

No. 127942
Consolidated with No. 127944

IN THE SUPREME COURT OF ILLINOIS

WILLIAM "WES" JOHNSON,

Plaintiff-Appellee

v.

LUCAS ARMSTRONG, M.D.,
SARAH HARDEN, and ADVOCATE
HEALTH AND HOSPITALS CORPORATION,
ADVOCATE BROMENN MEDICAL CENTER,

Defendants-Appellants.

) On Petition for Leave to Appeal
) From the Illinois Appellate Court,
) Fourth District, No. 4-21-0014,
)
) There Heard on Appeal From The
) Eleventh Judicial Circuit,
) McLean County, Illinois,
) Trial Court No. 2018 L 126
)
) The Honorable Rebecca S. Foley,
) Judge Presiding
)

**BRIEF OF DEFENDANT-APPELLANT,
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NATURE OF THE CASE

This is an appeal from an Order of the Appellate Court, Fourth District, reversing and remanding an Order of the Circuit Court of the Eleventh Judicial District, McLean County, granting summary judgment in favor of Lucas Armstrong, M.D. (“Dr. Armstrong”) on Plaintiff’s medical negligence count premised on the doctrine of *res ipsa loquitur*.

Plaintiff brought this medical negligence action against Dr. Armstrong related to a left total hip arthroplasty (hip replacement surgery) performed by Dr. Armstrong on October 6, 2016. Plaintiff’s Complaint asserts allegations of medical negligence, and medical negligence premised on the doctrine of *res ipsa loquitur*. Dr. Armstrong moved for summary judgment as to Count III in Plaintiff’s Complaint premised on *res ipsa loquitur* on December 15, 2020, which the Trial Court granted.

Plaintiff appealed the Trial Court’s grant of summary judgment in favor of Dr. Armstrong (A 264-289). In its published opinion, the Fourth District reversed and remanded the Trial Court’s order granting summary judgment in favor of Dr. Armstrong. (A 1-20). In so doing, the Fourth District acknowledged and then disregarded the precedent it previously set in *Taylor v. City of Beardstown*, 142 Ill.App.3d 584, 491 N.E.2d 803 (4th Dist. 1986), requiring expert testimony to prove the applicable standard of care and breach therefrom to invoke the doctrine of *res ipsa loquitur*. *Johnson v. Armstrong*, 2021 IL App (4th) 210038 ¶¶ 68-69. (A 16-19).

Dr. Armstrong timely submitted his Petition for Leave to Appeal on December 2, 2021. No issues are raised on the pleadings.

JURISDICTION

This Court has jurisdiction pursuant to Illinois Supreme Court Rule 315. This Court granted Dr. Armstrong's Petition for Leave to Appeal on January 26, 2022.

STATUTES INVOLVED

735 ILCS 5/2-1113. Medical malpractice – res ipsa loquitur

In all cases of alleged medical or dental malpractice, where the plaintiff relies upon the doctrine of res ipsa loquitur, the court shall determine whether that doctrine applies. In making that determination, the court shall rely upon either the common knowledge of laymen, if it determines that to be adequate, or upon expert medical testimony, that the medical result complained of would not have ordinarily occurred in the absence of negligence on the part of the defendant. Proof of an unusual, unexpected or untoward medical result which ordinarily does not occur in the absence of negligence will suffice in the application of the doctrine.

ISSUES PRESENTED FOR REVIEW

- I. **The Appellate Court's decision to disregard its prior opinion in *Taylor v. City of Beardstown*, 142 Ill.App.3d 584, creates a split in the Appellate Courts of this State on the issue of whether expert testimony is required to invoke the doctrine of *res ipsa loquitur*.**
- II. **The Appellate Court erred in its reliance on dicta in *Spidle v. Steward*, 79 Ill.2d 1, 8-9, 402 N.E.2d, 216, 220 (1980), and *McMillen v. Carlinville Area Hospital*, 114 Ill.App.3d 732, 737-38, 415 N.E.2d 10 (1983), in derogation of facts and law.**
- III. **Summary judgment in favor of Dr. Armstrong is appropriate on the evidentiary issue of *res ipsa loquitur* where Plaintiff's expert testified the surgery was performed competently and Plaintiff presents no evidence of negligent conduct.**
- IV. **The trial court properly met its gatekeeper obligation in deciding that the doctrine of *res ipsa loquitur* did not apply as a matter of law.**

- V. The Appellate Court erred when it failed to find that Plaintiff forfeited his appeal as to the grant of summary judgment for Dr. Armstrong with respect to the claim pursuant to the doctrine of *res ipsa loquitur*.**

STATEMENT OF FACTS

A. Proceedings in the Trial Court.

Plaintiff filed a four-count Complaint, in which two of the counts were directed against Dr. Armstrong. (C 27-34; A 21-28). The allegations of Plaintiff's Complaint arise out of a total hip arthroplasty wherein Plaintiff claims injury to his femoral nerve. *Id.* In Count III of his Complaint, Plaintiff alleged a theory against Dr. Armstrong premised on the doctrine of *res ipsa loquitur*. *Id.*

During discovery, Plaintiff disclosed Dr. Sonny Bal as his Supreme Court Rule 213(f)(3) controlled expert witness. (C 298-353; A 29-84). Until recently, and at the time of the surgery at issue (October 2016), Dr. Bal was a professor in the Department of Orthopedic Surgery at the University of Missouri Health System-Columbia. (A 33-84). While at the University of Missouri Health System-Columbia he was the interim chair for The Department of Orthopedic Surgery. (A 33-84). Dr. Bal attended medical school at Cornell University Medical College. (A 33-84). He undertook a fellowship in orthopedic biomechanics at Massachusetts General Hospital and a fellowship at Massachusetts General Hospital Harvard Medical School in hip and implant surgery. (A 33-84). Dr. Bal has lectured and authored extensively on hip replacement surgery. (A 33-84).

Dr. Bal testified by way of a discovery deposition. (C 652-675; A 132-239). In his deposition, Dr. Bal testified nerve palsies are a recognized complication of hip replacement surgery. (C 658; A 156-159). He agreed Dr.

Armstrong advised the Plaintiff before surgery that femoral nerve injury was a risk of the procedure. (C 658; A 156-159). Dr. Bal agreed that he was not giving an opinion that simply because a femoral nerve injury occurred, it was a result of a breach in the standard of care. (C 658; A 156-159). Dr. Bal testified that a femoral nerve injury with the anterior approach utilized by Dr. Armstrong does not automatically equal negligence or a breach in the standard of care. (C 658; A 156-159).

Dr. Bal agreed that many times the cause of a femoral nerve injury is unknown. (C 658-659, C 666-667; A 156-163, A 188-195). Dr. Bal admitted that a femoral nerve injury resulting from a total hip arthroplasty can occur without negligence. (C 659, C 666-667; A 160-163, A 188-195). Dr. Bal testified that a femoral nerve injury may occur from a competently performed hip replacement surgery, and that Dr. Armstrong competently performed Plaintiff's hip replacement surgery. (C 659-660; A 160-167).

Dr. Bal testified that the location of the incision by Dr. Armstrong was within the standard of care (C 659-660, C 661; A 169-170). The branches of the femoral nerve affected (the rectus femoris and vastus lateralis) are distal to (away from) where the incision was made. (C 664-666; A 174-175). Dr. Bal has written on the topic of the direct anterior approach to total hip replacement (the approach taken by Dr. Armstrong here) and the description of the incision in his article is the same incision that Dr. Armstrong described in his operative note, and which Dr. Bal indicated was within the standard of care (C 662-663; A174-177).

The trial court granted summary judgment in favor of Advocate BroMenn Medical Center (“Advocate”) and Surgical Technician Sarah Harden (“Tech. Harden”) as to Count III where the doctrine of *res ipsa loquitur* was alleged against them. (C 23, C 525-676, C 898-899; R 1-20; A 242-243, A 244-263). The trial court found: (1) that the theory of *res ipsa loquitur* did not apply as a matter of law; and (2) that by pleading a theory of *res ipsa loquitur*, Plaintiff was not excused from establishing a duty of care and breach of that duty, and he had failed to do so. (R 11-14; A 254-257).

Dr. Armstrong moved for summary judgment as to Count III of Plaintiff's Complaint on the basis that the trial court determined the doctrine of *res ipsa loquitur* did not apply as a matter of law and that Plaintiff could not establish a breach in the standard of care through his expert, Dr. Sonny Bal. (C 25). The trial court granted Dr. Armstrong's Motion for Summary Judgment. (C 25, C 882-883; A 240).

B. The Appellate Court's Opinion.

The Fourth District issued its Opinion on October 28, 2021. It reversed the Trial Court's grant of summary judgment in favor of Dr. Armstrong, Tech. Harden, and Advocate. (A 1-20). The Fourth District held that *res ipsa loquitur* applied because Plaintiff's expert asserted that the retractor caused the injury, and that Tech. Harden held the retractor during surgery. *Johnson*, ¶ 60. (A 15). Furthermore, the Fourth District declined to follow its precedent set in *Taylor v. City of Beardstown*, 142 Ill.App.3d at 592-594, holding that expert testimony regarding the standard of care and deviation therefrom is required to invoke the

doctrine of *res ipsa loquitur*. *Johnson*, ¶¶ 68-69. (A 17-18). Thus, the Fourth District held that no expert testimony was needed as to the standard of care and breach thereof in the context of a claim for *res ipsa loquitur*. *Id.* at ¶¶ 64-71. (A 16-19).

STANDARD OF REVIEW

A trial court's decision to grant a motion for summary judgment is reviewed *de novo*. *Jackson v. Graham*, 323 Ill.App.3d 766, 778, 753 N.E.2d 525, 536 (4th Dist. 2001).

A trial court's determination of whether the *res ipsa loquitur* doctrine should apply is a question of law and subject to a *de novo* standard of review. *Raleigh v. Alcon Laboratories, Inc.*, 403 Ill.App.3d 863, 868, 934 N.E.2d 530, 535 (1st Dist. 2010).

ARGUMENT

- I. **The Appellate Court's decision to disregard its prior opinion in *Taylor v. City of Beardstown* created a split in the Appellate Courts of this State on the issue of whether expert testimony is required to invoke the doctrine of *res ipsa loquitur*.**

In its Opinion, the Fourth District cited its prior opinion in *Taylor*, where it held that plaintiffs must establish all elements of *res ipsa loquitur* in order "to accede to the benefits of the doctrine." 142 Ill.App.3d at 592. Among other things, the plaintiff must demonstrate that he was "injured: (1) in an occurrence which would not ordinarily occur absence of negligence." *Id.* This element must be shown by expert testimony to prove the standard of care and breach thereof. *Id.* at 594; *Cassady v. Hendrickson*, 138 Ill.App.3d 925, 937, 486 N.E.2d 1329, 1336 (4th Dist. 1985).

The Fourth District noted that the First District followed the precedent set by *Taylor* in *Smith v. South Shore Hospital*, 187 Ill.App.3d 847, 857-58, 543 N.E.2d 868, 873 (1989). *Johnson*, ¶ 69. (A 17-18). The Fourth District then declined to follow its own precedent in *Taylor*. *Id.* at ¶¶ 68-69. (A 17-18). It held that plaintiffs were no longer required to show by expert testimony the applicable standard of care and breach thereof to proceed with claims under the doctrine of *res ipsa loquitur*. *Id.* at ¶¶ 64-71. (A 16-19).

Since the Fourth District's Opinion in *Taylor*, the expert witness requirement has been the law in Illinois. It has been either followed by, or referenced in, other Appellate Court opinions in addition to *Smith v. South Shore Hospital*. See e.g., *Edelin v. West Lake Community Hospital*, 157 Ill.App.3d 857, 910 N.E.2d 958 (1st Dist. 1987); *Schindel v. Albany Medical Corp.*, 252 Ill.App.3d 389, 625 N.E.2d 114 (1st Dist. 1993); *Roat v. Shivde*, 203 Ill.App.3d 181, 560 N.E.2d 113 (1st Dist. 1990); *Pogge v. Hale*, 253 Ill.App.3d 904, 625 N.E.2d 792 (4th Dist. 1993); *Nichols v. City of Chicago Heights*, 2015 IL App (1st) 122994, 31 N.E.3d 824 (1st Dist. 2015); *Andrews v. Northwestern Memorial Hospital*, 184 Ill.App.3d 486, 540 N.E.2d 447 (1st Dist. 1998); *Piquette v. Midtown Anesthesia Assoc.*, 192 Ill.App.3d 219, 584 N.E.2d 659 (1st Dist. 1989); *Welsch by Welsch v. Columbia Kinder*, 2017 IL App (5th) 160213-U (5th Dist. 2017); *Giegoldt v. Condell Medical Center*, 328 Ill.App.3d 907, 767 N.E.2d 497 (2d Dist. 2002). That is until the Fourth District's Opinion in this matter.

Here, Plaintiff's only expert, Dr. Bal, testified that a femoral nerve injury may occur from a competently performed hip replacement surgery and that Dr.

Armstrong competently performed Plaintiff's hip replacement surgery. (C 659-660; A 160-167). Dr. Bal testified that a nerve palsy, the subject of Plaintiff's lawsuit, is a recognized complication of hip replacement surgery, and that Dr. Armstrong explained that risk to Plaintiff pre-operatively. (C 658; A 156-159). Dr. Bal explained that simply because a femoral nerve injury occurred does not mean that it was the result of a breach in the standard of care. (C 658; A 156-159). Dr. Bal further testified that a femoral nerve injury resulting from a total hip arthroplasty performed with the anterior approach utilized by Dr. Armstrong does not automatically equal negligence or a breach in the standard of care. (C 658; A 156-159).

Dr. Bal also testified that the injury was most likely caused by a retractor, but that there was nothing inappropriate about Dr. Armstrong's placement of the retractor up against the rectus femoris muscle, "where it should be placed", and then moving the retractor to an intracapsular location when he repositioned it during the procedure. (C 659-660; A 160-167). Plaintiff's expert made clear that the location of the incision was within the standard of care (C 659-660, C 661; A169-170).

In essence, there was no testimony from Plaintiff's expert, Dr. Bal, that Dr. Armstrong was negligent in the care he provided to the Plaintiff. Both the incision and the retractor were properly placed by Dr. Armstrong. Without expert testimony that there was some negligent conduct on the part of the surgeon, summary judgment in favor of Dr. Armstrong is appropriate. *Taylor*, 142 Ill.App.3d at 592-594.

The trial court granted summary judgment in favor of Advocate and Tech. Harden on Plaintiff's allegations of *res ipsa loquitur* based upon the fact Plaintiff had no expert testimony to support that claim. Based upon its prior ruling in favor of Advocate and Tech. Harden, the Trial Court properly found that without all parties who had either management or control of the instrumentality present as defendants, the *res ipsa loquitur* claim against Dr. Armstrong could not stand and *res ipsa loquitur* did not apply as a matter of law. (C 25; C 882 – C 883; C 898 – C 899). Subsequently, the Fourth District held that the requirement of expert testimony to support a claim of *res ipsa loquitur* was no longer a law it would follow. *Johnson*, ¶¶ 64-71. (A 16-19). Now, confusion exists given the Fourth District's decision not to follow its own precedent in *Taylor*, where other districts have followed it as it relates to the requirement of expert testimony to invoke the doctrine of *res ipsa loquitur*, and in medical negligence cases generally.

It is appropriate here to review the statements of Professor Dean Prosser commenting on the doctrine of *res ipsa loquitur*:

It is a thing of fearful and wonderful complexity in ramifications, and the problems of its application in effect have filled the courts of all our states with a multitude of decisions, baffling and perplexing alike, to students, attorneys and judges.

Prosser, *Res Ipsa Loquitur* in California, 37 CAL. L. Rev. 183 (1949).

The opinion of the Fourth District is similarly “baffling and perplexing.” *Id.* Eliminating the long-established requirement of expert witness testimony to invoke the doctrine of *res ipsa loquitur* makes the doctrine problematic to apply. It directs the jury to speculate regarding the determination of fault in the setting of a

complex medical procedure. In addition to eliminating the requirement of expert testimony, the Fourth District ignored the expert deposition testimony of Plaintiff's expert in that the surgery was performed in a non-negligent fashion, that the retractor was properly placed during the procedure, and the location of the incision was within the standard of care. (C 658-660; A 156-167).

If a trial court finds that the doctrine applies, and where a plaintiff's own expert indicates that the care was not negligent, or there exists no competent expert testimony to invoke the doctrine, it invites a purely speculative leap and entrusts the jury with unreviewable power to impose liability as it sees fit. The inference of negligence in a *res ipsa loquitur* case must be based on more than speculation. However, the Fourth District's opinion here holds that the inference can be invoked even in the face of expert testimony that the defendant-physician's care was not negligent.

The Illinois Pattern Jury Instruction setting forth the law in Illinois on the doctrine of *res ipsa loquitur* provides in pertinent part:

The plaintiff has the burden of proving each of the following propositions:

First: the patient was injured.

Second: that the injury occurred during a procedure in which the instrumentality was under the defendant's control.

Third: that in the normal course of events, this injury would not have occurred if the defendant had used a reasonable standard of professional care while the instrumentality was under his control.

Whether the injury in the normal course of events would not have occurred if the defendant had used a reasonable standard of professional care while the instrumentality was under his control must be determined from expert testimony presented in this trial. You must not attempt to determine this question from any personal knowledge you have.

Illinois Pattern Jury Instructions – Civil (2021 Ed.) Instruction No.105.09. The Fourth District disregarded the directive of this IPI jury instruction.

Under the Illinois Pattern Jury Instructions, expert testimony that when such an incident occurs as alleged, that it more probably than not happened as a result of negligence, is required. The evidence must show that there is a specific act of negligence of the type which caused the injury. Allowing the jury to speculate would result in many doctors who perform no negligent acts to be found guilty of medical malpractice via allegations premised on *res ipsa loquitur*. If the only serious obstacle to Plaintiff's recovery under the doctrine of *res ipsa loquitur* is getting the case to the jury, then our courts have created a strict liability in malpractice cases under the guise of *res ipsa loquitur*. In the face of testimony that the defendant-physician performed the surgery competently the jury is then permitted to speculate that a basis for drawing the inference of negligence actually exists.

This is demeaning to the law, to the legal profession, and to the judicial process because it will appear to the public in general, and to healthcare professionals in particular, that the legal profession and the courts are playing games with what has come to be a meaningless Latin phrase for the purpose of

permitting an injured party to recover on the basis of fault when there is, in fact, no fault involved.

If public policy requires that financial responsibility be placed upon the doctor for a complication where the plaintiff's own expert indicates that the event can occur without negligence, on the assumption that the risk of loss can be better spread to the public in large, the courts of Illinois should be truthful with themselves and the public, and not continue to attempt to assign fault to a largely fictitious search for it. See *Spidle v. Steward*, 79 Ill.2d 1, 14-25, 402 N.E.2d 216 (1980) (Ryan, J., dissenting); *Renslow v. Mennonite Hospital*, 67 Ill.2d 348, 381, 367 N.E.2d 1250 (1977) (Ryan, J., dissenting).

The Illinois Supreme Court has not addressed the application of *res ipsa loquitur* in the context of a medical negligence claim since 2007 in *Heastie v. Roberts*, 226 Ill.2d 515, 877 N.E.2d 1065 (2007). With a clear split between the First and Fourth Districts regarding the requirement of expert testimony to proceed under the theory of *res ipsa loquitur*, along with the Fourth District's disregard of the language of IPI (Civil) 105.09 resulting in an unprecedented expansion of the application of the doctrine of *res ipsa loquitur*, this Court must consider the long-established expert witness requirement both in Illinois and in Courts in other states who have embraced it, and then decide if any basis exists to abandon it. See e.g., *Woodard v. Custer*, 473 Mich. 1, 702 N.W.2d. 522 (2015).

- II. **The Appellate Court erred in its reliance on dicta in *Spidle v Steward*, 79 Ill.2d 1, 8-9, 402 N.E.2d, 216, 220 (1980), and *McMillen v. Carlinville Area Hospital*, 114 Ill.App.3d 732, 737-38, 415 N.E.2d 10 (1983), in derogation of facts and law.**

The Fourth District created a precedent that will be the source of great confusion for trial courts. Its Opinion provides no real standard to guide trial courts in ruling on the applicability of *res ipsa loquitur*. The Fourth District's opinion substantially alleviates plaintiffs' long-established burden of production in malpractice actions. Thus, it essentially places on defendants the burden to conclusively prove freedom from negligence. Although burden shifting has been misstated and misconstrued throughout Illinois case law, the operation of *res ipsa loquitur* was never intended to shift the ultimate burden of persuasion. 9 Wigmore, Evidence § 2489, 285 (3d ed. 1940) (the burden of persuasion never shifts since the rules of law are static and the parties know beforehand what they must prove in order to recover or rebut allegations of negligence).

The current Restatement discussion of *res ipsa* omits any mention of an affirmative shift in the burden of proof, explaining instead that a majority of jurisdictions adopt the permissive inference interpretation while others follow the rebuttable presumption approach. See Restatement (Third) of Torts § 17, comment j (2005). Most jurisdictions have recognized *res ipsa* as creating either an inference of negligence or a rebuttable presumption and not a wholesale shift in the burden of proof from plaintiff to defendant. See *Prosser, The Procedural Effect of Res Ipsa Loquitur*, 20 Minn. L. Rev. 241, 244-45, 250-54 (1936).

The ultimate effect of the Fourth District's alteration of the burden of proof, therefore, is to make medical practitioners insurers against bad results. See *Greenberg v. Michael Reese Hospital*, 78 Ill.App.3d 17, 24, 396 N.E.2d, 1008, 1088, 1093 (1st Dist. 1979) (In the professional negligence area, the recognition of the applicability of *res ipsa loquitur* conditioned only on a bad or unanticipated outcome to the treatment or litigation, would result in a presumption of negligence based upon result other than any negligent act. This special class of defendants, solely because of the risk-laden nature of their profession, would thus become, in effect, guarantors of result, and would have the burden of constant justification of their acts in the light of this reoccurring "presumption of negligence"). The Illinois Courts never intended this result. *Spidle v. Steward*, 79 Ill.2d at 24.

The Fourth District cited *Dyback v. Weber*, 114 Ill.2d 232, 242, 500 N.E.2d 8, 12 (1986), for the proposition that Plaintiff need not conclusively prove all the elements of *res ipsa loquitur* to invoke the doctrine. In so stating the Fourth District sidestepped the fact that Plaintiff's expert testified that the procedure was performed competently. The Fourth District was focused on the threshold to invoke *res ipsa loquitur* without assessing the evidence, or lack thereof, provided by the Plaintiff at summary judgment. In *Dyback*, this Court found that the doctrine of *res ipsa loquitur* did not apply due to the failure of the Plaintiff to provide competent expert testimony and evidence that the fire that destroyed the home would not have occurred absent negligence. 114 Ill.2d at 243.

Poole v. University of Chicago, 186 Ill.App.3d 554, 542 N.E.2d 746 (1989), relied upon by the Fourth District, is distinguishable. In *Poole*, there was no testimony from the plaintiff's expert that the procedure was performed competently and without negligence. 186 Ill.App.3d at 559-60. The plaintiff's expert in *Poole* testified that the plaintiff's bilateral vocal cord paralysis ordinarily would not have occurred absent negligence on the part of the operating physician in clearing the trachea without locating and protecting the recurrent laryngeal nerves and in using electrocautery to control bleeding in the glandular area of the trachea. *Id.* Plaintiff's expert in *Poole* provided very specific expert testimony that the bilateral vocal cord paralysis would not have occurred absent negligence and exactly how negligent conduct on the part of the physician can bring about the vocal cord paralysis complained of. *Id.*

The Fourth District cited *Kolakowski v. Voris*, 83 Ill. 2d 388, 395-396, 415 N.E.2d 397, 400-01 (1980), for the proposition that the burden of proof shifts to the defendants. However, plaintiffs have the burden to introduce evidence that the occurrence would not have occurred absent negligence. *Id.* at 400. The defendant in *Kolakowski* argued that the introduction of evidence of specific acts of negligence extinguishes a plaintiff's right to rely upon the doctrine *res ipsa loquitur*. *Id.* at 397. The *Kolakowski* Court rejected the proposition that the inference of negligence raised by the doctrine of *res ipsa loquitur* disappears when specific evidence of negligence is admitted. *Id.*

The *Kolakowski* opinion stands for the proposition that plaintiffs have the right to rely upon the doctrine even when evidence of the specific acts of

negligence are introduced. This begs the question: what happens when the testimony of plaintiffs is that the care provided by the defendant-physician was not negligent? There is no precedent in the law of *res ipsa loquitur* where the plaintiff's expert testifies the care was appropriate and the matter nonetheless proceeds to a jury for determination of fault.

Plaintiff's counsel and the Fourth District referenced the proposition that Dr. Bal testified the incision was too medial. (C 656-657, C 659-660, C 666; A 151-152, A 160, A 165, A 169, A 190-191). The exact testimony of Plaintiff's expert was:

The documents I reviewed showed misplacement too far medial of the incision, and then twice in the operative record, the doctor documents the placement of the anterior retractor.

(C 660; A 165).

Dr. Bal's testimony in that regard is that the retractor is medial of the incision, not that the incision was too medial. (C 660; A 165). With respect to the location of the incision, he found that to be within the standard of care. (C 659-660, C661; A 169-170). Dr. Bal testified that the injury was most likely caused by a retractor, but there was nothing inappropriate about Dr. Armstrong's placement of the retractor up against the rectus femoris muscle, "where it should be placed," and then moving the retractor to an intracapsular location when he repositioned it during the procedure (C 659-660; A160-167).

In *Spidle*, this Court examined the equivocal testimony of a plaintiff's expert. 79 Ill.2d at 9. There, the plaintiff's counsel asked in his first question whether the fistula (fistula subsequent to a supracervical hysterectomy) in the absence of

negligence would ordinarily result. *Id.* at 8. The expert answered that the formation of the fistula is “a rare and unusual complication of hysterectomies and one would not normally expect to occur” *Id.* This Court found that such equivocal testimony was insufficient to establish “negligent antecedents” required under the doctrine of *res ipsa loquitur*:

We cannot conclude with equanimity, from this colloquy alone, whether he meant fistula formation after hysterectomy is usually a result of negligence or whether there is an equal probability that they occur despite the exercise of due care.

Id. at 9 (citing *Walker v. Rumer*, 72 Ill.2d 495, 381 N.E.2d 689 (1978)).

There is no equivocation regarding Dr. Bal’s testimony that the surgery was performed competently (C 659-660; A160-167). In *Spidle*, this Court relied upon the proposition that there was other evidence of the defendant’s negligence upon which the theory of *res ipsa loquitur* could properly be given to the jury. The plaintiff’s expert therein also testified about the inadvisability of operating on Mrs. Spidle if her pelvic inflammatory disease was in an acute or an acute flare-up stage. *Spidle*, 79 Ill.2d at 9-10. There was evidence, the defendant-physician admitted after the operation, that he had “operated a little too soon.” *Id.*

Dr. Bal opined that the extent of the injury to the femoral nerve would only occur if the procedure was performed negligently. However, he did not include any criticism of Dr. Armstrong’s surgical approach in this opinion. Like *Spidle*, at best there is equivocal testimony that the care provided by Dr. Armstrong was appropriate. (C 659-660; A 160-167). Additionally, there is no competent expert

testimony that Tech. Hardin's care was negligent. Therefore, summary judgment was appropriate.

III. Summary judgment in favor of Dr. Armstrong is appropriate on the evidentiary issue of *res ipsa loquitur* where Plaintiff's expert testified the surgery was performed competently and Plaintiff presents no evidence of negligence.

In the trial court and on appeal, Plaintiff did not dispute that expert opinion evidence is required on the issue of breach in the standard of care in order to survive summary judgment. Instead, he insisted Dr. Bal is competent to testify about nursing negligence even though he does not have a nursing degree, and contrary to this Court's holding in *Sullivan v. Edward Hospital*, 209 Ill.2d 100, 806 N.E.2d 245 (2004). Without expert testimony regarding the nursing standard of care, summary judgment was clearly appropriate in favor of Advocate and Tech. Harden.

Furthermore, without all potential defendants present, the doctrine of *res ipsa loquitur* cannot be invoked in a claim against Dr. Armstrong. See, *Raleigh v. Alcon Laboratories*, 403 Ill.App.3d 863, 869-70, 934 N.E.2d 530, 536 (1st Dist. 2010). In *res ipsa loquitur* actions, all parties who could have been the cause of a plaintiff's alleged injury must be joined as defendants. *Smith v. Eli Lilly & Co.*, 137 Ill.2d 222, 257, 560 N.E.2d 324, 339-40 (1990). Thus, "[a] plaintiff's failure to name as defendants all of the entities who might have caused his injuries is fatal to the action since the plaintiff must 'eliminate the possibility that the accident was caused by someone other than any defendant.'" *Raleigh*, 403 Ill.App.3d at 869.

The Trial Court granted summary judgment in favor of Advocate and Tech. Harden finding that Tech. Harden never had exclusive control of the retractor, but also because Plaintiff did not present any competent expert testimony as to the standard of care for a surgical technician such as Tech. Harden. (R 12-13; A 256-257). Just like Plaintiff's case against Dr. Armstrong, there is no expert testimony that Tech. Harden was negligent. (R 12-13; A 256-257).

While Plaintiff's Complaint may sufficiently allege a claim applying the doctrine of *res ipsa loquitur*, Plaintiff essentially eliminated through fact and expert discovery the ability to show the injury was caused by Tech. Harden and Advocate by failing to establish through expert testimony that there was a breach in the standard of care by Tech. Harden. The same is true with respect to the failure of Plaintiff to establish through expert testimony a breach in the standard of care by Dr. Armstrong.

The inference of negligence set forth in the doctrine of *res ipsa loquitur* was overcome by undisputed evidence of non-negligent conduct on the part of Dr. Armstrong and Tech. Harden. While Plaintiff claims there is a question of fact regarding exclusive control as it relates to Tech. Harden, and causation as it relates to Dr. Armstrong, Plaintiff can point to no evidence that either care provider was negligent in their respective care. Plaintiff's own expert conceded that there was no negligent conduct by either Dr. Armstrong or Tech. Harden, and was not qualified to render an opinion regarding the care provided by Tech. (C 670-671, A 204-211).

The Fourth District focused on the extent of the injury as an issue. However, it ignored the proposition that there was no evidence of negligent conduct on the part of someone who may have been in control of the instrumentality at issue. While some of the case law regarding *res ipsa loquitur* discusses that a scintilla of evidence is insufficient, there is not a scintilla of evidence that Dr. Armstrong's care fell below the standard. *McMillen v. Carlinville Area Hospital*, 114 Ill. App. 3d. 732, 737-38, 450 N.E.2d. 5, 10 (1983).

While it is true, as the Fourth District stated, that Plaintiff is not required to eliminate all possible causes of injury, it misstated the law when it indicated that Plaintiff was not required to show that the injury could only be a result of negligence. Evidence must be adduced at the point of summary judgment by way of testimony from Plaintiff's expert that the injury would not have occurred but for the negligence of someone. *Taylor*, 142 Ill.App.3d at 592. When Plaintiff's evidence or lack thereof cleared both Dr. Armstrong and Tech. Harden of any negligent conduct, summary judgment under the existing case law was clearly appropriate.

By holding that there was no obligation on the part of the Plaintiff to establish that there was negligence by way of expert testimony, the Fourth District's Opinion established an unwarranted deviation from the doctrine of *res ipsa loquitur* and is contrary to existing Illinois law. The inference that arises out of pleading a claim under the doctrine of *res ipsa loquitur* cannot be based solely upon the fact that a rare or unusual result occurred, but such evidence must be coupled with proof of a negligent act. *Adams v. Family Planning Assocs. Med.*

Group, 315 Ill.App.3d 533, 545-46, 733 N.E.2d 766, 775-76 (1st Dist. 2000). Plaintiff will point to Dr. Bal's testimony that permanency of the injury connotes that negligence occurred. But causation testimony alone does not meet the elements required under IPI 105.09. Illinois Pattern Jury Instructions – Civil (2021 ed.) Instruction Number 105.09.

The Fourth District's Opinion invites the jury to speculate, as proof of a bad result or mishap is not in and of itself evidence of negligence. *Sanders v. Frost*, 112 Ill.App.2d 234, 240, 250 N.E.2d 105, 107 (5th Dist. 1969); *Piquette v. Midtown Anesthesia Assoc.*, 192 Ill.App.3d 219, 223, 548 N.E.2d 659, 663 (1st Dist. 1989). With application of the Fourth District's Opinion here, summary judgment in a medical negligence case will not be allowed even when appropriate.

IV. The trial court has a gatekeeper obligation to decide if the doctrine of *res ipsa loquitur* applies as a matter of law.

Illinois courts have been traditionally reluctant to apply the doctrine of *res ipsa loquitur* in medical malpractice actions. See, *Olander v. Johnson*, 258 Ill. App. 89, 96, 1930 WL 3155 (2d Dist. 1930) (sponge left in abdomen following surgery; *res ipsa loquitur* inapplicable); *Goodman v. Bigler*, 133 Ill. App. 301, 303, 1907 WL 1836 (4th Dist. 1907) (improper healing of fractured limb; *res ipsa loquitur* inapplicable). The rationale has been because medical procedures were not considered a matter of common knowledge, and the lay jury could only speculate as to the probabilities of negligence. What evolved was the requirement of expert testimony where in medical malpractice actions it was acknowledged that the complex nature of some medical treatments make jury

comprehension difficult if not impossible. *Heastie v. Roberts*, 226 Ill. 2d, 515, 532, 877 N.E.2d. 1064 ([w]hether the *res ipsa* doctrine should apply in a given case presents a question of law. It is a question of law which must be decided in the first instance by the trial court.).

Under Section 2-1113 of the Code of Civil Procedure, a trial court is specifically authorized to rely upon “the common knowledge of layman, if it determines that to be adequate”, or upon expert testimony. 735 ILCS 5/2-1113 (West 2021); *Heastie*, 226 Ill.2d at 537. Illinois courts have been clear that where surgical technique is at issue, expert testimony is required. See I.P.I. 3d-Civil No. 105.09; *Gatlin v. Ruder*, 137 Ill. 2d. 284, 560 N.E.2d. 586 (1990); *Spidle v. Steward*, 79 Ill. 2d. 1, 402 N.E.2d. 216 (1980).

This Court expanded the utility of *res ipsa loquitur* in medical malpractice actions in *Walker v. Rumer* and re-established that expert testimony was necessary when complex medical procedures were involved. 72 Ill.2d at 500. This Court held that a specific factual situation had to be presented by an “appropriate state of facts,” before *res ipsa loquitur* could be applied. *Id.* at 500-01. Here, Plaintiff has not presented this court with “the appropriate state of facts” because of the lack of expert testimony.

It is well settled in Illinois that the applicability of the doctrine of *res ipsa loquitur* is a matter of law for the trial judge to decide. *Spidle*, 79 Ill. 2d at 7; see also *Metz v. Central Illinois Electric and Gas Company*, 32 Ill.2d 446, 449-50, 207 N.E.2d 305, 307 (1965). The Fourth District recognized this traditional judicial

function, but nonetheless effectively delegated the decision on the applicability of the doctrine to the jury.

The Fourth District's Opinion ignores the rule that it is the duty of the trial court to decide whether the circumstantial evidence is sufficient to warrant an instruction on *res ipsa loquitur* by performing a preliminary weighing of the evidence to determine if the balance of probabilities favors a finding of negligence. The trial court must determine whether the existence of a fact testified to (e.g., that a nerve injury occurred) is more probably than not attended by another fact (e.g., that the nerve injury was probably caused by negligence). If the trial court determines there is illegitimacy to this inference, then summary judgment is appropriate since the jury should not then be allowed to determine whether the second fact, *i.e.*, the nerve injury was caused by negligence, exists. When ruling on this preliminary issue the trial judge must assess the probative value of the evidence needed to satisfy the requirements of the law. *Metz*, 32 Ill. 2d. at 449-50.

This initial determination made by the trial judge, although not foolproof, is essential in situations where the medical procedures involved are not a matter of common knowledge. In such cases, expert testimony must establish that the occurrence is such as would not happen in the ordinary of things absent negligence. *Gatlin v. Ruder*, 137 Ill. 2d. 284, 560 N.E.2d. 586, (1990).

What the trial judge determined here was that there was insufficient expert testimony to support the invocation of *res ipsa loquitur* as it relates to Tech. Harden, pursuant to *Sullivan v. Edward Hospital*, 209 Ill. 2d. 100, 806 N.E.2d.

244, (2004). There was similarly insufficient evidence to invoke the doctrine against Dr. Armstrong. In other words, the trial court determined that the doctrine did not apply because the expert testimony presented by Plaintiff did not provide sufficient relevant information for a jury to reach a conclusion.

Expert testimony that fails in its intended purpose has the same effect on litigation as if no expert witness had testified. Since the testimony of Plaintiff's expert, Dr. Bal, lacked the thresholds required by law, the trial judge determined that Plaintiff failed to sustain his burden of production regarding the probability element for *res ipsa loquitur*. The Trial Court weighed that issue, exercised its gatekeeping function, and properly determined that the evidence failed to meet the threshold to allow the matter to be considered by the jury on the theory of *res ipsa loquitur*. The trial judge followed existing law in doing so.

When complex medical procedures are involved and the plaintiff seeks a *res ipsa loquitur* instruction, medical expertise is required to inform the jury of the probability that the injury resulted from negligence. *Walker v. Rumer*, 72 Ill. 2d at 500. As a result, when Plaintiff's expert was unqualified to testify regarding the standard of care of Tech. Harden and testified that Dr. Armstrong performed the procedure in a non-negligent fashion, Plaintiff failed to satisfy his burden of production. *Metz*, 32 Ill. 2d at 449. (The applicability of *res ipsa loquitur* is a question of law for the trial court to decide.); see also *Clark v. Gibbons*, 66 Cal.2d 399, 426 P.2d 525, 58 Cal.Rptr. 125 (1967) (Such an inference [of negligence] must be based on more than speculation). When faced with the evidence

presented by Plaintiff, the Trial Court appropriately found Plaintiff failed to satisfy his burden of production as required in *Metz*.

V. The Appellate Court erred when it failed to find that Plaintiff forfeited his appeal as to the grant of summary judgment for Dr. Armstrong with respect to the claim pursuant to the doctrine of *res ipsa loquitur*.

A. Where Plaintiff failed to present a sufficiently complete record on appeal, the Fourth District was required to presume that the Trial Court's grant of summary judgment to the Defendants with respect to the negligence counts pursuant to *res ipsa loquitur* conformed with the law and had a sufficient factual basis.

Before the Fourth District, Advocate and Tech. Harden contended that Plaintiff forfeited his appeal on the dismissal of his claims for *res ipsa loquitur* because he failed to meet his burden to present a sufficiently complete record on appeal and omitted any record whatsoever with respect to the grant of summary judgment for Dr. Armstrong. (A 280-283).

Pursuant to Supreme Court Rule 321, the record on appeal “shall” include any report of proceedings prepared in accordance with Supreme Court Rule 323. Ill. S. Ct. R. 321. “There is no distinction between the common law record and the report of proceedings for the purpose of determining what is properly before the reviewing court.” *Id.* Plaintiff had “the burden to present a sufficiently complete record of the proceedings at trial to support a claim of error.” *Foutch v. O'Bryant*, 99 Ill.2d 389, 391-92, 459 N.E.2d 958, 959 (1984).

Any doubts arising from Plaintiff's failure to include any record with respect to the December 15, 2020, hearing granting Dr. Armstrong's oral Motion for Summary Judgement in the record on appeal must be resolved against him. (C

25; C 882 – C 883; C 898 – C 899). *First American Bank v. Poplar Creek, LLC*, 2020 IL App (1st) 192450, ¶ 41. The absence of any record with respect to the grant of summary judgment for Dr. Armstrong on the claim for *res ipsa loquitur* required the Fourth District to presume that the Trial Court acted in conformity with the law and had a sufficient factual basis to enter that judgment. *Foutch*, 99 Ill.2d at 392.

The Fourth District improperly disregarded the Defendants’ arguments regarding Plaintiff’s forfeit of his ability to challenge the Trial Court’s judgment by summarily stating only that it disagreed with those assertions. *Johnson*, ¶ 35. Therefore, the Fourth District erred when it refused to presume that the Trial Court acted in conformity with the law when it entered summary judgment on behalf of Dr. Armstrong with respect to Plaintiff’s claims of *res ipsa loquitur*.

B. *Plaintiff forfeited his argument on appeal that the Trial Court erred in granting summary judgment in favor of Dr. Armstrong on Plaintiff’s res ipsa loquitur count by failing to make any argument regarding the same in his Brief of Appellant.*

Illinois Supreme Court Rule 341(h)(7) requires that an appellant’s arguments “shall contain the contentions of the appellant and the reasons therefor, with citation of the authorities and the pages of the record relied on. ... Points not argued are forfeited and shall not be raised in the reply brief, in oral argument, or on petition for rehearing.” Ill. S. Ct. R. 341(h)(7); *Tirado v. Slavin*, 2019 IL App (1st) 181705 ¶ 59, 147 N.E.3d 939, 952 (1st Dist. 2019). Failure to argue a point in an appellant’s opening brief violates Supreme Court Rule 341(h)(7). *City of Joliet v. Szayna*, 2016 IL App (3d) 150092 ¶ 68,

66 N.E.3d 875, 887 (3d Dist. 2016). Additionally, the mere failure to elaborate on an argument, cite persuasive authority, or present a well-reasoned argument violates Rule 341(h)(7). *Id.* The consequence of a plaintiff's violation of Rule 341(h)(7)'s mandatory requirements is forfeiture of his or her argument. *Tirado*, 2019 IL App (1st) 181705 ¶ 59.

In his Statement of Facts, Plaintiff states:

the trial court granted summary judgment on the issue of *res ipsa loquitur* in favor of all defendants, reasoning that plaintiff needed a nursing expert to opine as to the proper surgical technique for a nurse's use of retractors, and that plaintiff's orthopedic surgeon was not qualified to testify to the proper technique of a nurse participating in the surgery.

(A 269-272). Notably, as discussed in Dr. Armstrong's Statement of Facts, *supra*, and in Section II., *infra*, this was not the reason why the Trial Court granted summary judgment in favor of Dr. Armstrong. (C 25; C 882 – C 883; C 898 – C 899).

Moreover, the only portion of Plaintiff's Brief of Appellant in the Fourth District that could relate to Dr. Armstrong is Section I. of his Argument. (A 273-279). However, Plaintiff makes no argument there, or in the remainder of his Brief of Appellant, discussing any contentions and the reasons therefore, with citation of the authorities and the pages of the record relied on, that the Trial Court erred in granting summary judgment in favor of Dr. Armstrong. (A 273-279).

For these reasons, Plaintiff failed to comply with Rule 341(h)(7) in failing to argue that the Trial Court erred in granting summary judgment in favor of Dr. Armstrong, by failing to provide any reasons for that argument, by failing to

cite to any authority in support of that argument, and by failing to cite to any pages of the record relied upon. As such, Plaintiff forfeited any argument that the Trial Court erred in granting summary judgment in favor of Dr. Armstrong.

CONCLUSION

It has never been the law in Illinois that the doctrine of *res ipsa loquitur* can be applied in a fashion where plaintiffs can meet their burden of proof without expert opinion evidence of negligent care in the fact setting of this case. If the Fourth District's Opinion here stands, jurors will be directed to speculate as to whether the care provided by a defendant was negligent in the complete absence of expert medical testimony that a defendant breached the applicable standard of care.

FROM THE FOREGOING, Appellant, Lucas Armstrong, M.D., prays that the decision of the Illinois Appellate Court for the Fourth District, dated October 28, 2021, be reversed and the case be remanded for further proceedings consistent with this Court's opinion.

Dated: March 2, 2022.

Respectfully submitted,
LUCAS ARMSTRONG, M.D.,
Defendant-Appellee,

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CERTIFICATE OF COMPLIANCE

I certify that this brief conforms to the requirements of Rules 341(a) and (b). The length of this brief, excluding the pages or words contained in the Rule 341(d) cover, the Rule 341(h)(1) table of contents and statement of points and authorities, the Rule 341(c) certificate of compliance, the certificate of service, and those matters to be appended to the brief under Rule 342(a), is twenty-nine (29) pages.



/s/ Kevin M. Toth (ARDC# 6307191)

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APPENDIX

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2021 IL App (4th) 210038

NO. 4-21-0038

IN THE APPELLATE COURT

OF ILLINOIS

FOURTH DISTRICT

FILED

October 28, 2021

Carla Bender

4th District Appellate

Court, IL

WILLIAM “WES” JOHNSON,)	Appeal from the
Plaintiff-Appellant,)	Circuit Court of
v.)	McLean County
LUCAS ARMSTRONG; McLEAN COUNTY)	No. 18L126
ORTHOPEDICS, LTD.; SARAH HARDEN; and)	
ADVOCATE HEALTH AND HOSPITALS)	
CORPORATION, d/b/a Advocate BroMenn Medical)	Honorable
Center,)	Rebecca S. Foley,
Defendants-Appellees.)	Judge Presiding.

JUSTICE STEIGMANN delivered the judgment of the court, with opinion.

Justices DeArmond and Cavanagh concurred in the judgment and opinion.

OPINION

¶ 1 In September 2018, plaintiff, William “Wes” Johnson, filed a complaint alleging defendants, Lucas Armstrong, McLean County Orthopedics, Ltd. (McLean County Orthopedics), Sarah Harden, and Advocate Health and Hospitals Corporation, d/b/a Advocate BroMenn Medical Center (Advocate BroMenn), negligently performed a hip replacement surgery that resulted in Johnson’s suffering permanent nerve damage. Johnson advanced two legal theories of recovery: ordinary negligence and *res ipsa loquitur*. Johnson sought to hold Armstrong and Harden directly liable and McLean County Orthopedics and Advocate BroMenn indirectly liable under the doctrine of *respondeat superior*.

¶ 2 In August 2020, defendants Advocate BroMenn and Harden (collectively referred to as Advocate) filed a motion for summary judgment, arguing that Johnson had failed to

(1) establish the standard of care for Harden or that she deviated from the standard of care and (2) demonstrate that he met the requirements to invoke the doctrine of *res ipsa loquitur*. In October 2020, the trial court conducted a hearing on Advocate’s motion and granted summary judgment in its favor.

¶ 3 In December 2020, Armstrong made an oral motion for summary judgment on the remaining *res ipsa* count, which the trial court granted. The court subsequently entered written orders, entering judgment in the defendants’ favor on the *res ipsa* counts and making a finding that the orders were final and appealable pursuant to Illinois Supreme Court Rule 304(a) (eff. Mar. 8, 2016).

¶ 4 Johnson appeals, arguing that the trial court erred by entering summary judgment against him because (1) he made a *prima facie* showing of the elements of *res ipsa loquitur* and (2) his expert was qualified to testify to the applicable standard of care for Harden. We agree and reverse.

¶ 5 I. BACKGROUND

¶ 6 A. The Complaint

¶ 7 In September 2018, Johnson filed a four-count complaint alleging defendants negligently injured him during a left, total hip arthroplasty (THA) performed by Armstrong and assisted by Harden. The complaint alleged that the surgery was performed at Advocate BroMenn in October 2016. Following surgery, Johnson had femoral nerve palsy, and subsequent testing revealed he had “severe left femoral neuropathy that is specific to the branches to the vastus lateralis and rectus femoris muscles.” (We note that these are two of the muscles that comprise a person’s quadriceps.) Johnson alleged, “The lesion appears complete with no evidence of voluntary motor unit potential activation.”

¶ 8 Count I alleged ordinary negligence against Armstrong and specifically claimed that Armstrong (1) failed to protect Johnson’s femoral nerve, (2) improperly “retract[ed]” Johnson’s femoral nerve, or (3) directly injured Johnson’s femoral nerve. Count II alleged McLean County Orthopedics was vicariously liable under the doctrine of *respondeat superior*.

¶ 9 Count III alleged that Armstrong and Harden were negligent pursuant to the doctrine of *res ipsa loquitur*. More specifically, Johnson asserted that (1) Armstrong was assisted by Harden, (2) the injury to Johnson’s femoral nerve occurred while the retractors and other surgical instruments were under Armstrong and Harden’s control, and (3) Johnson’s injuries ordinarily would not have occurred if the standard of care was met. Count IV asserted the same claim against Advocate BroMenn on the basis that Advocate BroMenn employed Harden.

¶ 10 B. Advocate’s Motion for Summary Judgment

¶ 11 In August 2020, Advocate filed a motion for summary judgment in which it argued the following. First, Advocate claimed Johnson had not disclosed any expert to testify as to the standard of care for nurse Harden or that she breached her standard of care. Second, Advocate asserted that Johnson’s disclosed expert was not qualified to give an opinion on the nursing standard of care and did not offer one at his deposition. Third, Advocate contended that Johnson had not made a *prima facie* case that he was entitled to rely on the doctrine of *res ipsa loquitur* as to Harden because (1) the undisputed facts showed Harden did not have control over the instrumentality of the injury and (2) Johnson’s expert did not testify at his deposition that Harden acted negligently. In support of its motion, Advocate attached the depositions of Harden, Pamela Rolf, Armstrong, and Sonny Bal, Johnson’s expert.

¶ 12 1. *Deposition of Sarah Harden*

¶ 13 Harden testified that she was a surgical technician, commonly called a “scrub tech.”

She described her duties as follows: “A second scrub will hold a retractor wherever it is placed by the doctor, and that is pretty much it.” “I don’t use anything. I hold things.” “I hold what I’m told to hold—whatever the doctor tells me to do, I do.” Harden repeatedly stated it was not her responsibility to, nor did she ever, place, reposition, move, or otherwise use any instrument during surgery, including retractors. Those actions were always performed by the surgeon, and the surgeon was responsible for the instruments at all times. Harden testified that she had no independent recollection of the surgery but, based on her review of the medical records, she complied with the standard of care.

¶ 14

2. Deposition of Lucas Armstrong

¶ 15

At his deposition, Armstrong agreed Johnson did not have femoral nerve palsy before the THA surgery and did have it afterwards. Armstrong stated he placed and moved the retractors and Harden would have done nothing more than hold them. Armstrong further stated that, although he had no independent recollection of the surgery, if Harden would have done something abnormal while holding the retractor, such as moving it, he would have noted that in the records. Armstrong testified that he complied with the standard of care and disagreed that the type of injury Johnson sustained would not ordinarily occur absent negligence.

¶ 16

3. Deposition of Sonny Bal

¶ 17

Sonny Bal testified as an expert witness for Johnson. Bal, a retired orthopedic surgeon, stated that before he retired, he performed between 100 and 200 THAs per year on average and most commonly used the anterior approach, which was the same approach used by Armstrong in this case. Bal agreed that, “as a general proposition,” “nerve palsies are a recognized complication of hip replacement surgery.” Bal also agreed that, in general, merely because a femoral nerve injury occurs does not mean there is a breach in the standard of care (“I would need

more data.”). In his career, Bal had two patients develop femoral nerve palsies after THAs. One was caused by internal bleeding putting pressure on the nerve, and the other had an unknown cause. Bal agreed that the cause of femoral nerve palsies was often unknown.

¶ 18 Bal testified, “There’s evidence of direct injury to the [femoral] nerve based on the EMG findings.” Bal believed the injury was caused by a retractor, an instrument used to hold tissue to allow the surgeon to see the surgical site. Regarding the cause of Johnson’s injury, Bal testified as follows:

“The documents I reviewed show misplacement too far medial of the incision, and then twice in the operative record, the doctor documents the placement of the anterior retractor. While documentation does not say that the retractor was up against the femoral nerve, that is my opinion ***.

* * *

*** [Armstrong] does mention placing the retractor up against the rectus femoris muscle, which is where it should be placed, and then moving it to an intracapsular location when he repositioned it once during the operation.”

Bal agreed that “[a]s it’s stated, [there was] nothing inappropriate about that.” Bal agreed that Armstrong’s incision, though too far medial, was still within the standard of care.

¶ 19 Bal clarified his testimony that femoral nerve palsies can occur in the absence of negligence and stated the following:

“There are two distinct types of femoral nerve neuropathies, and I want to make sure we’re clear on the distinction.

Transient femoral neuropathy injury, neuropraxia palsy, as referred to in this paper *** occurs in the absence of negligence. It is transient; it has a good

prognosis; strength returns, and the patient goes on with a temporary time period during which there is a deficit that improves rapidly, and those are what I've encountered in my practice. That palsy can occur and does occur in the absence of negligence from a variety of factors.

My testimony here is a complete injury to the femoral nerve, as occurred here, verified by repeat EMG and subsequent treatment by a nerve specialist like Dr. Tung, does not occur absent negligence.”

¶ 20

Bal supported his opinions by stating as follows:

“The medial placement of the incision; the fact that the retractor was moved during surgery; the fact that the two branches that suffered complete injury are to the vastus lateralis and the intermedius, and those would be closer to the retractor than the branch to the medialis, which is further medial; and the fact that the article [presented to Bal by defense counsel during the deposition] clearly states a retractor tip is strikingly close to the femoral nerve when placed near the anterior rim of acetabulum, and one study demonstrated alarmingly high pressures around the nerve during retractor placement.”

¶ 21

Throughout the deposition, Bal indicated that, based on his experience and literature he reviewed, only transient femoral nerve palsies were known complications and outcomes that occurred in the absence of negligence. Bal testified that Johnson suffered a complete injury to two branches of his femoral nerve and the loss of muscle function and other symptoms he experienced were permanent. In sum, Bal indicated his opinion was that the permanent injury suffered did not occur in the absence of negligence.

¶ 22

C. The Hearing on Advocate's Motion for Summary Judgment

¶ 23 In October 2020, the trial court conducted a hearing on Advocate’s motion for summary judgment. Advocate argued that Johnson had not disclosed a nursing expert and Bal was not qualified to give an opinion as to the standard of care for a surgical technician. Advocate further argued that Johnson had not demonstrated that Harden exercised any control over the retractor that allegedly caused the injury; Armstrong placed and moved the retractor, and Harden merely held it in place. Harden had no part in deciding where to place the retractor or whether to move it.

¶ 24 Johnson acknowledged, “with reference to the fact that we don’t have a nursing expert, that’s absolutely correct, but that’s because a nursing expert cannot render an opinion on what is or is not appropriate with respect to an orthopedic surgical procedure.” Johnson maintained, “As a matter of law, it has to be testimony from an orthopedic surgeon, and we have that here.” Bal opined the injury was caused by a retractor and the undisputed facts showed that Harden held the retractor. (“I think the evidence at trial will be that she held the retractors only after they were placed or moved by Dr. Armstrong, but that doesn’t affect the fact that she’s the one holding the retractors and that’s when the damage occurred.”) Johnson further noted that Bal unequivocally stated that the type of injury sustained, complete denervation of two quadriceps, does not occur in the absence of negligence.

¶ 25 Advocate noted that “all the testimony says that [Harden] did exactly what was expected.” Advocate maintained that Johnson had to show Harden performed a negligent act and he had failed to do so.

¶ 26 The trial court agreed with Advocate. The court explained that Johnson was still required to show the standard of care and a breach of that standard. “Plaintiff has disclosed only one expert, Dr. Sonny Bal.” The court ruled that Bal was not qualified to give an opinion relative to the nursing standard of care because “he does not practice within the same school of medicine

as Nurse Harden, namely nursing.” The court further noted that the record did not contain any evidence that Harden committed a negligent act or omission.

¶ 27 The trial court stated as follows: “All witnesses testified that Defendant Armstrong, as the surgeon, placed the retractor. While Defendant Harden may have physically held the retractor upon placement, it was only at the direction of Defendant Armstrong. She did not exercise any independent control over any surgical tools, according to the testimony.” “Furthermore, the witnesses agree she only acted as directed, and she did not take any actions other than those directed by Dr. Armstrong. Accordingly, the retractor was never under the exclusive control of Nurse Harden.” The trial court granted summary judgment to Harden and to Advocate BroMenn because Advocate BroMenn was named as a defendant solely under *respondeat superior*.

¶ 28 D. Subsequent Proceedings

¶ 29 In November 2020, Johnson filed a motion to reconsider the trial court’s granting of Advocate’s motion for summary judgment. In December 2020, the trial court conducted a hearing on that motion and denied it.

¶ 30 Later in December 2020, at a hearing on a discovery matter, Armstrong orally moved for summary judgment, and the trial court granted his oral motion. On December 22, 2020, the trial court entered a written order entering summary judgment in favor of Armstrong on count III and finding no just reason for delaying enforcement or appeal of that order pursuant to Rule 304(a). The trial court stayed any pending litigation on the remaining counts against Armstrong and McLean County Orthopedics.

¶ 31 In January 2021, the trial court entered a written order (1) granting summary judgment in favor of Advocate and (2) finding no just reason for delaying the appeal of its order.

¶ 32 This appeal followed.

¶ 33

II. ANALYSIS

¶ 34 Johnson appeals, arguing that the trial court erred by entering summary judgment against him because (1) he made a *prima facie* showing of the elements of *res ipsa loquitur* and (2) he did not need a nursing expert to testify to the applicable standard of care for Harden. We agree and reverse.

¶ 35 As an initial matter, the defendants make several arguments that Johnson has, for various reasons, forfeited his ability to challenge the trial court's judgment. We disagree with these assertions and address this case.

¶ 36

A. The Applicable Law

¶ 37

1. *Summary Judgment*

¶ 38 Summary judgment is appropriate when “the pleadings, depositions, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.” 735 ILCS 5/2-1005(c) (West 2018). “A genuine issue of material fact precluding summary judgment exists where the material facts are disputed, or, if the material facts are undisputed, reasonable persons might draw different inferences from the undisputed facts.” (Internal quotation marks omitted.) *Monson v. City of Danville*, 2018 IL 122486, ¶ 12, 115 N.E.3d 81. When examining whether a genuine issue of material fact exists, a court construes the evidence in the light most favorable to the nonmoving party and strictly against the moving party. *Beaman v. Freesmeyer*, 2019 IL 122654, ¶ 22, 131 N.E.3d 488.

¶ 39

Summary judgment is a drastic means of disposing of litigation and “should be allowed only when the right of the moving party is clear and free from doubt.” (Internal quotation marks omitted.) *Id.* A trial court's entry of summary judgment is reviewed *de novo*. *Id.*

¶ 40

2. Res Ipsa Loquitur

¶ 41

“The doctrine of *res ipsa loquitur* allows the trier of fact to draw an inference of negligence from circumstantial evidence when direct evidence of the cause of the injury is primarily within the knowledge and control of the defendant. [Citation.] [T]he doctrine is not a separate theory of liability [but] a type of circumstantial evidence which permits the trier of fact to infer negligence when the precise cause of injury is not known by the plaintiff.” (Internal quotation marks omitted.) *Poole v. University of Chicago*, 186 Ill. App. 3d 554, 558, 542 N.E.2d 746, 748-49 (1989).

¶ 42

“The trial court must decide whether the doctrine applies as a question of law, subject to *de novo* review.” *Willis v. Morales*, 2020 IL App (1st) 180718, ¶ 36, 169 N.E.3d 74. “[A] plaintiff seeking to rely on the *res ipsa* doctrine must plead and prove that he or she was injured (1) in an occurrence that ordinarily does not happen in the absence of negligence, (2) by an agency or instrumentality within the defendant’s exclusive control.” *Heastie v. Roberts*, 226 Ill. 2d 515, 531-32, 877 N.E.2d 1064, 1076 (2007).

¶ 43

“If the plaintiff was unconscious at the time of the injury, and under the defendants’ control, then the plaintiff has adequately shown the control element for *res ipsa loquitur*, even if she cannot establish the exact instrumentality that caused the injury.” *Willis*, 2020 IL App (1st) 180718, ¶ 37. Further, “if [the plaintiff] can convince a finder of fact that the injury occurred during the surgery, ‘it can be inferred *** that the instrumentality of the injury was the handling’ of [the plaintiff] by defendants.” *Id.* (quoting *Collins v. Superior Air-Ground Ambulance Service, Inc.*, 338 Ill. App. 3d 812, 820, 789 N.E.2d 394, 401 (2003)).

¶ 44

“[U]nder Illinois precedent, [a] plaintiff is not required to show that his injuries were more likely caused by any particular one of the defendants in order to proceed with his

res ipsa claim, nor must he eliminate all causes of his injuries other than the negligence of one or more of the defendants.” *Heastie*, 226 Ill. 2d at 533-34. “In order to show the first element of *res ipsa loquitur*, an occurrence that ordinarily does not happen in the absence of negligence, a plaintiff is not required to show that the injury in question never happens without negligence, only that it does not ordinarily happen without negligence.” *Adams v. Family Planning Associates Medical Group, Inc.*, 315 Ill. App. 3d 533, 545, 733 N.E.2d 766, 775-76 (2000).

¶ 45 “A plaintiff need not conclusively prove all the elements of *res ipsa loquitur* in order to invoke the doctrine. He need only present evidence reasonably showing that elements exist that allow an inference that the occurrence is one that ordinarily does not occur without negligence.” *Dyback v. Weber*, 114 Ill. 2d 232, 242, 500 N.E.2d 8, 12 (1986).

“Illinois law does not require a plaintiff to show the actual force which initiated the motion or set the instrumentality in operation in order to rely on the *res ipsa* doctrine. To the contrary, if the specific and actual force which initiated the motion or set the instrumentality in operation were known unequivocally, leaving no reason for inference that some other unknown negligent act or force was responsible, the *res ipsa* doctrine could not even be invoked.” *Heastie*, 226 Ill. 2d at 539.

¶ 46 B. Johnson Made a *Prima Facie* Showing of the Elements of *Res Ipsa Loquitur*

¶ 47 1. *The Injury Was One That Ordinarily Does Not Occur Absent Negligence*

¶ 48 Bal’s testimony indicated that he had performed hundreds of hip replacements and had not encountered an injury such as the one Johnson had. Bal further stated that his review of the literature regarding injuries to the femoral nerve during a total hip replacement showed that the injuries experienced were transient or temporary and, to the extent such injuries continued, they were not anywhere near as severe as those Johnson experienced. Bal’s deposition testimony

adequately set forth his opinion that a severe and permanent injury to the femoral nerve does not occur in the absence of negligence and the factual bases therefor.

¶ 49 In *Spidle v. Steward*, 79 Ill. 2d 1, 8, 402 N.E.2d 216, 219 (1980), the Illinois Supreme Court acknowledged that had the expert in that case testified that the injury would not have occurred ordinarily in the absence of negligence, such testimony “would have established directly plaintiff[’s] initial burden with respect to the probability component.” “Such a direct answer *** would be sufficient initially even though it would not have constituted proof that [the injury at issue] never happen[s] without negligence.” *Id.* at 9.

¶ 50 In *Poole*, the plaintiff’s expert testified that although vocal cord paralysis was a known risk of a subtotal thyroidectomy, “*bilateral* vocal cord paralysis ordinarily would not have occurred in the absence of a deviation from the standard of care.” (Emphasis in original.) *Poole*, 186 Ill. App. 3d at 556. The appellate court held that the jury should have been given the *res ipsa loquitur* instruction even though (1) the defense expert testified that the bilateral injury was a known complication and (2) the plaintiff’s evidence “did not conclusively prove how or why the nerves [responsible for the injury] were damaged.” *Id.* at 559-60.

¶ 51 Bal opined that a retractor caused the injury. His opinion was based on the medial location of the incision, which would have increased the proximity of the retractor to the branches of the femoral nerve that were ultimately permanently injured and increased the risk of damage. Bal acknowledged that the location of the incision was not a violation of the standard of care despite the increased risk of nerve damage.

¶ 52 Although Bal agreed that femoral nerve injuries were a known risk of total hip replacement surgery, he clarified that the type and degree of such injuries were limited to transient symptoms that eventually resolved or to mild symptoms that were generally tolerable. Bal

unequivocally stated that Johnson's injury, a permanent denervation of multiple branches of the femoral nerve resulting in the inability to use two of his quadricep muscles, was not the type of injury that would have occurred in the absence of negligence.

¶ 53 Almost 40 years ago, this court examined whether the plaintiff in a medical malpractice case presented sufficient evidence in her case in chief to invoke the *res ipsa* doctrine and withstand a directed verdict. See *McMillen v. Carlinville Area Hospital*, 114 Ill. App. 3d 732, 737-38, 450 N.E.2d 5, 10 (1983). In affirming the directed verdict in the defendant's favor, we noted that the expert testified merely that the plaintiff's reaction was unexpected and the doctor " 'couldn't rule it out completely' " that the injection caused the injury. *Id.* at 738. We then concluded, "It is thus apparent that while plaintiff might have had a scintilla of evidence in support of her elements, that is insufficient ***." *Id.* By contrast, Bal testified the retractor caused the injury and explained that the injury was not merely unexpected, but instead was so severe that it would not have occurred absent negligence.

¶ 54 Bal's deposition testimony was sufficient to establish a genuine issue of material fact regarding the cause of Johnson's injury. Johnson was not required to eliminate all possible causes of the injury, nor was he required to show that the injury could *only* be the result of negligence. The plain language of the *res ipsa* statute is clear: "Proof of an unusual, unexpected or untoward medical result which *ordinarily* does not occur in the absence of negligence *will suffice* in the application of the doctrine." (Emphases added.) 735 ILCS 5/2-1113 (West 2018). Bal's testimony went much further, opining that he had never seen nor read about such an injury occurring in the absence of negligence. Although defendants are correct that an unexpected result is not enough on its own to invoke the *res ipsa* doctrine, such a result is sufficient when coupled with expert testimony that the result does not ordinarily occur in the absence of negligence. *Spidle*,

79 Ill. 2d at 9.

¶ 55 2. *Harden Had Control of the Retractor for Res Ipsa Purposes*

¶ 56 Advocate contends Johnson failed to establish that the instrumentality of the injury—the retractor—was within the control of Harden or other agents of Advocate BroMenn. In fact, Advocate argues, the deposition testimony unequivocally shows that Armstrong had exclusive control over the retractors because each occurrence witness testified to the same. We disagree. As we explain, Advocate misconstrues the showing necessary to establish control.

¶ 57 “In *res ipsa loquitur* and alternative liability situations, all parties who could have been the cause of the plaintiff’s injuries are joined as defendants.” *Smith v. Eli Lilly & Co.*, 137 Ill. 2d 222, 257, 560 N.E.2d 324, 339-40 (1990). “A plaintiff’s failure to name as defendants all of the entities who might have caused his injuries is fatal to the action since the plaintiff must eliminate the possibility that the accident was caused by someone other than any defendant.” (Internal quotation marks omitted.) *Raleigh v. Alcon Laboratories, Inc.*, 403 Ill. App. 3d 863, 869, 934 N.E.2d 530, 536 (2010).

¶ 58 Advocate is correct that Harden, Armstrong, and even Bal testified at their depositions that Armstrong was the only person to place, reposition, or otherwise move the retractor. They all similarly testified that although Harden physically held the retractor, she did so only as instructed by Armstrong. In other words, Armstrong was responsible for the retractor at all times.

¶ 59 However, this testimony establishes precisely why Harden was in control of the retractors in the sense necessary to support the elements of *res ipsa loquitur*. As explained, *res ipsa loquitur* is a form of proof available when the plaintiff can establish that an injury would not have occurred in the absence of negligence but cannot conclusively establish the precise cause

of the injury. *Poole*, 186 Ill. App. 3d at 558. Harden testified that the job of a surgery technician is to follow the surgeon's instructions precisely and not move or use (other than by holding in place) any surgical instrument. Obviously, if a surgical technician *did* move an instrument or hold that instrument incorrectly and an injury occurred as a result, the technician would be liable.

¶ 60 The undisputed evidence shows that Harden held the retractor. Bal testified that, in his opinion, the retractor caused the injury. Bal further testified that permanent and severe nerve damage to the femoral nerve does not occur in the absence of negligence. Accordingly, Johnson made a *prima facie* showing of the elements of *res ipsa loquitur*.

¶ 61 Although none of the people present during the surgery testified at their depositions that Harden acted improperly, this is not unexpected. Even Bal agreed during his deposition that from his review of the medical records, Armstrong complied with the standard of care. But that is precisely why the *res ipsa loquitur* doctrine applies: the injury speaks for itself. Bal explained that even though the documentation *says* all of the right things, in his opinion—based on his education and experience—the outcome was one that would not have occurred in the absence of negligence. That is, if the medical records and deposition testimony of the occurrence witnesses accurately reflected what happened, then Johnson would not have suffered permanent nerve damage.

¶ 62 In *Willis*, the experts testified that the plaintiff's injuries could have occurred in any number of ways caused by any number of people, such as a nurse placing too much pressure on a particular area. Likewise, in this case, Harden could have accidentally or unknowingly held the retractor in such a way as to cause the injury.

¶ 63 It is important to note that the inference of negligence is not the same in every case or even as to each defendant. Bal's opinion was that Armstrong improperly placed the retractor so as to damage the femoral nerve. At trial, even if Advocate did not present any evidence, the jury

would be free to reject the inference of negligence based on the mere fact that none of the witnesses identified a single thing Harden did wrong. See *Imig v. Beck*, 115 Ill. 2d 18, 27, 29, 503 N.E.2d 324, 329 (1986) (“The inference may be strong, requiring substantial proof to overcome it, or it may be weak, requiring little or no evidence to refute it. The weight or strength of such inference will necessarily depend on the particular facts and circumstances of each case and is normally a question of fact to be determined by the jury.” “Since the doctrine gives rise only to a permissive inference, in most cases a directed verdict for the plaintiff will not be appropriate, even where the defendant presents no explanation or rebuttal, because it must be left to the jury whether to draw the inference of negligence from the circumstances of the occurrence.”). But if Johnson did not include Harden as a defendant, Armstrong could, quite rightly, argue to the trial court that the *res ipsa* doctrine was not appropriate because Harden had physical control over the instrumentality of the injury during the surgery.

¶ 64 3. *Johnson Did Not Need an Expert To Establish Harden’s Standard of Care*

¶ 65 The whole point of the *res ipsa* doctrine is to provide an alternative method of proof when the injury would be otherwise unexplainable. Once a plaintiff establishes, through sufficient expert testimony, that the injury is one that would not ordinarily occur in the absence of negligence, and *res ipsa* applies, all defendants alleged to be in control of the instrumentality that allegedly caused the injury must be named defendants, and no further standard of care testimony is required.

¶ 66 If Advocate were correct, the same argument could be made successfully in the prototypical *res ipsa* case: a sponge left in a patient following surgery. Had this occurrence happened to Johnson, it would be no defense for Harden or Armstrong to state that the undisputed evidence shows that neither of them did anything wrong or that Johnson did not present any testimony as to what a reasonably careful surgeon or surgical technician would have done. The

sponge was still left in the patient, and *someone's* negligence during that operation was responsible for that error.

¶ 67 The essence of *res ipsa loquitur* is that the *injury* speaks for itself. Were it otherwise, there would be no need for the doctrine. Armstrong and Harden would be home free because Johnson could never find an expert to suggest that either one did something specifically wrong because all the records and testimony would point in the opposite direction.

¶ 68 Here, Johnson needs an expert to explain to the jury whether or not the type of injury in this case is the total-hip-replacement equivalent of leaving a sponge in a patient. However, the circumstances of the injury themselves—*i.e.*, going to a hospital, being rendered unconscious, and having surgery performed—unquestionably establish that those in control of the patient have a duty to exercise ordinary care and not injure the patient by violating that duty. In essence, the *control* element of the *res ipsa* doctrine is sufficient to establish a duty of care. Expert testimony is required to show that the injury is not one that would ordinarily occur absent negligence. The jury must then decide whether the resulting inference of negligence is sufficient to establish liability.

¶ 69 Advocate cites *Taylor v. City of Beardstown*, 142 Ill. App. 3d 584, 491 N.E.2d 803 (1986). We acknowledge that 35 years ago, this court held in *Taylor* that testimony regarding the standard of care and deviation from that standard was required to invoke the *res ipsa* doctrine. *Id.* at 593. We note that, as far as we can tell, the only other case to make such an explicit statement or rely on *Taylor* for that same proposition is *Smith v. South Shore Hospital*, 187 Ill. App. 3d 847, 857-58, 543 N.E.2d 868, 873 (1989), which itself has never been cited for that proposition. Indeed, in *Solon v. Godbole*, 163 Ill. App. 3d 845, 850, 516 N.E.2d 1045, 1048 (1987) (quoting *Plost v. Louis A. Weiss Memorial Hospital*, 62 Ill. App. 3d 253, 258, 378 N.E.2d 1176, 1180 (1978)), the

Third District noted, “[A] plaintiff may proceed to trial without an expert ‘*** where the theory is “*res ipsa loquitur*.” ’ ” We decline to follow *Taylor*.

¶ 70 Additionally, Illinois Supreme Court cases indicate that a plaintiff need demonstrate only a *prima facie* case of the elements of *res ipsa loquitur* to be entitled to proceed to trial using that method of proof. This reasoning makes sense because the plaintiff may have no idea how the injury happened and, as in this case, the medical records may state that everything occurred normally and the providers complied with the standard of care. Quoting a California case, the Illinois Supreme Court wrote the following:

“ ‘The present case is of a type which comes within the reason and spirit of the doctrine more fully perhaps than any other. *** [I]t is difficult to see how the doctrine can, with any justification, be so restricted in its statement as to become inapplicable to a patient who submits himself to the care and custody of doctors and nurses, is rendered unconscious, and receives some injury from instrumentalities used in his treatment. Without the aid of the doctrine a patient who received permanent injuries of a serious character, obviously the result of someone’s negligence, would be entirely unable to recover unless the doctors and nurses in attendance voluntarily chose to disclose the identity of the negligent person and the facts establishing liability.

* * *

*** The control, at one time or another, of one or more of the various agencies or instrumentalities which might have harmed the plaintiff was in the hands of every defendant or of his employees or temporary servants. This, we think, places upon them the burden of initial explanation.’ ” *Kolakowski v. Voris*, 83 Ill.

2d 388, 395-96, 415 N.E.2d 397, 400-01 (1980) (quoting *Ybarra v. Spangard*, 154 P.2d 687, 689-90, 25 Cal. 2d 486, 490-92 (Cal. 1944)).

¶ 71

The Illinois Supreme Court also wrote the following in *Spidle*:

“In addition, the [*res ipsa*] doctrine is useful in combatting the reluctance of medical personnel to testify against one another. (*Sanders v. Frost* (1969), 112 Ill. App. 2d 234, 241; Prosser, Torts sec. 39, at 227 (4th ed. 1971).) Doctors, for example, ‘may be more willing to testify that the injury was of a kind which would not ordinarily occur in the exercise of due care than they would be to specify those acts which constituted negligence.’ Note, *The Application of Res Ipsa Loquitur in Medical Malpractice Cases*, 60 Nw. U.L. Rev. 852, 865 (1966).” *Spidle*, 79 Ill. 2d at 6.

¶ 72

III. CONCLUSION

¶ 73

For the reasons stated, we reverse the trial court’s judgment and remand for further proceedings.

¶ 74

Reversed and remanded.

No. 4-21-0038

Cite as: *Johnson v. Armstrong*, 2021 IL App (4th) 210038

Decision Under Review: Appeal from the Circuit Court of McLean County, No. 18-L-126; the Hon. Rebecca S. Foley, Judge, presiding.

**Attorneys
for
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Stacy K. Shelly, Troy A. Lundquist, and Scott A. Schoen, of Langhenry, Gillen, Lundquist & Johnson, LLC, of Princeton, for appellees Advocate Health and Hospitals Corporation and Sarah Harden.

**IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT
MCLEAN COUNTY, ILLINOIS**

WILLIAM "WES" JOHNSON,

Plaintiff,

vs.

LUCAS ARMSTRONG, McLEAN
COUNTY ORTHOPEDICS, LTD.,
SARAH HARDEN, PAMELA ROLF, and
ADVOCATE HEALTH AND HOSPITALS
CORPORATION d/b/a ADVOCATE
BROMENN MEDICAL CENTER,

Defendants.

and

BRIAN STENGER and JORDAN PROSSER,

Respondents in Discovery.

FILED
9/18/2018 11:11 AM
DONALD R. EVERHART, JR.
CLERK OF THE CIRCUIT COURT
MCLEAN COUNTY, ILLINOIS

2018L0000126

FIRST CASE MANAGEMENT CONFERENCE

BEFORE JUDGE LAWRENCE

SET ON 03/07/2019 AT 10:00 AM

COMPLAINT

COUNT I

(Negligence v. Armstrong)

Plaintiff, WES JOHNSON, complains of defendant LUCAS ARMSTRONG, M.D. as follows:

1. At all times alleged herein defendant, LUCAS ARMSTRONG, M.D., (hereinafter, "ARMSTRONG") was a physician licensed in the State of Illinois and practicing in the field of orthopedic surgery in McLean County, Illinois.

2. On or prior to October 6, 2016 ARMSTRONG diagnosed WES JOHNSON with left hip osteoarthritis due to developmental dysplasia of the hip.
3. On October 6, 2016 ARMSTRONG performed a left total hip arthroplasty on WES JOHNSON using a direct anterior approach.
4. Following ARMSTRONG's surgery WES JOHNSON was discharged from the hospital with postoperative femoral nerve palsy.
5. At all times alleged herein ARMSTRONG had a duty to act as a reasonably careful orthopedic surgeon under the circumstances described.
6. In breach of that duty, on October 6, 2016 ARMSTRONG was guilty of the following negligent acts and omissions:
 - a. Failing to properly identify, preserve, and protect WES JOHNSON'S femoral nerve;
 - b. Improperly retracting WES JOHNSON's femoral nerve or improperly directing the placement of the retractors; or
 - c. Directly traumatizing WES JOHNSON's femoral nerve.
7. On both January 11, 2017 and June 1, 2017 ARMSTRONG's partner, Dr. Craig Carmichael, performed an electromyogram on WES JOHNSON.
8. Both studies demonstrated a severe left femoral neuropathy that is specific to the branches to the vastus lateralis and rectus femoris muscles.
9. The lesion appears complete with no evidence of voluntary motor unit potential activation.

10. As a direct and proximate result of ARMSTRONG'S negligence, WES JOHNSON endured and continues to endure significant pain and suffering, incurred medical expenses, sustained permanent disability, and suffered loss of a normal life.
11. Attached hereto and made a part hereof in conformance with 735 ILCS 5/2-622 are both an affidavit of counsel and a physician's report.

Wherefore, plaintiff prays judgment against defendant in an amount in excess of \$50,000 plus costs of suit.

COUNT II

(Respondent Superior v. McLean County Orthopedics)

Plaintiff, WES JOHNSON, complains of defendant, McLEAN COUNTY ORTHOPEDICS, LTD., as follows:

- 1-11. Plaintiff repeats and realleges paragraphs 1 through 11 of Count I as and for paragraphs 1 through 11 of Count II as though fully set forth herein.
12. The action and inactions of LUCAS ARMSTRONG were performed within the scope and authority of his employment by McLEAN COUNTY ORTHOPEDICS, LTD.

Wherefore, plaintiff prays judgment against defendant for an amount in excess of \$50,000 plus costs of suit.

COUNT III

(*Res Ipsa loquitur*)

Plaintiff, WES JOHNSON, complains of defendants, LUCAS ARMSTRONG, SARAH HARDEN, AND PAMELA ROLF as follows:

- 1-9. Plaintiff repeats and realleges paragraphs 1 through 9 of Count I as and for paragraphs 1 through 9 of Count III as though fully set forth herein.
10. During the October 6, 2016 surgery ARMSTRONG was assisted by scrub nurses, SARAH HARDEN and PAMELA ROLF.
11. The injuries to WES JOHNSON's femoral nerve occurred while the retractors, scalpel, electrocautery device and other surgical instruments were under the control of ARMSTRONG, HARDEN, and ROLF.
12. In the ordinary course of events, the injuries sustained by WES JOHNSON would not have occurred if ARMSTRONG, HARDEN, and ROLF had used a reasonable standard of professional care while the retractors, scalpel, electrocautery device and other surgical instruments were under their control.
13. As a direct and proximate result of the negligence of ARMSTRONG, HARDEN, AND ROLF, WES JOHNSON sustained the damages previously described.
14. Attached hereto and made a part hereof in conformance with 735 ILCS 5/2-622 are both an affidavit of counsel and a physician's report

Wherefore, plaintiff prays judgment against defendant for an amount in excess of \$50,000 plus costs of suit.

COUNT IV
(*Res ipsa loquitur* v. AHHC)

Plaintiff, WES JOHNSON, complains of defendant, ADVOCATE HEALTH AND HOSPITALS CORPORATION d/b/a ADVOCATE BROMENN MEDICAL CENTER, as follows:

1-13. Plaintiff repeats and realleges paragraphs 1 through 13 of Count III as and for paragraphs 1 through 13 of Count IV as though fully set forth herein.

14. The actions or inactions of SARAH HARDEN and PAMELA ROLF were performed within the scope and authority of their employment by ADVOCATE HEALTH AND HOSPITALS CORPORATION d/b/a ADVOCATE BROMENN MEDICAL CENTER.

15. As a direct and proximate result of the negligence of AAHC, WES JOHNSON sustained the damages previously described.

Wherefore, plaintiff prays judgment against defendant in an amount in excess of \$50,000 plus costs of suit.

RESPONDENTS IN DISCOVERY

Pursuant to 735 ILCS 5/2-402, plaintiff hereby names BRIAN STENGER and JORDAN PROSSER as Respondents in Discovery.

WILLIAM "WES" JOHNSON, Plaintiff

By: /s/ James P. Ginzkey
One of his Attorneys

James P. Ginzkey
GINZKEY LAW OFFICE
221 E. Washington St.
Bloomington, IL 61701
(309)821-9707 fax: (309)821-9708
ARDC #3124355
Primary Service: **service@ginzkeylaw.com**
Secondary Service: **jim@ginzkeylaw.com**
K:\Clients\Johnson, W\0 Pleadings\1 Complaint.wpd

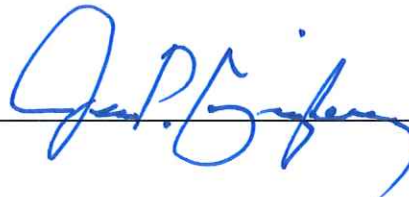
ATTORNEY'S AFFIDAVIT

STATE OF ILLINOIS)
) ss.
 COUNTY OF MCLEAN)

I, JAMES P. GINZKEY, after having been first duly sworn on oath and affirmation and pursuant to 735 ILCS 5/2-622 of the Illinois Code of Civil Procedure state:

- 1) I have consulted and reviewed the facts of this case with a health care professional who is a physician licensed to practice medicine in all its branches and who I reasonably believe:
 - a) is knowledgeable in the relevant issues involved in this particular action;
 - b) practices or has practiced with the last 6 years or teaches or has taught within the last 6 years in the same area of health care or medicine that is at issue in this particular action; and
 - c) is qualified by experience or demonstrated competence in the subject of this case.
- 2) That the reviewing health care professional has determined in a written report, after a review of medical records and other relevant material involved in this particular action, that there is a reasonable and meritorious cause for the filing of this action.
- 3) That I have concluded on the basis of the reviewing health care professional's review and consultation that there is a reasonable and meritorious cause for filing this action.

FURTHER AFFIANT SAYETH NOT.



Subscribed and sworn to before me this

18th day of September, 2018.


 Notary Public

James P. Ginzkey
 GINZKEY LAW OFFICE
 221 E. Washington St.
 Bloomington, IL 61701
 (309)821-9707 fax: (309)821-9708
 ARDC #3124355
 Primary email: service@ginzkeylaw.com
 Secondary email: jim@ginzkeylaw.com



James P. Ginzkey 221 E.
Washington Bloomington,
IL 61701

RE: William "Wes" Johnson
d/o/b: 03/21/1962

Dr. Mr. Ginzkey:

At your request, I have now reviewed the records of Wes Johnson from Advocate BroMenn Medical Center in Normal, Illinois and the office charting of McLean County Orthopedics in Bloomington, Illinois. Those records reflect that on October 6, 2016 Wes Johnson underwent a left total hip arthroplasty using a direct anterior approach by Dr. Lucas Armstrong of McLean County Orthopedics. The patient's discharge summary from the following day reflects that he was suffering from postoperative femoral nerve palsy.

The patient was seen by Dr. Armstrong's partner, Dr. Craig Carmichael, on January 11, 2017 and June 1, 2017. On both dates Dr. Carmichael conducted an electromyogram. Both studies demonstrated a severe left femoral neuropathy that is specific to the branches to the vastus lateralis and rectus femoris muscles, but spares the branch to the vastus medialis. The lesion is complete with no evidence of voluntary motor unit potential activation. While temporary injury to the patient's lateral femoral cutaneous nerve is a known risk of the direct anterior approach in total hip arthroplasty, direct trauma or traction injury causing permanent damage to the femoral nerve involved here, is not an expected outcome of anterior approach total hip arthroplasty. This patient's femoral nerve was not properly identified, preserved, and protected at the time of the surgical procedure by Dr. Armstrong, or at his direction. The surgical technique used here fell below the standard of care. This type of permanent injury generally does not occur absent negligence.

I believe that a meritorious cause of action exists against Dr. Armstrong, McLean County Orthopedics, Ltd., scrub nurses, Sarah Hardin and Pamela Rolf, as well as their employer, Advocate Health and Hospitals Corporation d/b/a Advocate BroMenn Medical Center. I am board certified in orthopedic surgery and am familiar with the type of surgery performed here. I am also familiar with the medical sequelae arising from these types of procedures. My opinions are based upon a reasonable degree of medical certainty but I reserve the right to amend my opinions as more information becomes available.

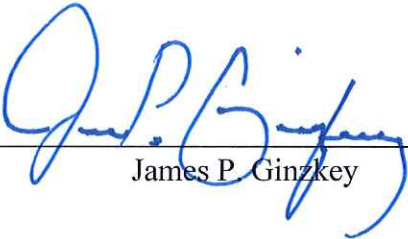
Respectfully,

SUPREME COURT RULE 222(b) AFFIDAVIT

STATE OF ILLINOIS)
) ss
 COUNTY OF McLEAN)

I, JAMES P. GINZKEY, after having been first duly sworn, on oath and affirmation state that damages sought in this cause **do** exceed \$50,000.

FURTHER AFFIANT SAYETH NOT.



 James P. Ginzkey

Subscribed and sworn to before me this

18th day of September,
 2018.



 Notary Public



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**IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT
MCLEAN COUNTY, ILLINOIS**

FILED
4/14/2020 2:22 PM
DONALD R. EVERHART, JR.
CLERK OF THE CIRCUIT COURT
MCLEAN COUNTY, ILLINOIS

WILLIAM “WES” JOHNSON,

Plaintiff,

vs.

LUCAS ARMSTRONG, McLEAN COUNTY
ORTHOPEDICS, LTD., SARAH HARDEN, and
ADVOCATE HEALTH AND HOSPITALS
CORPORATION d/b/a ADVOCATE
BROMENN MEDICAL CENTER,

Defendants.

2018 L 0000126

**PLAINTIFFS’ SUPREME COURT RULE 213(f)(3)
WITNESS DISCLOSURE OF SONNY BAL, M.D.**

Pursuant to Supreme Court Rule 213(f)(3) plaintiff discloses the following “controlled expert witness” and (i) the subject matter on which the witness will testify; (ii) the conclusions and opinions of the witness and the bases therefore; (iii) the qualifications of the witness; and (iv) any reports prepared by the witness about the case:

B. Sonny Bal, M.D.

**2000 E. Broadway, #251
Columbia, MO 65201**

- (i) Dr. Bal will testify to the standard of care applicable to a total hip arthroplasty using an anterior approach, whether there were any deviations from that standard in the present case, and what injuries were proximately caused by any such deviations.**
- (ii) Dr. Bal's opinions and conclusions, and the bases therefore are as follows:**

- (a) In his left total hip arthroplasty of 10/6/2016 Lucas Armstrong deviated from the required standard of care in the following respects:
 - 1) making his initial incision much too medially;
 - 2) failing to properly identify the patient's femoral nerve;
 - 3) failing to adequately protect the patient's femoral nerve; and
 - 4) causing injury to the patient's left femoral nerve resulting in permanent denervation of the branches to 2 of the patient's 4 quadriceps muscles, the vastus lateralis and rectus femoris.
 - (b) The surgical instruments injuring the patient's femoral nerve were under the control of Lucas Armstrong and his scrub nurse, Sarah Harden, who was acting at his direction.
 - (c) In the normal course of a total hip arthroplasty, complete denervation of 2 of a patient's 4 quadriceps muscles does not happen in the absence of negligence.
 - (d) Complete denervation of 2 of the patient's 4 quadriceps muscles has caused loss of strength in the patient's left leg resulting in multiple falls and head trauma.
- (iii) Dr. Bal's opinions are based upon his education, training and experience as set forth in the attached curriculum vitae, as well as his review of the following materials:
- (a) Medical:
 - 1) Chronology with 8 supporting records;
 - 2) Advocate BroMenn Medical Center charting from 9/13/16 through 11/4/16 (including OP Note of 10/6/16 and Discharge Summary of 10/7/16);
 - 3) Washington Univ. Physicians records (including nerve transplant consult of 7/16/18);
 - 4) EMG/NCVs of 1/11/2017 and 6/14/17;
 - 5) 3T MARS MRI of 9/30/2019

(b) Depositions with exhibits:

- 1) Lucas Armstrong, M.D.;
- 2) Sarah Harden;
- 3) Pamela Rolf;
- 4) William “Wes” Johnson;
- 5) Craig Carmichael, M.D.;
- 6) Thomas Tung, M.D.;

(c) Other documents:

- 1) Exhibit 13 to deposition of Craig Carmichael, M.D.
- 2) Photograph of incision taken 4/16/19
- 3) DePuy Synthes brochure “The Anterior Approach”

(iv) Dr. Bal prepared no reports.

Plaintiff reserves the right to call as a witness any person disclosed or identified as a trial witness pursuant to Supreme Court Rule 213(f)(3) by any other party to this litigation, regardless of whether that person is, in fact, actually called as a witness by the disclosing party, either in their case in chief or in rebuttal.

William “Wes” Johnson, Plaintiff

By: /s/James P. Ginzkey
One of his attorneys

James P. Ginzkey
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PROOF OF SERVICE

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned, a non-attorney, certifies that on the 14th day of April, 2020 at or before the hour of 5:00 p.m. the foregoing instrument was filed with the Clerk of the Court using Odyssey eFile and Serve, which shall serve the following attorney(s) of record at the email addresses designated in the system, as follows:

Peter W. Brandt, Esq.
e-mail: pbrandt@lbbs.com
 Rachel J. Brandt, Esq.
e-mail: rbrandt@lbbs.com

Troy A. Lundquist, Esq.
e-mail: tlundquist@lglfirm.com
 Scott A. Schoene, Esq.
e-mail: sschoen@lglfirm.com

/s/ Susan Rasor

 susan@ginzkeylaw.com

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 Secondary email: jim@ginzkeylaw.com

B. SONNY BAL; MD, MBA, JD, Ph.D*CURRICULUM VITAE***CONTACT :**

Mailing: 2000 E. Broadway, # 251
Columbia, MO 65201

Telephone: (573) 808 4512
Email: balb@missouri.edu

PRESENT POSITION:

Chief Executive Officer and President
SINTX Technologies
1885 W. 2100 South
Salt Lake City, UT 84119

PROFESSIONAL HIGHLIGHTS:**1. MEDICAL:**

- a. Jackson County Orthopaedics, Blue Springs, MO: Private practice in general orthopaedic surgery as partner in 4-physician group; 1994-1999.
- b. University of Missouri-Columbia: Academic practice in arthroplasty surgery; 1999-2017

2. LEGAL:

- a. Contributing Editor: "Orthopaedic Medico-Legal Advisor" Column in *Orthopedics Today* newsletter; 2005-present
- b. Contributing Editor: "MedicoLegal Sidebar" quarterly column in peer-reviewed *Clinical Orthopaedics and Related Research*; 2012-present
- c. Assisted law firms nationwide in medical malpractice, product liability, and intellectual property litigation.

3. CORPORATE:

- a. President, and CEO of SINTX Technologies (Nasdaq: SINT); 2014-present
- b. Chairman, Board of Directors SINTX Technologies; 2014-present
- c. Financing milestones:
 - i. Dawson James Securities (Agent): Public offering of stock and warrants, \$13 million, December 2014.
 - ii. Ladenburg-Thalmann (Agent): Registered Direct/Private Placement \$15 million in Common Stock and Warrants, September 2015
 - iii. Ladenburg-Thalmann (Agent): Follow-on Offering, \$12.7 million in

Common Stock & Warrants, and Convertible Preferred Stock & Warrants,
July 2016

- iv. Maxim Group New York (Agent): Follow on Offering in Common Stock and Warrants, \$4.5 million, January 2017
- v. Maxim Group New York (Agent): Preferred Stock and Warrants Offering; \$15 million, May 2018

EDUCATION:

Engineering:

Kyoto Institute of Technology (Ph.D)	10/15/2014 to 9/26/2016
Kyōto Kōgei Sen'i Daigaku, Kyoto, Japan	

Law:

University of Missouri School of Law (JD)	8/27/2002 to 5/16/2009
Columbia, Missouri	

Business Management:

Kellogg Graduate School of Management (MBA)	09/1/1997 to 6/30/1999
Northwestern University	
Evanston, Illinois	

Medical School:

Cornell University Medical College (MD)	8/1/1983 to 5/27/1987
New York, New York	

College:

University of California (MS-Genetics)	7/1/1982 to 6/30/1983
Davis, California	

University of California (BS-Genetics)	3/1/1981 to 6/30/1982
Davis, California	

San Joaquin Delta College (AA-Biology)	1/16/1979 to 2/28/1981
Stockton, California	

POST GRADUATE MEDICAL TRAINING

Fellowships:

Research Assistant	8/1/1994 to 7/31/1995
Orthopaedic Biomechanics Laboratory	
William H. Harris, M.D.	
Massachusetts General Hospital	
Boston, Massachusetts	

Hip and Implant Surgery, Post-graduate year 7 William H. Harris, M.D. Massachusetts General Hospital Harvard Medical School Boston, Massachusetts	8/1/1993 to 7/31/1994
---	-----------------------

Internship & Residency:

Orthopaedic Surgery, Post-graduate years 3-6 Department of Orthopaedic Surgery University of Missouri School of Medicine Kansas City, Missouri	7/1/1989 to 6/30/1993
---	-----------------------

General Surgery, Post-graduate years 1-2 Department of General Surgery University of California Hospitals and Clinics San Francisco, California	7/1/1987 to 6/30/1989
--	-----------------------

ACADEMIC APPOINTMENTS

Professor (with Tenure) Department of Orthopaedic Surgery University of Missouri Health System-Columbia	9/1/2013 to 11/6/2017
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Adjunct Faculty Executive MBA Medicine Program University Malaysia	8/2012 to Present
--	-------------------

Interim Chairman Department of Orthopaedic Surgery University of Missouri Health System-Columbia	12/15/2008 to 8/30/2009
--	-------------------------

Chief of Adult Reconstruction Department of Orthopaedic Surgery University of Missouri Health System-Columbia	9/1/2007 to 8/31/2013
---	-----------------------

Associate Professor Department of Orthopaedic Surgery University of Missouri Health System-Columbia	9/1/2007 to 8/31/2013
---	-----------------------

Adjunct Professor Department of Materials Science and Engineering Missouri Science & Technology University -Rolla	2005 to Present
---	-----------------

Assistant Professor Department of Orthopaedic Surgery University of Missouri Health System-Columbia	9/1/1999 to 8/31/2007
---	-----------------------

Assistant in Orthopaedic Surgery	1993 to 1995
----------------------------------	--------------

Cambridge Hospital/Harvard Medical School
Cambridge, Massachusetts

BOARD CERTIFICATION

American Board of Orthopaedic Surgery, July 1997
American Board of Orthopaedic Surgery, Recertified July 2016.
Licensed to practice law in Missouri since 2009

PROFESSIONAL MEMBERSHIPS & APPOINTMENTS

Orthopaedic Research & Education Foundation (OREF), Board of Trustees 2016-2019
CEO and President; Amedica Corp. (NASDAQ: AMDA, now SINT) 9/30/14 to present.
Chairman, Board of Directors, Amedica Corp. (above) August 21, 2014 to present.
MU Department of Radiology Promotion and Tenure Committee; July 2014 to present.
Amedica Corporate Board of Directors (above); January 1 2013 to present.
Amedica Corporate Audit Committee; January 1 2013 to present.
Amedica Corporate Compensation Committee; January 1 2013 to present.
Lifetime Member: International Soc. for Tech. in Arthroplasty; January 1, 2013 to present.
Professional Liability and Compliance Committee; March 1, 2012-October 30, 2015.
American Bar Association; 2009 to present.
The Missouri Bar Association; 2009 to present.
Florida Expert Witness Certificate since March 2014
University of Missouri Graduate Faculty; 2009.
University Physicians Professional Liability Committee; 2006 to 2008.
Clinical Orthopaedic Society; 2005 to present.
Jefferson Club, University of Missouri-Columbia; 2005 to present.
The Library Society, University of Missouri-Columbia; 2005 to present.
The McAlester Society, University of Missouri-Columbia; 2005 to present.
McMaster University Evidence-Based Journal Reviewing System; 2003 to 2006.
Missouri State Orthopaedic Association; 2003 to 2013.
American Association of Hip and Knee Surgeons; 2001 to present.
Mid-America Orthopaedic Association; 2000 to 2013.
Orthopaedic Research Society; 2000 to present.
Society for Biomaterials; 2000 to present.
American Academy of Orthopaedic Surgeons.
Shareholder/Partner, Jackson Country Orthopaedics, Inc., Blue Springs, MO; 1995 to 1999

HOSPITAL AFFILIATIONS

University of Missouri Hospital and Clinics; 6/21/1999 to 11/06/2017
Women's and Children, known as Columbia Regional Hospital; 8/16/2000 to present. (Active)
Boone Hospital Center; 6/2000 to 2/13/2014. (Courtesy)
Capital Region Medical Center; 11/15/2005 to present. (Active)
Harry S. Truman Veterans' Memorial Hospital; 12/12/1999 to present. (WOC)
St. Mary's Hospital, Blue Springs, MO; 7/1995 to 8/1999.

Centerpoint Medical Center of Independence, Independence, MO; 1995 to 1999.
Cambridge Hospital, Cambridge, MA; 1994 to 1995.

OUTPATIENT CENTER AFFILIATIONS

The Institute for Outpatient Surgery; 7/1/2002 to present.
HealthSouth Rusk Rehabilitation Center; 6/8/2006 to present.

HONORS AND AWARDS

Examiner, American Board of Orthopaedic Surgeons Part II: July 2009, 2011, 2012, 2017.
Missouri Hospitals Association Award for Exceptional Care, May 2017
Elite Reviewer for the Journal of Arthroplasty and 2014 “Wall of Fame”
AAOS Achievement Award, March 12, 2013.
Certificate of Editorial Achievement, Guest Editor for Composite Materials in Skeletal Engineering for Open Access Journal. December 2012.
AAOS Achievement Award for Volunteer Service. January 27, 2012.
Missouri Life Sciences Research Award. The Evaluation of a Synthetic Bioactive Biomaterial Scaffold for the Tissue Engineering of Cartilage. P Jayabalan, MN Rahaman, BS Bal, HJ Sims, JL Cook. July 18 – 21, 2011.
2nd Place Phi Zeta Research Day Poster Presentation, University of Missouri. July 18 – 21, 2011.
University of Missouri President’s Intercampus Collaboration Award. March 4, 2011.
University of Missouri, Research and Creativities Forum 2010: 1st Place Award Bioactive Glass 13-93 as a subchondral substrate for tissue engineered osteochondral constructs *P Jayabalan, AR Tan, MN Rahaman, BS Bal, CT Hung, JL Cook*.
Appointed to Elwood L. Thomas Inn of Court, MU School of Law; 2008 to 2009.
American Board of Orthopaedic Surgeons: Invited examiner for oral examination of candidates taking Part II of ABOS Certification Examination, July 14-17, 2008, July 2017.
COL Making a Difference Award, 2008.
Paul “HAP” Award for Outstanding Scientific Paper, International Society of Technology in Arthroplasty (ISTA), August 2007.
American Academy of Orthopaedic Surgeons, Clinician-Scientist Travel Fellowship Award, December 2006.
American Academy of Orthopaedic Surgeons, Leadership Fellows Program, Class of 2007 (elected 2006).
University of Missouri Health Care Service Quality Award for July 2005.
Columbia Chamber of Commerce Leadership Certificate may 29, 2001
Department of Radiology-Chair Search Committee, University of Missouri Health Care, 2001.
St. Luke’s Hospital House Staff Research Award, University of Missouri School of Medicine 1991.
Rex L. Diveley Orthopaedic Research Award, University of Missouri–Kansas City School of Medicine 1990, 1992, and 1993.
Department of Orthopaedic Surgery Prize, University of Missouri - Kansas City School of Medicine 1990, 1991, 1992, and 1993.
Richard H. Kiene Orthopaedic Award, University of Missouri - Kansas City School of Medicine 1990, 1991, and 1992.
Honors in Research with M.D. degree, Cornell University Medical College 1987.

Dept. of Physiology Basic Science Research Prize, Cornell University Medical College 1987.
Teaching Assistantships, Genetics and Biochemistry, University of California-Davis 1982 to 1983.

Alpha Zeta Honor Society, University of California-Davis 1982.

B.S. degree with High Honors, University of California-Davis 1982.

A.A. degree with High Honors, San Joaquin Delta College 1981.

Teaching Assistantships, Chemistry and Physics, San Joaquin Delta College 1980 to 1981.

Alpha Gamma Sigma Honor Society, San Joaquin Delta College 1980.

STUDENT RESEARCH ADVISOR, SPONSOR, MENTOR

“Design of a Cable Tensioning Tool For Reattachment of the Greater Trochanter.”

Undergraduate thesis, Mechanical & Aerospace Engineering, MU MAE 350 Honors Research, December 2002, Jonathan T. Brown. Sherif El-Gizawy, PhD, Honors Advisor and **B. Sonny Bal, MD**, Research Advisor.

“Finite Element Analysis of Proximal Femoral Loading In Minimally Invasive Total Hip Replacement.” MS Thesis, October 2005, Aaron Xavier Molina Martell. Sherif El-Gizawy, PhD, Thesis Supervisor and **B. Sonny Bal, MD**, Thesis Co-Supervisor.

“Alternative Avenues for MedicoLegal Dispute Resolution.” Program mentor and graduate advisor, 2005-2006, Sukhsimranjit Singh, LLM degree, University of Missouri Law School.

“Fabrication of Functional Gradient Composite Ceramic Materials for Orthopaedic Bearings.” Hrishikesh Keshavan, 2002-2003. MS thesis, MU Aerospace and Mechanical Engineering. Graduate student advisors: Khaled Morsi, PhD, and **B. Sonny Bal, MD**.

“Response of primary human blood monocytes and the U937 human monocytic cell line to alumina ceramic particles.” Efrat Yagil, MS thesis, MU School of Veterinary Immunobiology. Graduate Advisors: D. Mark Estes, PhD, and **B. Sonny Bal, MD**.

“Tissue-engineered osteochondral constructs.” Post Graduate fellowship advisor: Dr. Wenhui Huang, PhD. January 1, 2005 to June 30, 2006. Mohamed Rahaman, PhD, and **B. Sonny Bal, MD**.

“Alumina/polyethylene acetabular cups and alumina-niobium bearings for total hip arthroplasty.” Post Graduate fellowship advisor: Yadong Li, PhD, April 1, 2005 to July 31, 2006. Co-Advisors: Mohamed Rahaman, PhD, and **B. Sonny Bal, MD**.

“Interaction of cells with bioactive glasses.” Undergraduate fellowship; Second Prize in the UM-Rolla annual undergraduate research competition, Agatha Dwilewicz, April 2006. Advisors: Mohamed Rahaman, PhD, and **B. Sonny Bal, MD**.

“Fabrication of hydroxyapatite and bioactive glass scaffolds for bone repair and regeneration.” Qiang Fu, PhD, August 2005. Advisor: Mohamed Rahaman, PhD, and **B. Sonny Bal, MD**.

“Composite Ceramic THA Bearings.” Post Graduate fellowship Dr. Aihua Yao, Visiting Scientist, July 15, 2006 to present. Advisors: Mohamed Rahaman, PhD, and **B. Sonny Bal, MD**.

“Nanomechanical Property Characterization of Femoral Heads.” Masters of Science thesis presented to the Faculty of the Graduate School, University of Missouri-Columbia, Prashanthi Tirunagari 2006. Sanjeev Khanna, PhD, Thesis Supervisor and **B. Sonny Bal, MD**, Research Advisor.

“Freeze casting of bioactive ceramics and glass scaffolds for engineering bone tissue.” PhD/DE Advisory and Thesis Defense Committee. Qiang Fu August 15, 2005 to May 28, 2009. Mohamed Rahaman, PhD, Faith Dogan, PhD, Roger Brown, PhD, Delbert Day, PhD and **B. Sonny Bal, MD**.

“Serum Amyloid Factor and Osteophyte Formation in Degenerative Joint Disease.” Srijita Dhar, student May 2008 to present. Master’s thesis committee.

Doctoral Dissertation and Advisory Committee member, PhD degree, Graduate Student Xin Liu, January 2010-August 2012, Missouri S&T University, Rolla, MO. Dissertation: Bioactive Glass Scaffolds for the Regeneration of Load-Bearing Bone.

“Bioactive Glass (13-93) as a subchondral substrate for tissue-engineered osteochondral constructs.” Prakash Jayabalan, Andrea Tan, Mohammed N Rahaman, **B Sonny Bal**, Hannah J Sims, Clark T Hung and James L Cook. Prakash won 2010 MU Post-Doctoral Association Travel Award Grant.

Faculty Mentor: MU Discovery Fellow Research Student (Darby Provance); 2011 to 2012.

“A New Standard for Measuring Professional Conduct of the Physician in Training.” *Publication in preparation* Faculty Advisor: Haden Ross Compton, 2nd year law student, University of Missouri-Columbia.

Advisor to Missouri Law Review Associate Member, fall 2011 academic semester, University of Missouri, Columbia.

Advisor to Clint Mathews. A class ran by Jake Holliday of the Missouri Innovation Center - Starting a High Growth Venture - The Business Plan.

Supported seven (7) post-graduate fellows at Comparative Orthopaedic Laboratory, 2003-2012.

PhD Advisory Committee; Wei Xiao. Bioactive glass scaffolds for structural bone repair. 2016

Pre-Clerkship Advisor to first year medical students and Clinical Advisor to students early in the M3 year.

Faculty Mentor: Student Research Fellowship (Mitchell Tarka); 2014-2015.

Committee Member for Yinan Lin for work on 13-93 bioactive glass doped with Cu in rat calvarial defect model and segmental model; 2014.

Clinical Risk and Judicial Reasoning –How to Make Legally Sound Clinical Decisions. Mentor: Caroline Poma, Class of 2017, University of North Carolina School of Law.

Faculty Mentor: Student Research Samuel Thompson and Dominic Zanaboni; A Comparison of Cost and Hospital Outcomes in Patients Receiving the ConforMIS iTotal TKA vs. an off the shelf brand; 2015.

Thesis advisory committee member for Yinan Lin: Healing of Bone Defects in a Rodent Calvarial Defect Model Using Strong Porous Bioactive Glass (13-93) Scaffolds; 2015.

ASC Preclerkship Advisor: Kenny Weith; August 2015-July 2016.

Mentor and Pre-clerkship Advisor: Medical Student John Welsh, University of Missouri 2017.

COMMITTEE SERVICE

National/International:

At-Large Legal Advisor for Health Policy Committee, American Association of Hip and Knee Surgeons, January 2010 to present.

Contributing Author to the Interactive Educational Program (IEP) for Total Joint, 2010 to present.

Orthopaedic Research & Education Foundation (OREF), Orthopaedic Partners Committee. Appointment, June 2010 to present.

Medical Liability Committee, American Academy of Orthopaedic Surgeons, March 2008 to March 2010.

Honorary One Health Initiative Website Advisory Board, July 2009 to present.

Hip, Knee, and Adult Reconstruction Evaluation Subcommittee, American Academy of Orthopaedic Surgeons, 2007 to March 2013.

American Academy of Orthopaedic Surgeons, Leadership Fellows Program, 2007 to 2008.

Legal Advisory Committee, American Association of Hip and Knee Surgeons, July 2005 to present; Vice-Chairman, November, 2005, Chairman elect 2007 to 2010.

American Legal Forum and Orthopaedic Medical Legal Advisor Bulletin, Founding Member, and Board of Directors, Chapel Hill, NC, 2005 to present.

Medical Liability Committee, American Academy of Orthopaedic Surgeons, Academic Business and Practice Management Committee, American Academy of Orthopaedic Surgeons, 2002 to 2005.

Foundation for the Advancement of Research in Medicine, Board of Directors, California, 2002 to present.

ECRI-Health Technology Forecast Advisory Board, 2003 to 2005.

Orthopaedic Research & Education Foundation (OREF), Finance Committee. Appointment, August 2012 to present.

American Bar Association Advisory Panel, appointed March 2012 to present.

Advisory Board for *Physicians' Life* magazine, November 2014 to present.

Orthopaedic Research & Education Foundation (OREF), Visionary Research Society, August 2014-present.

Orthopaedic Research & Education Foundation (OREF) Board of Trustees, February 29, 2016-February 29, 2019.

Industry:

Board of Directors, Amedica US Spine Inc., Salt Lake City, UT. Appointed January 2012.

Board of Directors, OrthoMind Inc. Social Media website for Orthopaedic Surgeons. Appointed August 2011.

Hip and Knee Implant Designer Surgeon Panel, Zimmer Inc., Warsaw, Indiana, 2002-2011.

Total Joint Reconstruction Clinical Advisory Panel, Amedica Inc., Salt Lake City, UT, 2005 to present.

Board of Directors, BoneSmart.org and FARMortho LLC.

Scientific Advisory Board for the ConforMIS iTotal Hip Implant, May 2013 to present.

University of Missouri:

MU Discovery Fellows Program for the 2011 to 2012 academic year.

MU Orthopaedic Transitional Leadership Advisory Committee, 2008 to 2009.

Member; Board of Directors and Executive Committee, Missouri Orthopaedic Institute, University of Missouri.

Promotion & Tenure Committee of the Department of Orthopaedic Surgery, University of Missouri, Columbia.

University Physicians Medical Malpractice Committee.

EDITORIAL BOARDS/PEER REVIEWER

Peer reviewer for the Hip, Knee & Adult Reconstruction questions for the new Self-Assessment Examination based on the AAOS Orthopaedic Knowledge Online, April 27, 2012 to present.

Editorial Manager, Adult Reconstruction OKO Self-Assessment Exam: Adult Reconstruction, April 2011.

Editorial Board, *World Journal of Orthopedics* (WJO), March 2011 to present.

Peer reviewer, *Journal of Knee Surgery*, April 2010 to present.

Editorial Board member of *Orthopedics Today*, April 2010 to present.

Editorial Board of *Global Journal of Surgery*, February 2010 to June 30, 2012.

Dove Medical Press, Honorary Editorial Board, 2008 to present.

Editorial Board, *Journal of Orthopaedic Surgical Advances*, October 2007 to present.

Peer reviewer for *Journal of the American Academy of Orthopaedic Surgeons*.

Editorial Board for the *International Journal Medicine and Law*, January 1, 2014 to present.

Peer Reviewer, “Patient-Specific Rehabilitation in Knee Osteoarthritis”; PI – Stephen Sayers; University of Missouri Research Board Grant; May 2014.

Editorial Board, *Arthroplasty Today*, October 2014 to present.

SCIENTIFIC PRESENTATIONS (peer reviewed)

1. **Bal BS.** “Alpha-adrenergic blockade alters regional perfusion during E. coli bacteremia.” First International Shock Congress and Tenth Annual Conference on Shock, Montreal, Canada, June 7-11, 1987.
2. **Bal BS.** “Concentration- and calcium- dependent binding of acidic phosphoproteins to type-I collagen.” American Society for Bone and Mineral Research, San Diego, California, August 24-28, 1991.
3. **Bal BS.** “The oblique trochanteric osteotomy.” 23rd Annual Hip Course, Harvard Medical School, Boston, Massachusetts, 1993.
4. **Bal BS.** “Factors in trochanteric union.” 24th Annual Hip Course, Harvard Medical School, Boston, Massachusetts, 1994.
5. **Bal BS.** “Wear in monoblock versus modular femoral stems.” 25th Annual Hip Course, Harvard Medical School, Boston, Massachusetts, 1995.
6. **Bal BS.** “Fate of trochanters in revision total hip arthroplasty.” 25th Annual Hip Course, Harvard Medical School, Boston, Massachusetts, 1995.

7. **Bal BS.** “Trochanteric escape in revision total hip arthroplasty.” 25th Annual Hip Course, Harvard Medical School, Boston, Massachusetts, 1995.
8. **Bal BS,** Vandelune D, Gurba DM and Harris WH. “A comparison of polyethylene wear between femoral stems of different modularity, porous-coating, and metal composition.” Annual Meeting of the American Academy of Orthopaedic Surgeons, Atlanta, Georgia, February 22-26, 1995.
9. **Bal BS.** “Cementless cups into prior allografts.” 29th Annual Hip Course, Harvard Medical School, Boston, Massachusetts, 1999.
10. **Bal BS.** “Ceramic femoral components in total knee replacement.” Mid-Central States Orthopaedic Society/Missouri State Orthopaedic Association Annual Meeting, Branson, Missouri, June 2000.
11. **Bal BS.** “Ceramic femoral head fractures.” 4th Annual Symposium on Alternate Bearings in Total Joint Arthroplasty, Maui, Hawaii, September 24-26, 2001.
12. **Bal BS.** “Zirconia ceramic femoral component in total knee replacement.” 4th Annual Symposium on Alternative Bearings in Total Joint Arthroplasty, Maui, Hawaii, September 24-26, 2001.
13. Cook JL, Ray A, Ray BK, Kuroki K, Kenter K, **Bal BS.** “Transcription factor SAF-1 regulates matrix metalloproteinase-1 gene expression in osteoarthritis” Aust G. Orthop Res Soc, New Orleans, LA, February 2-5, 2003. ***Orthopaedic Research Society’s 2003 New Investigator Recognition Award Winner***
14. **Bal BS.** “Ceramic-on-ceramic bearings in total hip replacement.” 33rd Annual Course, Advances in Arthroplasty, Harvard Medical School, Cambridge, MA, September 17-20, 2003.
15. **Bal BS.** “Ceramic total knee replacement.” The 6th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement, San Francisco, California, September 22-24, 2003.
16. **Bal BS.** “Characterization of surface damage to alumina bearings in total hip arthroplasty.” 17th Annual Symposium of the International Society for Technology in Arthroplasty, Rome, Italy, September 23-25, 2004.
17. **Bal BS.** “Ceramics dislocation.” 34th Annual Course, Advances in Arthroplasty, Harvard Medical School, Cambridge, MA, September 29-October 2, 2004.
18. **Bal BS.** “My first 50 cases.” 34th Annual Course, Advances in Arthroplasty, Harvard Medical School, Cambridge, MA, September 29-October 2, 2004.
19. **Bal BS.** “Encore ceramic-ceramic and status of PDP.” The 7th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement, Philadelphia, PA, October 14-15, 2004.

20. **Bal BS.** “Ceramic total knee replacement.” The 7th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement, Philadelphia, PA, October 14-15, 2004.
21. **Bal BS.** “MIS THR: not an easy road.” The 7th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement, Philadelphia, PA, October 14-15, 2004.
22. **Bal BS.** “Early clinical results of primary hip replacement surgery using two incisions.” The 14th Annual American Association of Hip and Knee Surgeons, November 5-7, 2004, Dallas, Texas.
23. **Bal BS, Haltom D, Aleto T, Barrett MO.** “Clinical results in eighty-nine primary total hip replacements performed with a two-incision minimally invasive technique.” Minimally Invasive Surgery meets Computer Assisted Orthopaedic Surgical Technology (MIS meets CAOS) Indianapolis, IN, May 19-21, 2005.
24. **Bal BS, Garino JP.** “Ceramic-on-ceramic versus ceramic-on-polyethylene bearings in total hip arthroplasty: results of a multicenter prospective randomized study and update of modern ceramic total hip trials in the USA.” BioloX Symposium, Washington, DC, June 1-11, 2005.
25. **Bal BS.** “Surface changes to alumina femoral heads after metal staining during implantation, and after recurrent dislocations of the prosthetic hip.” BioloX Symposium, Washington, DC, June 1-11, 2005.
26. **Bal BS.** “Primary total knee replacement with a zirconia ceramic femoral component.” BioloX Symposium, Washington, DC, June 1-11, 2005.
27. **Bal BS.** “MIS sub-vastus approach to total knee replacement.” 35th Annual Course, Advances in Arthroplasty, Harvard Medical School, Cambridge, MA, September 28-October 1, 2005.
28. **Bal BS.** “Ceramics for the orthopaedic surgeon.” 35th Annual Course, Advances in Arthroplasty, Harvard Medical School, Cambridge, MA, September 28-October 1, 2005.
29. **Bal BS.** “High incidence of fractures of the polyethylene tibial post in a posterior cruciate-substituting total knee system.” The 15th Annual American Association of Hip and Knee Surgeons, Dallas, Texas November 4-6, 2005.
30. **Bal BS.** “A few concepts, regards, medical defense, action and liability reform.” An educational presentation by the AAHKS Legal Advisory Committee. The 15th Annual American Association of Hip and Knee Surgeons, Dallas, Texas, November 4-6, 2005.
31. **Bal BS, Khandkar A.** “Alternative bearing in total hip replacement.” The 50th Annual Conference of Indian Orthopaedic Association, Mumbai, India, December 28, 2005.
32. **Bal BS.** “Alternative bearing – ceramics.” The 50th Annual Conference of Indian Orthopaedic Association, Mumbai, India, December 28, 2005.
33. **Bal BS, Greenberg DD, Li S, Cherry KL, Aleto TJ.** “Failure of the polyethylene tibial post in a posterior cruciate-substituting total knee arthroplasty.” Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago, Ill., March 24, 2006.

34. **Bal BS**, Lowe J, Burlingame N, Serafin L. "Relationship between diameter and load to failure in ceramic femoral heads." 23rd Annual Southern Orthopaedic Association Meeting, Paradise Island, Bahamas, July 20, 2006.
35. **Bal BS**, Lowe J, Burlingame N, Serafin L. "MIS sub-vastus approach to total knee replacement." Twenty-third Annual Southern Orthopaedic Association Meeting, Paradise Island, Bahamas, July 20, 2006.
36. **Bal BS**, Barrett MO, Lowe J. "Early outcomes of primary total hip replacements with a modified two incision approach." 23rd Annual Southern Orthopaedic Association Meeting, Paradise Island, Bahamas, July 20, 2006.
37. **Bal BS**. "Zimmer MIS 2-incision THA improvement—M/L taper hip." Zimmer Arthroplasty Course, Nashville, Tennessee, November 10, 2006.
38. **Bal BS**. "Avoiding leg length discrepancy with *VerSys* hip/longevity poly." Zimmer Arthroplasty Course, Nashville, Tennessee, November 10, 2006.
39. **Bal BS**, Ries M, Atwood S, Anderson M, Penenberg B, Halley D, Greenwald A, Pruitt L, Penenberg, B. "Fracture of highly cross-linked UHMWPE acetabular Liners." Presented at the 75th Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, March 5-9, 2008.
40. Khandkar AC, Bernero J, **Bal BS**, Lakshminarayanan R, Clarke I, Hoffman AA. "Silicon nitride: a new material for spinal implants." 10th Annual Update in Hip and Knee Arthroplasty and Bearings Surfaces, held in Racho Mirage, CA, September 17-19, 2008.
41. Cook JL, Lima EG, Ng KW, Kuroki K, Stoker AM, **Bal BS**, Ateshian GA, Hung CT. "Towards biologic osteochondral resurfacing of the canine patella using tissue engineered anatomic constructs." Orthopaedic Research Society, New Orleans, LA, March 6-9, 2009.
42. Lima EG, Chao PH, Ateshian GA, Cook JL, **Bal BS**, Vunjak-Novakovic G, Hung CT. "Porous tantalum metal outperforms devitalized bone as a substrate for osteochondral tissue engineering." Orthopaedic Research Society, New Orleans, LA, March 6-9, 2009.
43. Tan AR, Barsi JM, Jayabalan PS, Rahaman MN, **Bal BS**, Ateshian GA, Cook JL, Hung, CT. "The potential for 13-93 bioglass as a medium supplement for culturing tissue engineered cartilage." Orthopaedic Research Society, New Orleans, LA, March 6-9, 2009.
44. Jayabalan P, Tan AR, Rahaman MN, **Bal BS**, Sims HJ, Hung CT, Cook JL. "Bioactive glass (13-93) as a subchondral substrate for tissue-engineered osteochondral constructs." Orthopaedic Research Society, New Orleans, March 6-9, 2009
45. **Bal, BS**: "2010 Anterior approach total hip arthroplasty" for the round table discussion tip and tricks Q&A and "Learning the anterior approach my experience with technique (from 2-incision to anterior approach)" in Las Vegas, NV, October 22, 2010.

46. **Bal, BS:** “The anterior approach optimizes THA outcome” and “Ceramic-ceramic use in THA: comforts and caveats.” 12th Annual Current Concepts in Joint Replacement Las Vegas, NV May 22 – 25, 2011.
47. **Bal BS:** “Anterior total hip replacement” 63rd Annual Meeting of The Association of Bone and Joint Surgeons in Dublin, Ireland, June 8-12, 2011.
48. **Bal BS, Brenner LB:** Symposium: “Contemporary medico-legal issues in orthopaedic surgery” in San Francisco, CA, February 6 - 10, 2012.
49. **Bal BS:** “Medico-legal issues in arthroplasty surgery,” “Metal cones in TKR,” “Fundamentals of revision TKA basic principles – case presentations and rapid fire discussions,” “Bioactive glasses in skeletal reconstruction,” “Infected TKR - case presentations and rapid fire discussions.” 11th Anniversary of the Annual Advances in Arthritis, Arthroplasty and Trauma Course in St. Louis, MO, April 26-28, 2012.
50. **Bal BS:** “Current status of ceramic total hip bearings” and “Discussion panel: metal-on-metal total hips.” 2012 Annual Missouri State Orthopaedic Association Meeting May 18 – 19, 2012.
51. **Bal BS :** “Ceramic Bearings in Total Hip Replacement”, The 42nd Annual Advances in Arthroplasty Course, Harvard Medical School, Cambridge, MA, October 2–5, 2012.
52. **Bal BS:** 2013 Annual Meeting American Academy of Orthopaedic Surgeons, Instructional Course: “Contemporary medico-legal issues in orthopaedic surgery” in Chicago, IL, March 19-23, 2013.
53. **Bal BS:** 2013 Annual Meeting American Academy of Orthopaedic Surgeons, Symposium: “Medical-legal considerations in managing patients with musculoskeletal tumors” in Chicago, IL, March 19-23, 2013.
54. **Bal BS:** The Stevens Conference: The 2nd Conference on Bacteria – Material Interactions: “Silicon nitride – A unique antibacterial bioceramic” in Hoboken, NJ, June 6, 2013.
55. **Bal BS:** ISTA 26th Annual Congress: “Patient-specific implants and instruments improved outcomes of total knee replacement” in Palm Beach, Florida, October 18, 2013.
56. **Bal BS:** “A new generation of bioceramics: the case for silicon nitride.” 2015 2nd Annual Pan Pacific Orthopaedic Congress, Big Island of Hawaii, July 22-25, 2015.
57. McEntire BJ, **Bal BS**, Rahaman MN, Pezzotti G. “The effect of accelerated aging on the material properties of ceramic femoral heads.” ISTA 28th Annual Meeting, Vienna, Austria, September 30 - October 3, 2015.
58. Bock RM, McEntire BJ, **Bal BS**, Rahaman MN, Boffelli, M, Pezzotti G. “Surface modulation of silicon nitride ceramics for orthopaedic application.” ISTA 28th Annual Meeting, Vienna, Austria, September 30 - October 3, 2015.

59. Pezzotti G, Puppulin L, Boffelli M, McEntire BJ, Rahaman MN, Yamamoto K, **Bal BS**. "The effect of ceramic femoral head material composition on polyethylene structure and oxidation in total hip bearings." ISTA 28th Annual Meeting, Vienna, Austria, September 30 - October 3, 2015.
60. **Bal BS**, McEntire BJ, Rahaman MN, Pezzotti G. "Debunking the myth that ceramics are bioinert: comparison of alumina versus silicon nitride." ISTA 28th Annual Meeting, Vienna, Austria, September 30 - October 3, 2015
61. McEntire BJ, Enomoto Y, Zhu W, Boffelli M, Marin E, **Bal BS**, Pezzotti G. "Differential effects of hydrothermal ageing on the surface fracture toughness of ceramics." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.
62. McEntire BJ, Jones E, Ray D, Bock RM, **Bal BS**, Pezzotti G. "Differential bacterial expression on silicon nitride, PEEK, and titanium surfaces." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.

SCIENTIFIC PRESENTATIONS (invited, not peer reviewed)

1. **Bal BS**. "Dorsal Capsulodesis of the Scaphoid for Scapholunate Dissociation." American Orthopaedic Association Residents' Conference, Kansas City, Missouri, 1991.
2. **Bal BS**. "Experience with Ceramic Knee Femur." Orthopedic Review Symposium, Vail Colorado, January 2002.
3. **Bal BS**. "Minimally Invasive Total Knee Technique & Results." Contemporary Topics in Orthopedics, Vail Colorado, January 2-3, 2003.
4. **Bal BS**. "Minimally Invasive Total Hip Replacement." Contemporary Topics in Orthopedics, Vail Colorado, January 2-3, 2003.
5. **Bal BS**. "Minimally Invasive Hip and Knee Replacement Surgery: Fact, Fiction, Reality and Myth. What the Patient Should Know." Columbia, MO, March 12, 2005.
6. **Bal BS**. "Ceramic Bearings in Prosthetic Hip and Knee Joints." University of Missouri-Rolla, Department of Materials Science and Engineering, December 1, 2005.
7. **Bal BS**. "Modified Two Incision Technique." 20th Annual Vail Orthopaedic Symposium, Total Hip & Knee Arthroplasty, Vail, Colorado, January 22-27, 2006.
8. **Bal BS**, Rahaman MN. "Tissue-Engineering of Cartilage on Bioactive Glass Scaffolds." 6th Annual Comparative Orthopaedics Day, Columbia, Missouri, April 14, 2006.
9. **Bal BS**, Aleto TJ. "Advances in Hip and Knee Replacement." Columbia Activity Recreation Center, September 15, 2006.
10. **Bal BS**. "The Outcomes of Two-Incision Total Hip Arthroplasty Performed Without Intraoperative Fluoroscopy." Minimally Invasive Surgery meets Computer Assisted

Orthopaedic Surgical Technology (MIS meets CAOS) in Scottsdale, AZ, October 26-28, 2006.

11. **Bal BS**. “Subvastus Total Knee Arthroplasty Without Cement or Tourniquet.” Minimally Invasive Surgery meets Computer Assisted Orthopaedic Surgical Technology (MIS meets CAOS) in Scottsdale, AZ. MIS-CAOS, October 26-28, 2006.
12. **Bal BS**. “Acetabular Reaming and Positioning.” Anterior Approach Total Hip Arthroplasty, San Francisco, CA, March 1, 2013.
13. Tolias P, Marlow M, **Bal BS**, Phillips S. Panel Discussion: “How Can We More Quickly Bring New Materials-Based Infection-Control Strategies to Clinical Practice?” Matthew Libera, moderator. The Stevens Conference: The 2nd Conference on Bacteria – Material Interactions, Hoboken, NJ, June 6, 2013.
14. **Bal BS**: Panel Moderator: “Liability Exposure for New Orthopedic Technologies- All That Glitters May Not Be Gold!” 2014 Annual Meeting of Western Orthopaedic Association Scientific Program, The Fairmont Orchid, Big Island, HI, July 31-August 2, 2014.
15. **Bal BS**: Panel Moderator: “What a Difference a Year Makes.” Ted Davis, moderator. 12th Annual Musculoskeletal New Ventures Conference, Memphis, TN, October 28-29, 2014.
16. **Bal BS**, Tarka M: “Design and Rationale of a Constrained Acetabular Component.” MU Campus Fast Track 2015 Pitch Competition, April 13, 2015- May 8, 2015
17. **Bal BS**, Brenner LR. Symposium 4 – Medical Liability Update. 32nd Annual Southern Orthopaedic Association Annual Meeting, Asheville, NC, July 15-18, 2015.
18. **Bal BS**: “Why iTotal,” “iTotal Cadaver Debrief” and “iTotal® Patient Indications & Selection.” National Surgeon Training: iTotal CR, iTotal PS, and iUni G2 Knee Replacement Systems, Plano, TX, January 9, 2016.
19. **Bal BS**: “Clinical application of the silicon nitride for arthroplasty” 46th Annual Meeting of the Japanese Society for Replacement Arthroplasty. Congress Convention Center, Osaka, Japan, February 26-27, 2016.

ABSTRACTS/POSTERS (peer reviewed)

1. **Bal BS**, Cherry K, Edelstein D. “Prospective Randomized Study Comparing Ceramic/Ceramic and Ceramic/PE Bearing Surfaces in Total Hip Arthroplasty.” The American Academy of Orthopaedic Surgeons 69th Annual Meeting in Dallas, Texas, February 2002.
2. Cook JL, Kuroki K, **Bal BS**. “Effects of Bipolar Radiofrequency Energy on Articular Cartilage Extracellular Matrix.” Orthop Res Soc in Dallas, TX, February 10-14, 2002.
3. Kazmier P, Burd T, **Bal BS**. “Nonunion of the Greater Trochanter Following the Anterior Trochanteric Slide Osteotomy.” The 35th Annual Residents Conference in Memphis,

Tennessee, April 12-14, 2002.

4. Marberry KM, Cook JL, Kuroki K, Brawner T, Geiger T, Jayalaban P, Kenter K, **Bal BS**. "Effects of Radiofrequency Generated Heat on Human Degenerative Articular Cartilage." American Orthopaedic Association - 35th Annual Residents Conference in Memphis, TN, April 13-15, 2002.
5. Kazmier P, Burd T, **Bal BS**. "Nonunion of the Greater Trochanter Following the Anterior Trochanteric Slide Osteotomy." 12th Annual Meeting of the Mid-America Orthopaedic Association in Tucson, Arizona, April 24-28, 2002.
6. Marberry KM, Cook JL, Kuroki K, Kenter K, **Bal BS**. "In Vitro Assessment of Articular Cartilage Stiffness Following Treatment with Radiofrequency Generated Heat." 20th Annual Mid-America Orthopaedic Association Meeting in Tucson, AZ, April 25-28, 2002.
7. Kazmier P, **Bal BS**, Patil SK, Rahaman MN. "Microscopic Characterization of Alumina Bearing Surfaces in Total Hip Arthroplasty." The 49th Annual Meeting of the Orthopaedic Research Society in New Orleans, Louisiana, February 2-5, 2003.
8. Kazmier P, Gornowicz B, Crow B, Christensen G, **Bal BS**. "Bacterial Adhesion to Alumina Ceramic Versus Cobalt-Chrome Femoral Heads." The 49th Annual Meeting of the Orthopaedic Research Society, New Orleans, Louisiana, February 2-5, 2003.
9. Kuroki K, Ray A, Aust G, Cook JL, **Bal BS**, Ray B. "SAF-1 Regulates Matrix Metalloproteinase-1 in Osteoarthritis." Missouri Life Sciences Week in Columbia, MO, March 3-7, 2003.
10. Roller BL, Cook JL, **Bal BS**, Stoker AM. "Correlation of Clinical Assessment of Meniscal Pathology to Biochemical and Molecular Analyses." University of Missouri Health Sciences Research Day in Columbia, MO, November 11, 2004.
11. Kumar D, Shakya A, Kuroki K, Cook JL, **Bal BS**, Ray A, Ray BK. "Induction of Matrix Metalloproteinases in Chondrocyte Cells of Osteoarthritic Cartilage is Mediated by Inflammation-Responsive Transcription Factors." The American Society For Biochemistry and Molecular Biology Meeting, 2004.
12. Hendricks KJ, Aleto TJ, **Bal BS**. "Early results of Modern Ceramic on Ceramic Total Hip Arthroplasty, A Prospective Randomized Study." 22nd Annual Mid-America Orthopaedic Association Meeting, 2004.
13. Roller BL, Cook JL, **Bal BS**, Stoker AM. "Correlation of Clinical Assessment of Meniscal Pathology to Biochemical and Molecular Analyses." 3rd Biology of the Meniscus Meeting in Washington, DC, February 23, 2005.
14. **Bal BS**, Kazmier P, Burd T, Aleto TJ. "Anterior Trochanteric Slide Osteotomy for Primary Total Hip Replacement. Review of Nonunion and Complications." American Academy of Orthopaedic Surgeons Annual Meeting in Washington, D.C. February 23-27, 2005.

15. **Bal BS**, Ray BK, Shakya A, Ray A. “Overexpression of MMP-14 in Human Osteoarthritic Joint Is Mediated by SAF-1.” 52nd Annual Meeting of the Orthopaedic Research Society in Chicago, IL, March 19-22, 2006.
16. **Bal BS**, Evans R, Rahaman M, Ellingsen MD, Khanna, SK. “Comparison of Surface Characteristics and Prediction of Wear Properties between Alumina and Oxinium Femoral Heads.” 52nd Annual Meeting of the Orthopaedic Research Society in Chicago, IL, March 19-22, 2006.
17. **Bal BS**, Rahaman M, Kuroki K, Cook JL. “In Vivo Comparison of Tissue Engineered Osteochondral Plugs Using Allograft Bone, Trabecular Metal and Bioactive Glass Substrates.” Orthop Res Soc in San Diego, CA, February 11-14, 2007.
18. Roller BL, Stoker AM, Fox DB, **Bal BS**, Cook JL. “Characterization of Pathology of Knee Menisci: Correlation of Radiographic, Gross, Histologic, Biochemical and Molecular Measures of Disease.” Orthop Res Soc in San Diego, CA, February 11-14, 2007.
19. **Bal BS**, Hillard A, Lowe J, Aleto TJ, Greenberg D. “Muscle Damage after Total Hip Arthroplasty with the Two-incision Technique.” 24th Annual Mid-America Orthopaedic Association Meeting in Boca Raton, Florida, April 11-15, 2007.
20. **Bal BS**, Hughes M, Li S, Aleto TJ, Rahaman MN. “The Effect of Metal Staining on Alumina-Alumina Hip Simulation Wear.” 24th Annual Mid-America Orthopaedic Association Meeting in Boca Raton, Florida, April 11-15, 2007.
21. **Bal BS**, Barrett MO, Greenberg DD, Lowe J, Aleto TJ. “Incidence of Heterotopic Ossification Following Primary Two-incision Total Hip Arthroplasty.” 24th Annual Mid-America Orthopaedic Association Meeting in Boca Raton, Florida, April 11-15, 2007.
22. **Bal BS**, Aleto TJ, Lakshminarayanan RR, Khandkar A, Clarke I, Hoffman A. “The Wear of Silicon Nitride Ceramic Bearings in a Hip Simulator.” 24th Annual Mid-America Orthopaedic Association Meeting in Boca Raton, Florida, April 11-15, 2007.
23. Rahaman MN, Li Y, Aleto TJ, **Bal BS**. “Alumina Ceramic Femoral Heads with a Metal Taper.” 24th Annual Mid-America Orthopaedic Association Meeting in Boca Raton, Florida, April 11-15, 2007.
24. Cook JL, Lima EG, Ng KW, Kuroki K, Stoker AM, **Bal BS**, Ateshian GA, Hung CT. “Towards Biologic Osteochondral Resurfacing of the Canine Patella Using Tissue Engineered Anatomic Constructs.” Orthop Res Soc in Las Vegas, NV, February 22-25, 2009.
25. Lima EG, Chao PH, Ateshian GA, Cook JL, **Bal BS**, Vunjak-Novakovic G, Hung CT. “Porous Tantalum Metal Outperforms Devitalized Bone as a Substrate for Osteochondral Tissue Engineering.” Orthop Res Soc in Las Vegas, NV, February 22-25, 2009.
26. Tan AR, Barsi JM, Jayabalan P, Rahaman MN, **Bal BS**, Ateshian GA, Cook JL, Hung CT. “The Potential for 13-93 Bioglass as a Medium Supplement for Culturing Tissue Engineered

Cartilage.” 55th Annual Orthopaedic Research Society Conference in Las Vegas, NV, February 22 – 25, 2009.

27. Jayabalan P, Tan AR, Barsi JM, Rahaman MN, Ateshian GA, Hung CT, Cook JL, **Bal BS**. “In Vitro Optimization of Tissue Engineered Osteochondral Grafts.” 9th Annual Comparative Orthopaedics Day in Columbia, MO, April 2009
28. Jayabalan P, Tan AR, Barsi JM, Rahaman MN, **Bal BS**, Ateshian AG, Hung CT, Cook JL. ‘Bioactive Glass (13-93) as a Subchondral Substrate and Culture Media Supplement for Tissue Engineered Cartilage.’ International Cartilage Repair Society conference in Miami, Florida, May 2009.
29. Franklin SP, Hung C, Lima E, Ng K, Kuroki K, Stoker A, **Bal BS**, Ateshian G, Pfeiffer F, Cook JL. “Progression toward Biologic Joint Resurfacing in Dogs.” Veterinary Orthopedic Society Conference in Breckenridge, CO, February 20-27, 2010.
30. Roller BL, Stoker AM, Marberry KM, White RA, **Bal BS**, Cook JL. “Characterization of Meniscal Pathology with Molecular and Proteomic Analyses.” Orthop Res Soc in New Orleans, LA, March 6-9, 2010.
31. Roller BL, Stoker AM, Garner BC, **Bal BS**, Raghu DR, Cook JL. “Analysis of Synovial Fluid Biomarkers and Correlation with Radiography.” Orthop Res Soc in New Orleans, LA, March 6-9, 2010.
32. Jayabalan P, Tan AR, Rahaman MN, **Bal BS**, Sims HJ, Hung CT, Cook JL. “Bioactive Glass (13-93) as a Subchondral Substrate for Tissue-engineered Osteochondral Constructs.” Orthop Res Soc in New Orleans, LA, March 6-9, 2010.
33. **B.S. Bal**, Aleto TJ, Aggarwal A, Wegman B. “Primary Uncemented Total Knee Replacement with a Monoblock Tibial Component.” American Academy of Orthopaedic Surgeons Annual Meeting in San Diego, CA, February 15-19, 2011.
34. **Bal BS**. “Informed Consent Law: How Much to Disclose?” 64th Annual Meeting of the Association of Bone and Joint Surgeons in Charleston, South Carolina, May 2–6, 2012.
35. Pfeiffer FM, **Bal BS**. “P51; Fabrication and Evaluation of Tissue Engineered Femoral Head Implants for Resurfacing of Osteoarthritic Joints.” International Cartilage Repair Society conference in Montreal, Canada, May 12-15, 2012.
36. McEntire BJ, Lakshminarayanan A, **Bal BS**, Webster TJ. “An Overview of Silicon Nitride as a Novel Biomaterial.” 2012 Innovations in Biomaterials Conference, American Ceramic Society in Raleigh, NC, September 11-13, 2012.
37. Franklin S, Pfeiffer FM, Cockrell M, Stoker A, **Bal BS**, Cook JL. “Effects of low temperature hydrogen peroxide gas plasma sterilization on in vitro cytotoxicity of poly-l-caprolactone (PCL).”

38. Ivie C, **Bal BS**. “Concerns and Limitations of Ceramic Total Hip Bearings.” The Association of Bone and Joint Surgeons 65th Annual Meeting at Çırağan Palace Kempinski in Istanbul, Turkey, April 24-28, 2013.
39. Ivie C, Probst P, Bal A, Gallizzi M, Bal BS. “Patient-specific implants and instruments improved outcomes of total knee replacement.” The Clinical Orthopaedic Society’s 101st Annual Meeting in Niagara, NY, Sept. 19-21, 2013.
40. Rahaman MN, **Bal BS**, Huang T. “Porous titanium implants fabricated by a salt bath sintering process for bone repair applications.” Materials Science & Technology 2013, Next Generation Biomaterials; Montreal, Quebec Canada, October 27-31, 2013.
41. **Bal BS**, Ivie C, Davis M, Crist B. “Patient-specific implants and instruments improved outcomes of total knee replacement.” 2013;95B(34):86. Abstract published in Orthopaedic Proceedings, Dec. 31, 2013.
42. **Bal BS**, Liu X, Rahaman MN, Bi LX, Bonewald LF. “Strong porous bioactive glass implants for structural bone repair.” 60th Annual Meeting of the Orthopaedic Research Society at the Hyatt Regency New Orleans, March 15-18, 2014.
43. **Bal BS**. “Silicon nitride bearings for total joint arthroplasty.” 27th Annual Congress of the International Society for Technology in Arthroplasty (ISTA) to be held at the Hotel Okura in Kyoto Japan, September 24-27, 2014. *Lubricants*. 2016;4(4), 35.
44. **Bal BS**, McEntire BJ, Bock RM, Jones E, Rahaman M. “Surface modulation of silicon nitride ceramics for orthopaedic applications’. International Congress for Joint Reconstruction -- Transatlantic Orthopaedic Congress, in New York, NY, Oct. 3-5, 2014. Winner of a 2014 Transatlantic Orthopaedic Congress Abstract Award.
45. Tarka M, **Bal BS**. “End of arm robotic tool design for automated cutting assistance during total hip arthroplasty.” Health Sciences Research Day, University of Missouri School of Medicine, Columbia, MO, Nov. 16, 2014.
46. Cutler CS, Lattimer J, Kelsey J, Kuchuk M, O’Connor D, **Bal BS**, Katti KV. “Nano-radiosynovectomy for osteoarthritis treatment.” 2015 Society of Nuclear Medicine and Molecular Imaging Annual Meeting, Baltimore, Maryland, June 6-10, 2015.
47. Peterson BE, Buchert G, Probst P, Aleto TJ, **Bal BS**, Crist BD. “The use of fluoroscopy in aiding acetabular cup position in direct anterior total hip arthroplasty.” 2015 2nd Annual Pan Pacific Orthopaedic Congress, Big Island of Hawaii, July 22-25, 2015.
48. “Silicon nitride for orthopaedics – A bioactive and interactive non-oxide ceramic.” 46th Annual Meeting of the Japanese Society for Replacement Arthroplasty, Osaka, Japan, February 26-27, 2016.
49. McEntire BJ, Zhu WL, Boffelli M, Marin E, Bal BS, Pezzotti G. “Effect of accelerated hydrothermal ageing on the surface fracture toughness of bioceramics.” 46th Annual Meeting of the Japanese Society for Replacement Arthroplasty, Osaka, Japan, February 26-27, 2016.

50. Werner N, Stoker AM, Bozynski C, **Bal BS**, Cook JL. "Responses of osteoarthritic osteochondral tissue to cytokine stimulation *in vitro*." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.
51. Werner N, Stoker AM, Stannard J, **Bal BS**, Cook JL. "Assessment of biomarker production by osteochondral tissue obtained from patients undergoing total knee arthroplasty." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.
52. Werner N, Stoker AM, Pfeiffer F, Stannard J, Bozynski C, **Bal BS**, Cook JL. "Correlation of biomarker production of biomechanical, biochemical, and histological properties of osteoarthritic osteochondral tissue obtained from patients undergoing total knee replacement." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.
53. Pezzotti G, Puppulin L, Boffelli M, McEntire BJ, Rahaman MN, Yamamoto K, **Bal BS**. "Do ceramic femoral heads contribute to polyethylene oxidation." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.
54. Pezzotti G, Puppulin L, Boffelli M, McEntire BJ, Sugano N, **Bal BS**. "Metal ions contribute to the material instability of zirconia toughened alumina." 2016 Orthopaedic Research Society, Orlando, Florida, March 5-8, 2016.
55. Peterson BE, Buchert G, Probst P, Aleto TJ, **Bal BS**, Crist BD. "The use of fluoroscopy in aiding acetabular cup position in direct anterior total hip arthroplasty." 47th Annual Meeting Missouri State Orthopaedic Association, Kansas City, MO, April 1-2, 2016.
56. McEntire BJ, Enomoto Y, Zhu W, Boffelli M, Marin E, Bal BS, Pezzotti G. "Comparative evaluation of the surface fracture toughness of bioceramics." 68th Annual Meeting of The Association of Bone and Joint Surgeons, Auckland, New Zealand, April 5-9, 2016.
57. Pezzotti G, Puppulin L, Boffelli M, McEntire BJ, Rahaman MN, Yamamoto K, **Bal BS**. "The effect of ceramic femoral head material composition on polyethylene structure and oxidation in total hip bearings." Innovations in Biomedical Materials and Technologies, Rosemont Hyatt in Chicago, IL, July 29-31, 2016.
58. "In situ Monitoring of Porphyromonas Gingivalis on Chemistry-Modulated Silicon Nitride Bioceramics." Innovations in Biomedical Materials and Technologies, Rosemont Hyatt in Chicago, IL, July 29-31, 2016.
59. "Enhanced Osteoconductivity on Surface-Modulated Silicon Nitride Bioceramics Monitored by in situ Raman Spectroscopy." Innovations in Biomedical Materials and Technologies, Rosemont Hyatt in Chicago, IL, July 29-31, 2016.
60. "Engineering Bacteriostatic Behavior into Implantable Medical Devices." Innovations in Biomedical Materials and Technologies, Rosemont Hyatt in Chicago, IL, July 29-31, 2016.
61. Pezzotti G, McEntire BJ, Bock R, Zhu W, Vitale E, Puppulin L, Adachi T, Yamamoto T, Kanamura N, **Bal BS**. "Enhanced Osteoblast Proliferation and Hydroxyapatite Formation on Silicon Nitride." The 28th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, Charlotte, NC, Oct. 18-21, 2016.

62. Zhu W, Pezzotti G, McEntire BJ, Zanicco M, Marin E, Sugano N, **Bal BS**. “Transition Metal Ions Accelerate the Polymorphic Phase Transformation in Zirconia-Toughened Alumina.” The 28th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, Charlotte, NC, Oct. 18-21, 2016.
63. Bal BS, Bock R, Rondinella A, Marin E, Zhu W, Adachi T, McEntire BM, Pezzotti G. “Osteoinductive Properties of Silicon Nitride, Alumina, and Titanium.” Orthopaedic Research Society 2017 Annual Meeting at the San Diego Convention Center in San Diego, California, March 19-22, 2017.
64. **Bal BS**, McEntire BM, Pezzotti G, Oba N, Marin E, Rondinella A, Boschetto, Zhu W, Yamamoto K. “Investigation of the Osseointegration Characteristics of a Silicon Nitride Intervertebral Spinal Spacer: A Retrieval Study.” 7th International Conference Advances in Orthopaedic Osseointegration, San Diego, CA, March 12-13, 2017.
65. **Bal BS**, Zhu W, McEntire BM, Pezzotti G. “Metal staining leads to instability of zirconia alumina femoral heads.” AAOS 2017 Annual Meeting, San Diego, CA, March 14-18, 2017.
66. McEntire B, **Bal BS**, Ishikawa M, Bentley KL, Schwarz EM, Xie C. “Effect of Surface Topography on the bacteriostatic and osseointegration behavior of silicon nitride.” Australian Spine Society, Adelaide, Australia, April 28, 2018
67. Assad M, McEntire B, Iacampo S, Trudel Y, **Bal BS**. Osseointegration and Biocompatibility Evaluation of Silicon Nitride Composite Using Ovine Distal Femoral Epiphyseal Insertion and Rabbit Paravertebral Muscle Implantation Models. Orthopaedic Research Society Annual Meeting, Feb 2-5 2019, Austin Texas

INVITED MODERATOR, KEYNOTE SPEAKER

Moderator. “Alternative Bearings and Minimally Invasive Surgery Techniques” at the University of Pennsylvania for The 7th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement, Philadelphia, PA, October 14-15, 2004.

“Advances in Arthroplasty, an Emphasis on Treatment Options for the Young/Active Patient.” Harvard University, Cambridge, MA, October 3-7, 2006.

Meeting Co-Chairman and Presenter. “Minimally Invasive Total Hip Surgery.” Minimally Invasive Surgery meets Computer Assisted Orthopaedic Surgical Technology (MIS meets CAOS) in Scottsdale, AZ, October 26-28, 2006.

“MIS Total Joint Arthroplasty and other Factors Effecting Recovery.” American Association of Hip & Knee Surgeons Meeting in Dallas, TX, November 3-5, 2006.

Keynote Speaker. “Hard-on-hard Bearings in THA.” Moderator: “Mini-Smith Peterson and Head Damage: Hard on Hard.” Hip and Knee Arthroplasty Continuing Education Course at Harvard University in Cambridge, MA, September 25-27, 2007.

Moderator. “Soft Tissue and Tachnology.” Tissue Engineering of Articular Cartilage.

Musculoskeletal Transplant Foundation in Vancouver, British Columbia, October 11-13, 2007.

Meeting Chairmen and Presenter. “Anterior Total Hip Arthroplasty Mini-Symposium.” American Association of Hip & Knee Surgeons, November 2, 2007.

Orthopaedic Research Society in Las Vegas, NV, Feb 2009.

Regional Life Sciences Summit in Kansas City, MO, March 9, 2010.

The Anterior Approach Total Hip Arthroplasty Lab in Henderson, NV, October 21-22, 2010.

The Anterior Approach THA Cadaver Lab in Houston, TX, January 13-14, 2011.

Anterior Approach Total Hip Arthroplasty. “Anatomic Consideration and Patient Selection for the Anterior Approach” and “Learning the Anterior Approach – My Experience with the Technique (From 2-Incision to Anterior Approach).” Las Vegas, NV April 8, 2011.

“Filling the Gaps: Bone Deficiency and Treatment Options.” Missouri Musculoskeletal Conference in Kansas City, MO, July 28, 2011.

Moderator and speaker for the 11th Anniversary of the Annual Advances in Arthritis, Arthroplasty and Trauma Course in St. Louis, Missouri, April 26-28, 2012.

“Custom Implants in Joint Replacement.” Meeting of the Morgan-Stanley Investment Banking Group, Boston, MA, March 28, 2013.

“Closed Medical Negligence Claims Can Drive and Reduce Litigation.” The 4th Annual Pegalis and Erickson Lectureship, New York, New York, April 9, 2013.

“Reducing Liability Risk and Improving Quality: Role of the Orthopaedic Executive.” 2013 Annual American Association of Orthopaedic Executives, San Diego, CA, April 28-30, 2013.

Faculty Panel Presenter. “Perioperative Management THA. AAOS/AAHKS Challenges and Controversies in Total Joint Arthroplasty, Rosemont, IL. May 3, 2013.

Lab Faculty. “Primary THA (Direct THA/Mini Posterior).” AAOS/AAHKS Challenges and Controversies in Total Joint Arthroplasty, Rosemont, IL. May 3, 2013.

Lab Faculty. “Revision THA (Trochanteric Osteotomy, Augment, Cage).” AAOS/AAHKS Challenges and Controversies in Total Joint Arthroplasty, Rosemont, IL. May 3, 2013.

Lab Faculty. “Primary TKA.” AAOS/AAHKS Challenges and Controversies in Total Joint Arthroplasty, Rosemont, IL. May 4, 2013.

Lab Faculty. “Revision TKA.” AAOS/AAHKS Challenges and Controversies in Total Joint Arthroplasty, Rosemont, IL. May 4, 2013.

Informed Consent and Risk Awareness in the Operating room Environment given to the Operating Room staff on October 2, 2013.

Moderator: "Contemporary Medico-Legal Issues in Orthopaedic Surgery." 2014 AAOS Annual Meeting, in New Orleans, Louisiana, March 11-15, 2014.

Invited Faculty: "Integrating the Anterior Approach Into Practice: minimizing your learning curve." "History and Role of the Old and New Technology." Short Stems do we need them?" "Most Total Knees Have Same Geometry on Both Sides." "Smart Trials – Unnecessary?" State-of-the-Art Solutions in the Hip and Knee Reconstruction, in Chicago, IL, June 27-28, 2014.

Invited speaker: Avoidable complications in knee surgery that invite litigation; Resident liability in medical negligence claims; Joint medical and legal complications of total hip arthroplasty. 16th Annual Multispecialty Conference- Medical Negligence and Risk Management in Medicine, Surgery, Emergency Medicine, Radiology, and Family Medicine, in the Bahamas, January 5-8, 2016.

Moderator: "Panel Discussion: Collaborating with FDA to Ensure Medtech Approval." 7th Annual Life Science Chief Executive Officer Forum, in Atlanta, GA, January 25-26, 2016.

Invited Scholar: "Silicon nitride for orthopaedics – A bioactive and interactive non-oxide ceramic." Kyoto Institute for Technology Mini-Symposium, Sakyo-ku, Kyoto, Japan, February 22, 2016.

Invited speaker: "Bioactive silicon nitride: A new therapeutic material for osteoarthropathy." Texas A&M College of Dentistry "Pathways to Excellence" seminar on March 8, 2017.

MAJOR LECTURES AND VISITING PROFESSORSHIPS

Visiting Professor; University of Oklahoma, Dept. of Orthopaedic Surgery, September 29, 2017

Neumann Visiting Professorship; University of Rochester, Center for Musculoskeletal Research, New York, August 1-2, 2017

Visiting Professor: Collaborative research in silicon nitride ceramics. Kyoto Institute of Technology, Osaka, Japan. July 20-26, 2015.

Visiting Professor: Liability, Standards, and the Future of Medical Malpractice. University of South Alabama, Mobile, AL. August 8, 2014.

Visiting Professor: Legal Liability during Residency Training. University of Southern California, Los Angeles, CA. June 8, 2012.

Visiting Professor: Anterior Total Hip Replacement –Affirmative. Louisiana State University, Shreveport, LA. September 23, 2011.

Visiting Professor: Medical Liability of Physicians in Training. Louisiana State University, Shreveport, LA. September 22, 2011.

RESEARCH GRANT APPLICATIONS

Principal Investigator:

Arthritis Foundation: “Comparison of tissue-engineered osteochondral grafts fabricated with mesenchymal stem cells and trabecular metal or allograft bone.” \$199,997.00. 6/1/2005 to 5/31/2007.

Pfizer Inc.: “Comparison of tissue-engineered osteochondral grafts fabricated with mesenchymal stem cells and trabecular metal or allograft bone.” \$199,999.00. 7/1/2005 to 7/1/2007.

Musculoskeletal Transplant Foundation: “Comparison of tissue-engineered osteochondral grafts fabricated with mesenchymal stem cells and trabecular metal or allograft bone.” \$100,000.00. 7/1/2005 to 6/30/2007. (Awarded)

Aircast Foundation: “Development of osteoarthritis in transgenic mice with increased SAF-1 expression in articular cartilage.” \$99,998.00. 8/1/2005 to 7/31/2007.

National Health Institute: “Development of osteoarthritis in transgenic mice with increased SAF-1 expression in articular cartilage.” \$404,248.00. 10/1/2005 to 9/30/2007.

Zimmer Holdings, Inc.: “Comparison of tissue-engineered osteochondral grafts fabricated with mesenchymal stem cells and trabecular metal or allograft bone.” \$125,406.00. 5/25/2006 to 5/24/2007 (Awarded)

Orthopaedic Research and Education Foundation: “Comparison of tissue-engineered patellar osteochondral grafts fabricated from mesenchymal stem cells and bioactive glass or trabecular tantalum metal.” \$150,625.00. 7/1/2007 to 6/30/2010.

National Institute of Health: “Novel freeze-cast bioactive glass scaffolds for bone repair.” \$108,472.00. 1/1/2009 to 12/31/2010. (Awarded)

Missouri Life Science Research Board: “Missouri consortium for biomaterials research and commercialization.” \$292,287.00. 1/1/2009 to 12/31/2011.

Missouri Life Science Research Board: “Tissue engineered resurfacing of the hip joint.” \$198,459.00. 1/1/2009 to 12/31/2011.

Missouri Life Science Research Board: “Research on freeform fabrication of objects with graded bio-materials.” \$105,283.00. 1/1/2009 to 12/31/2011.

Orthopaedic Research and Education Foundation: “Bioactive glass scaffolds for bone repair.” \$131,328.00. 7/1/2009 to 6/30/2012.

Department of Health and Human Services: “Novel freeze-cast bioactive glass scaffolds.” \$108,482.00. 8/19/09 to 7/31/12.

National Institute of Health: “Functional tissue-engineered osteochondral composite constructs.” \$254,701.00. 10/15/2009 to 10/14/2011.

Missouri Life Science Research Board: “Research of freeform fabrication of objects.” \$105,284.00. 1/1/2010 to 12/31/2012.

Missouri Life Science Research Board: “Missouri consortium for biomaterials research and commercialization.” \$400,001.00. 1/1/2010 to 12/31/2012.

Missouri Life Science Research Board: “Ceramic-metal composite femoral head for total hip arthroplasty.” \$125,826.00. 2/1/2010 to 1/31/2012.

Missouri Life Science Research Board: “Development of a hybrid metal-bioactive glass material for skeletal repair.” \$123,955.00. 1/1/2011 to 12/31/2012.

National Institute of Health: “Bioengineering research partnership: bioactive glass in regenerative medicine.” \$719,725.00. 8/1/2011 to 7/31/2016.

Orthopedic Research Society: “Faculty career development through the orthopaedic research society's collaborative exchange award.” \$7,501.00. 10/1/2011 to 9/30/2012.

Musculoskeletal Transplant Foundation: “Fabrication and testing of a canine biological femoral head arthroplasty.” \$301,106.00. 1/1/2012 to 12/31/2014.

National Institute of Health: “Bioactive glass in osteochondral tissue engineering.” \$138,969.00. 1/1/2012 to 12/31/2013.

Musculoskeletal Transplant Foundation: “Bioactive glass in skeletal regeneration.” \$0.00. 1/1/2012 to 12/31/2014.

National Institute of Health: “Bioactive glass in regenerative medicine.” \$114,638.00. 5/1/2012 to 4/30/2017.

Orthopaedic Research and Education Foundation: “Fabrication and testing of a canine biological femoral head arthroplasty.” \$223,932.00. 7/1/2012 to 6/30/2015.

Department of Defense: “Bicompatible device for repairing segmental bone defects.” \$292,335.00. 7/1/2012 to 6/30/2014.

Consultant for a NIH SBIR research project “Silorane based bone cements” proposal by Nanova and UMKC. Grant pending.

Career Development Grant, Orthopaedic Research and Education Foundation: “Fabrication and testing of a biological femoral head arthroplasty.” \$224,995. 7/1/2014 to 6/30/2017.

University of Missouri Interdisciplinary Intercampus Research Program (IDIC): Healing Chronic Bone Infection Using Bioactive Glass. \$145,000. 8/1/2014 to 7/31/2015. (Awarded)

Bal BS, Rahaman M, Tarka M. Constrained Ball-and-Socket Design for Total Hip Replacement University of Missouri FastTrack Initiative. 7/1/2015-6/30/2016; \$50,000. (Awarded)

Bal BS, Rahaman M. Constrained Ball-and-Socket Design for Total Hip Replacement, Coulter Foundation Development Grant. 7/1/2017-6/30/2018; \$100,000. (Awarded)

Co-Investigator:

National Science Foundation: “MRSEC interactions & transformation at membrane interfaces.” \$22,774,108.00. 9/1/2005 to 8/30/2011.

Musculoskeletal Transplant Foundation: “Characterization of pathology of the knee menisci for optimizing diagnosis and treatment of meniscal disorders.” \$56,252.00. 1/1/2007 to 12/31/2007.

Orthopaedic Research and Education Foundation: “Characterization of pathology of the knee menisci for optimizing diagnosis and treatment of meniscal disorders.” 7/1/2007 to 6/30/2008.

Arthritis Foundation: “Analysis of regional chondrocyte metabolism in canine and human OA patients.” \$200,000.00. 7/1/2007 to 6/30/2009.

National Institute of Health: “Synovial fluid molecules pertaining to toll-like receptors as biomarkers of osteoarthritis followed by acute knee injury.” \$ 789,738.00. 10/1/2009 to 9/30/2011.

National Football League: “Characterization of pathology of the knee menisci for optimizing diagnosis and treatment of meniscal disorders.” \$119,252.00. 1/1/2010 to 6/30/2012.

Arthritis Foundation: “Synovial fluid derived biomarkers in osteoarthritis.” \$74,800.00. 6/1/2011 to 5/31/2012.

National Institutes of Health: “Center of research translation.” \$7,233,877.00. 7/1/2012 to 6/30/2017.

Coulter Foundation: “Nano-radiosynovectomy for osteoarthritis treatment” \$41,976.00. 09/01/2012 to 08/31/2013.

Nutramax Lab, Inc. “Clinical pilot study assessing the structure/function efficacy in a knee OA patient cohort following consumption of a novel nutraceutical blend containing glucosamine, chondroitin sulfate, avocado/soybean unsaponifiables (ASU) and AKBA.” \$100,980 (\$80,143 direct; \$20,837 indirect). 1/1/2014 to 12/1/2016.

National Institutes of Health: “Structural bone repair using strong porous bioactive scaffolds with enhanced osteogenic capacity. \$92,034. 9/21/2014 to 8/31/2017. *Submitted.*

Key Personnel on Grants:

AO Research Fund: “Characterizing knee menisci pathology for optimal diagnosis and treatment of meniscal disorders.” \$51,380.00. 8/1/2009 to 7/31/2009.

National Institute of Health: “Creation of new musculoskeletal engineering faculty position.” \$1,365,092.00. 10/1/2009 to 9/30/2011.

National Institute of Health: “Characterization of pathology of the knee menisci for optimizing diagnosis and treatment of meniscal disorders.” \$227,250.00. 4/1/2010 to 3/31/2013.

National Institute of Health: “Fabrication and testing of a canine biological femoral head arthroplasty.” \$218,495.00. 7/1/2012 to 6/30/2015.

PEER REVIEWED PUBLICATIONS

1. Fantini GA, Shiono S, **Bal BS**, Shires GT. Adrenergic mechanism contribute to alterations in regional perfusion during normotensive E. coli bacteremia. *J Trauma*. 1989 Sep;29(9):1252-7.
2. **Bal BS**, Gurba DM. Coumadin-induced necrosis of the skin after total knee replacement. A case report. *J Bone Joint Surg Am*. 1991 Jan;73(1):129-30.
3. Chen Y, **Bal BS**, Gorski JP. Calcium and collagen binding properties of osteopontin, bone sialoprotein, and bone acidic glycoprotein-75 from bone. *J Biol Chem*. 1992 Dec 5;267(34):24871-8.
4. **Bal BS**, Jones L Jr. Arthroscopic resection of a chondroblastoma in the knee. *Arthroscopy*. 1995 Apr;11(2):216-9.
5. **Bal BS**, Sampath SAC, Burke DW. A technique for cementing the patella component in total knee arthroplasty. *Am J Orthop*. 1995 Apr;24(4):358.
6. **Bal BS**. A technique for comparison of leg lengths during total hip arthroplasty. *Am J Orthop*. 1996 Jan;25(1):61-2.
7. McGrory BJ, **Bal BS**, Harris WH. Current concepts of six trochanteric osteotomies for total hip arthroplasty. *J Am Acad Orthop Surgeons*. 1996;4:258-67.
8. **Bal BS**, Sandow T. Bilateral femoral neck fractures with negative bone scans. A case report. *Orthopaedics*. 1996 Nov;19(11):974-6.
9. **Bal BS**, Jiranek W, Harris WH. Periprosthetic osteolysis around an uncemented endoprosthesis. A Case Report. *J Arthroplasty*. 1997;12(3):346-9.
10. **Bal BS**, Maurer B, Harris W. Trochanteric union following revision total hip arthroplasty. *J Arthroplasty*. 1998 Jan;13(1):29-33.
11. **Bal BS**, Vandelune D, Gurba DM, Jasty M, Harris WH. Polyethylene wear in cases using femoral stems of similar geometry, but different metals, porous layer, and modularity. *J Arthroplasty*. 1998 Aug;13(5):492-9.
12. **Bal BS**, Maurer T, Harris W. Revision of the acetabular component without cement after a previous acetabular reconstruction with use of a bulk femoral head graft in patients who had congenital dislocation or dysplasia. *J Bone Joint Surg Am*. 1999 Dec;81(12):1703-6.

13. Ray A, Kuroki K, Cook JL, **Bal BS**, Kenter K, Aust G, Ray BK. Induction of matrix metalloproteinase 1 gene expression is regulated by inflammation-responsive transcription factor SAF-1 in osteoarthritis. *Arthritis Rheum.* 2003 Jan;48(1):134-45.
14. Oonishi H, Kim SC, Clarke I, Asano T, **Bal BS**, Kyomoto M, Masuda S. Retrieved ceramic total knee prosthesis in clinical use for 23 years. *Key Eng Mater* Vols. 240-242, pp. 797-800, 2003.
15. Keshavan H, **Bal BS**, Morsi K. Preliminary investigation into the production of grain-size functionally gradient materials for artificial hip implant applications, TMS Annual Meeting, Symposium: Surface Engineering: In *Materials Science II*, Mar 2-6 2003, San Diego, CA, United States, 2003, p 233-41.
16. Morsi K, Keshavan H, **Bal BS**. Processing of grain-size functionally gradient bioceramics for implant applications. *J Mater Sci MaterMed.* 2004 Feb;15(2):191-7.
17. Cook JL, Kuroki K, Kenter K, Marberry K, Brawner T, Geiger T, Jayabalan P, **Bal BS**. Bipolar and monopolar radiofrequency treatment of osteoarthritic knee articular cartilage: acute and temporal effects on cartilage compressive stiffness, permeability, cell synthesis, and extracellular matrix composition. *J Knee Surg.* 2004 Apr;17(2):99-108.
18. Yagil-Kelmer E, Kazmier P, Rahaman MN, **Bal BS**, Tessman RK, Estes DM. Comparison of the response of primary human blood monocytes and the U937 human monocytic cell line to two different sizes of alumina ceramic particles. *J Orthop Res.* 2004 Jul;22(4):832-8.
19. Morsi K, Keshavan H, **Bal BS**: Hot Pressing of Graded Ultrafine-Grained Alumina Bioceramics. *Mater Sci Eng A386*: 384-389, September 2004.
20. Ray A, **Bal BS**, Ray BK. Transcriptional induction of matrix metalloproteinase-9 in the chondrocyte and synoviocyte cells is regulated via a novel mechanism: evidence for functional cooperation between serum amyloid A-activating factor-1 and AP-1. *J Immunol.* 2005 Sep 15;175(6):4039-48.
21. **Bal BS**, Aleto TJ, Garino JP, Toni A, Hendricks K. Ceramic-on-ceramic versus ceramic-on-polyethylene bearings in total hip arthroplasty: results of a multicenter prospective randomized study and update of modern ceramic total hip trials in the U.S. *Hip Int.* 2005 July-September;15:129-35.
22. Aleto T, Garino JP, Hendricks KJ, **Bal BS**. A comparison of ceramic-on-ceramic with ceramic-on-polyethylene bearings in total hip arthroplasty: early results of a prospective randomized trial. *U Penn Orthop J.* 2005;17:1-5.
23. **Bal BS**, Haltom D, Aleto TJ, Barrett MO. Early complications in eighty-nine primary total hip replacements performed with a two-incision minimally invasive technique. *J Bone Joint Surg Am.* 2005 Nov;87(11):2432-8.
24. **Bal BS**, Barrett MO. Acute sepsis complicating degenerative arthritis of the hip joint: a

report of three cases. *J Surg Orthop Adv*. 2005 Winter;14(4):190-2.

25. **Bal BS**, Barrett MO, Lowe J. A modified two-incision technique for primary total hip replacement. *Seminars in Arthroplasty*. September 2005;16(3):198-207.
26. **Bal BS**, Kazmier P, Burd T, Aleto TJ. Anterior trochanteric slide osteotomy for primary total hip replacement. Review of nonunion and complications. *J Arthroplasty*. 2006 Jan;21(1):59-63.
27. **Bal BS**, Greenberg D, Buhrmester L, Aleto TJ. Primary total knee replacement with a zirconia ceramic femoral component. *J Knee Surg*. 2006 Apr;19(2):89-93.
28. **Bal BS**, Aleto TJ. A method to remove the polyethylene liner during hip revision surgery. *Am J Orthop*. 2006 May;35(5):242.
29. **Bal BS**, Haltom D, Aleto T, Barrett M. Early complications of primary total hip replacement performed with a two-incision minimally invasive technique. Surgical Technique. *J Bone Joint Surg Am*. 2006 Sep;88 Suppl 1 Pt 2:221-33.
30. **Bal BS**, Garino J, Ries M, Rahaman MN. Ceramic materials in total joint arthroplasty. *Seminars in Arthroplasty*. September/December 2006;17(3/4):94-101.
31. Rahaman MN, Brown RF, **Bal BS**, Day DE. Bioactive glasses for nonbearing applications in total joint arthroplasty. *Seminars in Arthroplasty*. September/December 2006;17(3/4):102-12.
32. Garino J, Rahaman MN, **Bal BS**. The reliability of modern alumina bearings in total hip arthroplasty. *Seminars in Arthroplasty*. September/December 2006;17(3/4):113-9.
33. **Bal BS**, Rahaman MN, Aleto TJ, Miller FS, Traina F, Toni A. The significance of metal staining on alumina femoral heads in total hip arthroplasty. *J Arthroplasty*. 2007 Jan;22(1):14-9.
34. **Bal BS**, Greenberg DD, Lowe J, Aleto TJ. Primary total knee arthroplasty performed with a MIS subvastus approach. *Tech Knee Surg*. 2007 March;6(1):60-7.
35. **Bal BS**, Greenberg D. Failure of a metal-reinforced tibial post in TKA. A case report. *J Arthroplasty*. 2007 Apr;22(3):464-7.
36. **Bal BS**, Garino J, Ries M, Rahaman MN. A review of ceramic bearing materials in total joint arthroplasty. *Hip Int*. 2007 Jan-Mar;17(1):21-30.
37. Barrett MO, **Bal BS**. Septic arthritis of the hip joint in an immune competent adult: the significance of the differential diagnosis. *J Am Board Fam Med*. 2007 May-Jun;20(3):307-9.
38. Fu Q, Rahaman MN, Bal BS, Huang W, Day DE. Preparation and bioactive characteristics of a porous 13-93 glass, and fabrication in the articulating surface of a proximal tibia. *J Biomed Mater Res A*. 2007 Jul;82(1):222-9.

39. Rahaman MN, **Bal BS**, Garino J, Ries M, Yao J. Ceramics for prosthetic hip and knee joint replacement. *J Am Ceram Soc.* 2007;90(7):1965–88.
40. Yoon RS, Lloyd EW, McGrory B, **Bal BS**, Macaulay W. Studies presented in poster format at the annual Meetings of the American Association of Hip & Knee Surgeons: how do they fare in the peer review process? *J Arthroplasty.* 2007 Sept;22(6 Suppl 2):17-20.
41. Upadhyay A, York S, Macaulay M, McGrory B, Robbennolt J, **Bal BS**. Medical malpractice in hip and knee arthroplasty. *J Arthroplasty.* 2007 Sept;22(6 Suppl 2):2-7.
42. **Bal BS**, Garino J, Ries M, Oonishi H. Ceramic bearings in total knee arthroplasty. *J Knee Surg.* 2007 Oct;20(4):261-70.
43. Fu Q, Rahaman MN, Dogan F, **Bal BS**. Freeze casting of porous hydroxyapatite scaffolds. I. Processing and general microstructure. *J Biomed Mater Res B Appl Biomater.* 2008 Jul;86(1):125-35.
44. Fu Q, Rahaman MN, Dogan F, **Bal BS**. Freeze casting of porous hydroxyapatite scaffolds. II. Sintering, microstructure, and mechanical behavior. *J Biomed Mater Res B Appl Biomater.* 2008 Aug;86(2):514-22.
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PHILANTHROPY

Founder, The Sonny and Dana Bal Orthopaedic Endowment. Award funds for orthopaedic educational and scientific endeavors at the University of Missouri-Columbia.

“Substrates for Osteochondral Tissue Engineering.” Research grant and work in progress with Columbia University, New York and The Comparative Orthopaedic Laboratory, University of Missouri, Columbia. Total budget is \$15,764.27.

Very Distinguished Fellows- Diplomats, Jefferson Club 2006-2007. Members support translates into student scholarships, nationally recognized faculty, groundbreaking research and state-of-the-art facilities that enhance the University’s reputation and stature.

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Deposition of

Lucas Armstrong, MD

October 15, 2019

William "Wes" Johnson v. Lucas Armstrong, et al.



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Lucas Armstrong, MD
October 15, 2019

<p style="text-align: right;">1</p> <p style="text-align: center;">IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT OF ILLINOIS MCLEAN COUNTY</p> <p>WILLIAM "WES" JOHNSON,)) Plaintiff,)) -vs-) No. 2018 L 0000126) LUCAS ARMSTRONG, MCLEAN) COUNTY ORTHOPEDICS, LTD.,) SARAH HARDEN, PAMELA) ROLF, and ADVOCATE HEALTH) AND HOSPITALS CORPORATION) d/b/a ADVOCATE BROMENN) MEDICAL CENTER,)) Defendants.)) and)) BRIAN STENGER and JORDAN) PROSSER,)) Respondents) In Discovery.)</p> <p>THE DISCOVERY DEPOSITION OF LUCAS ARMSTRONG, MD, a defendant, called by the Plaintiff, for examination pursuant to notice, taken before Gina Fick, Illinois CSR 084-003872, CRR, RMR, on Tuesday, the 15th day of October, 2019, commencing at the hour of 9:05 a.m., at McLean County Orthopedics, 1111 Trinity Lane, Suite 111, in the City of Bloomington, County of McLean, and State of Illinois.</p>	<p style="text-align: right;">3</p> <p>1 LUCAS ARMSTRONG, MD, 2 having been first duly sworn, was examined and 3 testified as follows: 4 5 EXAMINATION BY MR. GINZKEY: 6 Q. Will you please state your name for the record. 7 A. Lucas Armstrong. 8 Q. Dr. Armstrong, your counsel handed me a 9 curriculum vitae, which I've marked as Exhibit 10 36. I just have a couple questions about that. 11 Is it relatively up to date? 12 A. I would say in the last two years, relatively. 13 Q. Okay. If I'm following this correctly, you 14 would have served an orthopaedic surgery 15 residency at the University of Kansas-Wichita, 16 correct? 17 A. Correct. 18 Q. Were you primarily at one hospital in Wichita? 19 A. I was primarily at two hospitals in Wichita. 20 Q. What were those institutions? 21 A. One was Wesley Medical Center; it's 22 W-e-s-l-e-y. 23 Q. Got it.</p>														
<p style="text-align: right;">2</p> <p>1 PRESENT: 2 JAMES P. GINZKEY, ESQ. 3 221 East Washington Street 4 Bloomington, Illinois 5 BY: James P. Ginzkey, Esq. 6 (309)821-9707 7 jim@ginzkeylaw.com 8 for the Plaintiff; 9 LIVINGSTON, BARGER, BRANDT & SCHROEDER 10 115 West Jefferson Street 11 P.O. Box 3457 12 Bloomington, Illinois 61702 13 BY: Peter W. Brandt, Esq. 14 (309)828-5281 15 pbrandt@lbbs.com 16 for Lucas Armstrong, MD 17 18 LANGHENRY, GILLEN, LUNDQUIST & JOHNSON 19 605 South Main Street 20 Princeton, Illinois 61356 21 BY: Troy A. Lundquist, Esq. 22 (815)726-3600 23 tlundquist@lgfirm.com 24 for Sarah Harden, Pamela Rolf and 25 Advocate Health and Hospitals;</p> <p style="text-align: center;">INDEX OF EXAMINATIONS</p> <table> <tr> <td>17 Witness</td><td style="text-align: right;">Page</td></tr> <tr> <td>18 LUCAS ARMSTRONG, MD</td><td></td></tr> <tr> <td>19 Examination by Mr. Ginzkey</td><td style="text-align: right;">3</td></tr> <tr> <td>20 Examination by Mr. Lundquist</td><td style="text-align: right;">60</td></tr> <tr> <td>21 Examination by Mr. Brandt</td><td style="text-align: right;">70</td></tr> <tr> <td>22 Certificate of Reporter</td><td style="text-align: right;">81</td></tr> <tr> <td>23 (Exhibit Nos. 1 through 35 premarked.)</td><td></td></tr> </table>	17 Witness	Page	18 LUCAS ARMSTRONG, MD		19 Examination by Mr. Ginzkey	3	20 Examination by Mr. Lundquist	60	21 Examination by Mr. Brandt	70	22 Certificate of Reporter	81	23 (Exhibit Nos. 1 through 35 premarked.)		<p style="text-align: right;">4</p> <p>1 A. The other one was Saint Francis, and that has 2 gone through a couple of different ownerships, 3 and I can't tell you. 4 Q. Okay. On Page 2 of that curriculum vitae there 5 was a presentation that you gave in connection 6 with peripheral nerve healing and repair. 7 Would you still have copies of 8 whatever documents were associated with that 9 presentation? 10 A. I do not. 11 Q. Okay. Then, Doctor, let me hand you some 12 exhibits that I've marked. 13 MR. BRANDT: Okay. Thank you. 14 MR. LUNDQUIST: Thank you, sir. 15 BY MR. GINZKEY: 16 Q. And Exhibit 1 is three pages, and they're 17 copies of answers to questions that have been 18 propounded in this case. 19 And looking at Page 1 of Exhibit 1 20 there was a suit in Kansas by the name of 21 Balandran versus Armstrong. I'm assuming that 22 that was -- you were a resident at that time? 23 A. That is correct.</p>
17 Witness	Page														
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Gina Fick, CRR, RMR, CSR
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<p style="text-align: right;">5</p> <p>1 Q. Do you recall what the allegations in that case 2 were? 3 A. I do recall the outcome of the case, but I do 4 not recall the direct -- the true 5 allegations -- 6 Q. Okay. 7 A. -- of it. 8 Q. And the outcome of the case was it was 9 dismissed, correct? 10 A. I was dismissed from this case. 11 Q. Understood. 12 I was in one of these depositions two 13 weeks ago, and the answer to that question had 14 changed meaning that between the time that the 15 interrogatories were answered by the doctor and 16 the time of the deposition there was another 17 lawsuit that had been filed. 18 Other than the case of Wes Johnson 19 that we're here to discuss this morning, is 20 this Balandran the only other case filed 21 against you? 22 A. Yes. 23 Q. Then if we can go to Page 2 of that Exhibit 1,</p>	<p style="text-align: right;">7</p> <p>1 the record. 2 BY MR. GINZKEY: 3 Q. Doctor, as I understand it, the last office 4 visit with Wes Johnson contains a statement 5 that the EMG was normal, and it should actually 6 read the EMG was abnormal, correct? 7 A. Correct. 8 Q. And that's the only typo or other error that 9 you saw in the charting, true? 10 A. True. 11 MR. BRANDT: Just, for the record, 12 that's a visit of 6/27/17. 13 BY MR. GINZKEY: 14 Q. Then if we can go to what would be Exhibit 2, 15 that is a copy of a portion of the Complaint 16 that's pending in this case, and if we can go 17 to Page 2 of Exhibit 2, Paragraph 4, one of the 18 allegations as stated in Paragraph 4 is, 19 "Following Armstrong's surgery Wes Johnson was 20 discharged from the hospital with postoperative 21 femoral nerve palsy," and that allegation was 22 admitted as true, correct? 23 A. True.</p>
<p style="text-align: right;">6</p> <p>1 it's Interrogatory 4, which simply asks, 2 "Identify by date, time and source document any 3 and all entries and/or portions of plaintiff's 4 charting," plaintiff being Wes Johnson, "which 5 are inaccurate or incomplete." 6 And, again, it's been my experience 7 in these depositions that in preparing, the 8 physician goes through the charting and does 9 find one or two typos or misstatements. 10 And, again, my question to you would 11 be, has your answer to Interrogatory 4 changed? 12 The answer was, "None to my knowledge," meaning 13 you didn't see any inaccuracies in the charting 14 for Wes Johnson. Does that remain the case? 15 MR. BRANDT: We talked about one 16 yesterday. 17 A. I did identify one. I cannot identify the 18 date, time and source. 19 MR. GINZKEY: Okay. We can go off 20 the record. 21 MR. BRANDT: Yes. 22 (Discussion off the record.) 23 MR. GINZKEY: If we can go back on</p>	<p style="text-align: right;">8</p> <p>1 Q. It would also be true that it was your left hip 2 arthroplasty that caused the postoperative 3 femoral nerve palsy, true? 4 MR. BRANDT: Object to the form. 5 You can answer. 6 A. That depends. 7 BY MR. GINZKEY: 8 Q. What does it depend on? 9 A. It depends on a lot of different things. 10 Q. Can you tell me what those different things 11 are? 12 A. Every patient is different. There is a myriad 13 of different reasons. 14 Q. Let me see if I can approach it in this 15 fashion: Prior to the total left hip 16 arthroplasty that we're here to discuss, did 17 you document any femoral nerve palsy in Wes 18 Johnson concerning his left leg? 19 A. No, I did not. 20 Q. Isn't it the case that prior to your surgery 21 Wes Johnson did not have a left femoral nerve 22 palsy? 23 A. Correct.</p>

<p style="text-align: right;">9</p> <p>1 Q. And when you say that the answer to No. 4</p> <p>2 depends, are you indicating that there is</p> <p>3 different portions of the surgery where such a</p> <p>4 nerve palsy can happen, or are you suggesting</p> <p>5 that there is some idiosyncratic etiology for</p> <p>6 Wes Johnson's femoral nerve palsy?</p> <p>7 A. I'm saying that a femoral nerve palsy after a</p> <p>8 total hip replacement can be caused by many</p> <p>9 different things.</p> <p>10 Q. And let me explain where I'm coming from. I'm</p> <p>11 not suggesting that there aren't different</p> <p>12 etiologies from a femoral -- or for a femoral</p> <p>13 nerve palsy following THA, but in this case it</p> <p>14 appears to me that it was the THA that caused</p> <p>15 the femoral nerve palsy that the patient has,</p> <p>16 and wouldn't you agree with that?</p> <p>17 A. I would agree before the total hip arthroplasty</p> <p>18 he did not have a femoral nerve palsy --</p> <p>19 Q. Okay.</p> <p>20 A. -- and after the total hip arthroplasty he did</p> <p>21 have a femoral nerve palsy.</p> <p>22 Q. If I can have you, Doctor, go to the bottom of</p> <p>23 this second page of Exhibit 2, Paragraph 9.</p>	<p style="text-align: right;">11</p> <p>1 Q. And if we look at the first full paragraph at</p> <p>2 the top of Page 1 of this Exhibit 3 under</p> <p>3 Diagnostic Interpretation, about three</p> <p>4 sentences down it says, "At this time the</p> <p>5 lesion appears complete with no evidence of</p> <p>6 voluntary motor unit potential activation."</p> <p>7 That's what it says, correct?</p> <p>8 A. Correct.</p> <p>9 Q. What evidence, statements or documents are you</p> <p>10 aware of, as you sit here today, to suggest</p> <p>11 that that statement by Dr. Carmichael in this</p> <p>12 Exhibit 3 is not accurate?</p> <p>13 MR. BRANDT: Object to the form,</p> <p>14 unless we put a time on it, but you can</p> <p>15 answer it.</p> <p>16 A. I would agree on January 11, 2017, that</p> <p>17 there -- the lesion appears complete per this</p> <p>18 study.</p> <p>19 BY MR. GINZKEY:</p> <p>20 Q. Okay. The lesion appears complete, and there</p> <p>21 is no evidence of voluntary motor unit</p> <p>22 potential activation, correct?</p> <p>23 A. Correct.</p>
<p style="text-align: right;">10</p> <p>1 A. Uh-huh.</p> <p>2 Q. And Paragraph 9 is an allegation that reads,</p> <p>3 "The lesion appears complete with no evidence</p> <p>4 of voluntary motor unit potential activation."</p> <p>5 The answer that was filed indicated</p> <p>6 that there was either no knowledge or</p> <p>7 insufficient knowledge with respect to that</p> <p>8 allegation.</p> <p>9 And if I can have you go to Exhibit</p> <p>10 3, it's four pages down -- five pages down in</p> <p>11 your documents, this Exhibit 3 is the EMG</p> <p>12 report of Dr. Carmichael concerning his</p> <p>13 performance of an EMG on Wes Johnson on</p> <p>14 January 11 of 2017, correct?</p> <p>15 A. Correct.</p> <p>16 Q. And this Exhibit 3 would be part of Wes</p> <p>17 Johnson's chart here at McLean County</p> <p>18 Orthopedics, correct?</p> <p>19 A. Correct.</p> <p>20 Q. So you have access to this Exhibit 3 in Wes</p> <p>21 Johnson's charting here at your office at</p> <p>22 McLean County Orthopedics, correct?</p> <p>23 A. Correct.</p>	<p style="text-align: right;">12</p> <p>1 Q. And sticking with that Diagnostic</p> <p>2 Interpretation paragraph at the top of Page 1</p> <p>3 of Exhibit 3, the statement made by Dr.</p> <p>4 Carmichael is, "There is a severe left femoral</p> <p>5 neuropathy that is specific to the branches of</p> <p>6 the vastus lateralis and rectus femoris</p> <p>7 muscles," correct?</p> <p>8 A. Correct.</p> <p>9 Q. Those are two of the four muscles in the</p> <p>10 quadriceps?</p> <p>11 A. Correct.</p> <p>12 Q. When Dr. Carmichael says that the lesion</p> <p>13 appears complete with no evidence of voluntary</p> <p>14 motor unit potential activation, doesn't that</p> <p>15 mean that both the vastus lateralis and rectus</p> <p>16 femoris are completely denervated?</p> <p>17 MR. BRANDT: Objection with</p> <p>18 respect to time.</p> <p>19 A. That depends on what time you're...</p> <p>20 BY MR. GINZKEY:</p> <p>21 Q. All right. I understand what you're saying.</p> <p>22 Let's take January of '17. Based on what's</p> <p>23 written on Page 1 of this Exhibit 3, isn't it</p>

<p style="text-align: right;">13</p> <p>1 true that in January of 2017 Wes Johnson's</p> <p>2 vastus lateralis and rectus femoris muscles in</p> <p>3 his left quadriceps were completely denervated?</p> <p>4 A. According to the study, yes.</p> <p>5 Q. Are you aware of any subsequent studies, any</p> <p>6 subsequent clinical findings that would suggest</p> <p>7 that at this point in time, and by that I mean</p> <p>8 mid October of 2019, that the patient Wes</p> <p>9 Johnson has recovered any of his motor function</p> <p>10 for either the vastus lateralis or rectus</p> <p>11 femoris muscles of his left quadriceps?</p> <p>12 A. I have not examined the patient. No, I am not</p> <p>13 aware of any studies.</p> <p>14 Q. Is Dr. Carmichael still with McLean County</p> <p>15 Orthopedics?</p> <p>16 A. As of today, yes.</p> <p>17 Q. Is that status going to change?</p> <p>18 A. It is going to change.</p> <p>19 Q. Do you have any idea where he might be going?</p> <p>20 A. He will be practicing in Peoria.</p> <p>21 Q. Do you happen to know what group he might be</p> <p>22 with in Peoria, he might be going to?</p> <p>23 A. I believe he is going to Midwest Orthopaedics.</p>	<p style="text-align: right;">15</p> <p>1 You can answer.</p> <p>2 A. It is a possibility that it is permanent.</p> <p>3 BY MR. GINZKEY:</p> <p>4 Q. But statistically isn't that possibility very</p> <p>5 slim?</p> <p>6 MR. BRANDT: Same objection. I</p> <p>7 don't know what you mean by "slim."</p> <p>8 A. I can't answer the question without a</p> <p>9 percentage to agree to.</p> <p>10 Q. Let's move on from Exhibits 3 and 4 and go to</p> <p>11 Exhibit 5. Exhibit 5 would be a true and</p> <p>12 accurate copy of your dictated Discharge</p> <p>13 Summary in connection with the THA that we're</p> <p>14 discussing, correct?</p> <p>15 A. Correct.</p> <p>16 Q. And part of what you dictated I've got</p> <p>17 highlighted "postoperative femoral nerve</p> <p>18 palsy." That is what you dictated, correct?</p> <p>19 A. Correct.</p> <p>20 Q. Then I want to go from there. If I can have</p> <p>21 you go to Exhibit 8. For the record, Exhibit 8</p> <p>22 is an abstract of a peer reviewed medical</p> <p>23 journal article that begins with the phrase or</p>
<p style="text-align: right;">14</p> <p>1 Q. Okay. Thank you.</p> <p>2 Then, Doctor, if we can go back to</p> <p>3 Exhibit 2 and move to what would be Page 4.</p> <p>4 I've highlighted Paragraph 12. And I've got</p> <p>5 some preliminary questions. Would you agree</p> <p>6 with me that femoral nerve palsy is a known</p> <p>7 complication of a THA?</p> <p>8 A. I would agree it's a known complication.</p> <p>9 Q. Would you also agree that in the vast majority</p> <p>10 of those cases where there is a femoral nerve</p> <p>11 palsy secondary to THA that that palsy is</p> <p>12 temporary in nature?</p> <p>13 MR. BRANDT: Object to the form.</p> <p>14 I'm not sure what you mean by "vast</p> <p>15 majority," but you can answer.</p> <p>16 A. I do agree that the femoral nerve palsy would</p> <p>17 be transient.</p> <p>18 BY MR. GINZKEY:</p> <p>19 Q. Wouldn't you agree that it is unusual for a</p> <p>20 femoral nerve palsy secondary to THA to be</p> <p>21 permanent?</p> <p>22 MR. BRANDT: Object to the form.</p> <p>23 I don't know what you mean by "unusual."</p>	<p style="text-align: right;">16</p> <p>1 the title "Is the Anterior Approach Safe," and</p> <p>2 it's coauthored by Drs. Gorab and Matta.</p> <p>3 You agree with me that both Drs.</p> <p>4 Gorab and Matta are recognized as authoritative</p> <p>5 authors with respect to THAs?</p> <p>6 MR. BRANDT: Object to the form.</p> <p>7 MR. LUNDQUIST: I'll join.</p> <p>8 A. I would agree that Dr. Matta has a lot of</p> <p>9 publications on total hip replacements.</p> <p>10 BY MR. GINZKEY:</p> <p>11 Q. Are his publications considered authoritative?</p> <p>12 MR. BRANDT: Object to the form.</p> <p>13 MR. LUNDQUIST: Same objection.</p> <p>14 A. That depends.</p> <p>15 Q. Doesn't Dr. Gorab also have quite a number of</p> <p>16 peer reviewed medical journal articles</p> <p>17 concerning THAs?</p> <p>18 A. I am unaware of Dr. Gorab's CV.</p> <p>19 Q. Okay. In any event, and I'm paraphrasing, and</p> <p>20 I've highlighted what I'm paraphrasing in this</p> <p>21 Exhibit 8, Drs. Gorab and Matta were two of the</p> <p>22 coauthors with respect to a study cohort that</p> <p>23 consisted of 5,090 consecutive primary</p>

<p style="text-align: right;">17</p> <p>1 procedures, and we're talking about THAs, and</p> <p>2 what they documented in their study was that</p> <p>3 there were only two sciatic nerve palsies and</p> <p>4 one peroneal nerve palsy. Isn't that what's</p> <p>5 reflected in Exhibit 8?</p> <p>6 MR. BRANDT: Take your time and</p> <p>7 look through this before you answer, please.</p> <p>8 THE WITNESS: Okay.</p> <p>9 A. Now, that I've read it, will you please restate</p> <p>10 the question, because I've kind of forgot.</p> <p>11 MR. GINZKEY: Yeah, if you can</p> <p>12 reread that, Gina.</p> <p>13 (Record read.)</p> <p>14 A. That is what is documented in the Results</p> <p>15 section of this paper, of this abstract.</p> <p>16 Q. And you would agree with me, would you not,</p> <p>17 that there are other peer reviewed medical</p> <p>18 journal articles with reference to this topic,</p> <p>19 and by that I mean nerve palsies following THA,</p> <p>20 that document similar percentages?</p> <p>21 MR. BRANDT: Object to the form.</p> <p>22 I'm not sure what you mean.</p> <p>23 A. I actually disagree.</p>	<p style="text-align: right;">19</p> <p>1 causing permanent damage to the femoral nerve</p> <p>2 involved here is not an expected outcome of</p> <p>3 anterior approach total hip arthroplasty."</p> <p>4 Do you agree or disagree with that</p> <p>5 statement?</p> <p>6 MR. BRANDT: Object to the form.</p> <p>7 I don't know what he means by "expected</p> <p>8 outcome." You can answer.</p> <p>9 A. I would agree that it is a known complication</p> <p>10 from a total hip replacement.</p> <p>11 BY MR. GINZKEY:</p> <p>12 Q. That permanent nerve damage is a known</p> <p>13 complication is your testimony, correct?</p> <p>14 A. Nerve damage, whether it be transient or</p> <p>15 permanent, from a total hip replacement is a</p> <p>16 known complication.</p> <p>17 Q. Okay. Let me have you look at Exhibit 7.</p> <p>18 That's a consent form, and specifically what</p> <p>19 I'm interested in is Paragraph 4, which reads,</p> <p>20 "My Physician or his/her associates has/have</p> <p>21 fully explained to me the diagnosis of my</p> <p>22 condition, the nature of the proposed care and</p> <p>23 the material risks, complications and adverse</p>
<p style="text-align: right;">18</p> <p>1 BY MR. GINZKEY:</p> <p>2 Q. Okay. Tell me why you disagree.</p> <p>3 A. There are multiple studies in peer reviewed</p> <p>4 journals showing different nerve palsies from</p> <p>5 different approaches at a much higher rate than</p> <p>6 3 per 6,000.</p> <p>7 Q. What are those approaches that have a higher</p> <p>8 incidence of nerve palsy for THA?</p> <p>9 A. There are multiple different approaches to the</p> <p>10 hip, and there are multiple studies stating the</p> <p>11 incidence of nerve palsy is roughly equivalent.</p> <p>12 Q. Regardless of approach?</p> <p>13 A. Correct.</p> <p>14 Q. If I can have you go back to Exhibit 6, that is</p> <p>15 a one-page document. And, for the record,</p> <p>16 that's what we attorneys call a Certificate of</p> <p>17 Merit, it's appended to the Complaint, and what</p> <p>18 I've highlighted is the author's statement,</p> <p>19 "While temporary injury to the patient's</p> <p>20 lateral femoral cutaneous nerve is a known risk</p> <p>21 of the direct anterior approach in total hip</p> <p>22 arthroplasty, direct trauma or traction injury</p> <p>23</p>	<p style="text-align: right;">20</p> <p>1 outcomes potentially associated with the</p> <p>2 proposed care, including, but not limited to,</p> <p>3 death."</p> <p>4 It's true, is it not, that you never</p> <p>5 told Wes Johnson that permanent femoral palsy</p> <p>6 was a risk of the procedure you were about to</p> <p>7 perform?</p> <p>8 A. I would agree that I specifically stated there</p> <p>9 is a possibility of nerve damage during the</p> <p>10 procedure.</p> <p>11 Q. And I understand that. But the question is,</p> <p>12 permanent nerve damage, did you ever indicate</p> <p>13 to Wes Johnson that there is a risk that there</p> <p>14 is going to be permanent nerve damage to your</p> <p>15 quadriceps as a result of this procedure?</p> <p>16 A. I do not recall specifically stating that, but</p> <p>17 I definitely said there is a possibility of</p> <p>18 nerve damage.</p> <p>19 Q. When would that statement have taken place?</p> <p>20 Where were you, where was Wes and where in the</p> <p>21 scope of the procedure --</p> <p>22 A. I can -- may I look back in my records?</p> <p>23 Q. Absolutely.</p>

<p style="text-align: right;">21</p> <p>1 MR. BRANDT: Hang on. Just so</p> <p>2 everybody is on the same page, I'm going to</p> <p>3 hand him, this would be the visit that he</p> <p>4 had on -- bear with me -- this immediate</p> <p>5 preop visit, and I'm just looking for the</p> <p>6 date here, 6/27.</p> <p>7 A. My statement is, The risks, comma, benefits,</p> <p>8 comma, complications and alternatives to total</p> <p>9 hip arthroplasty were discussed. The risks are</p> <p>10 including, comma, but not limited to, comma,</p> <p>11 bleeding, comma, infection, comma, nerve and</p> <p>12 vessel damage, comma, fracture, comma, need for</p> <p>13 further surgery, coma, limb length discrepancy,</p> <p>14 comma, dislocation, and thromboembolic events,</p> <p>15 such as DVT, comma, PE, comma, stroke, comma,</p> <p>16 MI and death.</p> <p>17 Q. Let me have you move, Doctor, to Exhibit 9.</p> <p>18 That's, for the record, a part of the charting</p> <p>19 from Advocate BroMenn Medical Center where the</p> <p>20 surgery in question took place, and what you</p> <p>21 would have been using would have been DePuy's</p> <p>22 Pinnacle System, correct?</p> <p>23 A. On the acetabular side, correct.</p>	<p style="text-align: right;">23</p> <p>1 you did attend in Rosemont, Illinois, CME with</p> <p>2 respect to the anterior approach for total hip</p> <p>3 arthroplasty. Do you see that?</p> <p>4 A. Yes.</p> <p>5 Q. Then if we go to Exhibit 11, that is part of</p> <p>6 the handouts from that course. If you look at</p> <p>7 the title at the top of Page 1 of Exhibit 11</p> <p>8 and the date and the place, it's Anterior</p> <p>9 Approach for Total Hip Arthroplasty taught by</p> <p>10 Dr. Matta at Rosemont, on November 13, 2015.</p> <p>11 So that would be the course that you attended,</p> <p>12 correct?</p> <p>13 A. I attended this course. I'm pretty certain Dr.</p> <p>14 Matta was not there.</p> <p>15 Q. Okay. If I can have you go to Page 2 of this</p> <p>16 Exhibit 11, I've got highlighting, and this</p> <p>17 handout states, "I encourage you to take</p> <p>18 advantage of the ongoing support available to</p> <p>19 you. These tools include visitation sites and</p> <p>20 regionally based, cadaveric SMART labs and 3-D</p> <p>21 animation."</p> <p>22 My question to you would be, you</p> <p>23 didn't attend any of DePuy's cadaveric training</p>
<p style="text-align: right;">22</p> <p>1 Q. If I could have you look at Exhibit 10.</p> <p>2 It might be before that. It's this</p> <p>3 grid.</p> <p>4 MR. BRANDT: Yeah, we've got it.</p> <p>5 A. Oh, sorry.</p> <p>6 MR. BRANDT: Oh, I'm sorry.</p> <p>7 BY MR. GINZKEY:</p> <p>8 Q. Under that Exhibit 10 marker, there is a legend</p> <p>9 that says DePuy 000589. I want you to assume</p> <p>10 that that's what we attorneys call a Bates</p> <p>11 stamp.</p> <p>12 A. Oh, way down here, yeah.</p> <p>13 Q. Yes. Just meaning that this was produced by</p> <p>14 DePuy in this case.</p> <p>15 A. Okay.</p> <p>16 Q. And what they had been asked to produce was</p> <p>17 their records of your training with respect to</p> <p>18 the use of their products, and what they have</p> <p>19 got listed here are two essentially CME</p> <p>20 courses, one is for -- the second one is for</p> <p>21 the Attune Knee System, which is not relevant,</p> <p>22 so we're going to skip that, but what is</p> <p>23 reflected here is that on November 13 of 2015</p>	<p style="text-align: right;">24</p> <p>1 labs, did you?</p> <p>2 A. I am uncertain whether I -- that day we did a</p> <p>3 cadaver.</p> <p>4 Q. Okay. Were you in a hands-on position that</p> <p>5 day?</p> <p>6 A. Yes.</p> <p>7 Q. What about -- let me back up.</p> <p>8 If you recall, were there any other</p> <p>9 cadaveric labs with respect to DePuy's Pinnacle</p> <p>10 System that you attended?</p> <p>11 A. No.</p> <p>12 Q. Did you participate in any of the DePuy's 3-D</p> <p>13 animation training sessions?</p> <p>14 MR. BRANDT: I object to the form.</p> <p>15 I'm not sure what that is. But you can</p> <p>16 answer, if you know.</p> <p>17 A. If the 3-D animation is the chapter video, then</p> <p>18 yes.</p> <p>19 BY MR. GINZKEY:</p> <p>20 Q. Okay. Did you assist on any THAs prior to</p> <p>21 starting to use the DePuy Pinnacle System</p> <p>22 yourself?</p> <p>23 A. Absolutely.</p>

<p style="text-align: right;">25</p> <p>1 Q. Okay. How many and where, if you recall?</p> <p>2 A. In my fellowship for total hips we used the</p> <p>3 Pinnacle System from multiple approaches.</p> <p>4 Q. So University of Kansas at Wichita?</p> <p>5 A. In my fellowship --</p> <p>6 Q. Gotcha.</p> <p>7 A. -- hip and knee at Virginia Commonwealth.</p> <p>8 Q. VCU?</p> <p>9 A. Correct.</p> <p>10 Q. Okay.</p> <p>11 A. Virginia Commonwealth University Medical</p> <p>12 College of Virginia.</p> <p>13 Q. Let me have you flip to Exhibit 12. That,</p> <p>14 quite frankly, is just a screen shot off a</p> <p>15 website of the Anterior Hip Foundation. Do you</p> <p>16 belong to that foundation?</p> <p>17 A. I do not.</p> <p>18 Q. Have you ever attended any of the training labs</p> <p>19 promulgated -- or sponsored, I should say, by</p> <p>20 the Anterior Hip Foundation?</p> <p>21 A. I can say that I've never been to a training</p> <p>22 lab solely sponsored by this foundation.</p> <p>23 Q. Let me give a preface for this next question.</p>	<p style="text-align: right;">27</p> <p>1 We can get that answer from him or her.</p> <p>2 A. Angie Yoches, Y-o-c-h-e-s.</p> <p>3 Q. Thank you.</p> <p>4 If we can go to Exhibit 13. That's</p> <p>5 just a picture of an anterior approach broach.</p> <p>6 And my first question would be, it's true, is</p> <p>7 it not, that that broach is not a part of the</p> <p>8 total hip arthroplasty box, for lack of a</p> <p>9 better term, that the reps bring to the</p> <p>10 surgeries, is it?</p> <p>11 A. I do not understand the question.</p> <p>12 Q. Okay.</p> <p>13 MR. BRANDT: He'll rephrase it.</p> <p>14 BY MR. GINZKEY:</p> <p>15 Q. With respect to the components of the</p> <p>16 artificial hip, the acetabulum shell, the</p> <p>17 liner, those components are actually brought to</p> <p>18 the operating room by the DePuy reps, correct?</p> <p>19 A. Correct.</p> <p>20 Q. And it's my understanding that what the reps</p> <p>21 bring are the components that are going to be</p> <p>22 used in the artificial hip as opposed to, for</p> <p>23 instance, Stryker drills; they don't bring the</p>
<p style="text-align: right;">26</p> <p>1 We attorneys have to engage in continuing legal</p> <p>2 education, CLE as opposed to CME. We also are</p> <p>3 obligated to file proof of what courses we've</p> <p>4 attended with the Illinois Supreme Court.</p> <p>5 Is there -- and I should back up. So</p> <p>6 there is essentially a database for Illinois</p> <p>7 lawyers where you can go and see what courses</p> <p>8 they have taken through the years.</p> <p>9 Is there a similar database for</p> <p>10 orthopaedic surgeons?</p> <p>11 A. I am unaware of any database --</p> <p>12 Q. Me too.</p> <p>13 A. -- but we do have to perform CMEs.</p> <p>14 Q. I understand.</p> <p>15 Do those get reported to, for</p> <p>16 instance, the Illinois Department of</p> <p>17 Professional and Financial Regulation?</p> <p>18 A. This is horrible of me, I do my CMEs, and I</p> <p>19 give them to my office staff, and they get</p> <p>20 filed to the authorities.</p> <p>21 Q. If you wanted to ask somebody here at MCO to</p> <p>22 whom or what entity proof of those CME credits</p> <p>23 are filed with, who would you ask here at MCO?</p>	<p style="text-align: right;">28</p> <p>1 Stryker drills, do they?</p> <p>2 A. Exhibit 13 is not an implant, and I do not know</p> <p>3 who brings the instruments. I'm unaware of who</p> <p>4 owns the instrument sets and who brings them.</p> <p>5 Q. Would you have used an anterior approach broach</p> <p>6 such as depicted in Exhibit 13 for Wes</p> <p>7 Johnson's THA?</p> <p>8 A. Yes.</p> <p>9 Q. If we look at Exhibit 14, that is a list --</p> <p>10 actually it's your preference card for hip</p> <p>11 arthroplasty, and I certainly may have missed</p> <p>12 it, but looking the three pages of Exhibit 14,</p> <p>13 can you tell me where that anterior broach is</p> <p>14 listed?</p> <p>15 MR. BRANDT: Take your time.</p> <p>16 A. I'm unaware of where. I do not see it listed</p> <p>17 specifically.</p> <p>18 BY MR. GINZKEY:</p> <p>19 Q. And if we look at Exhibit 15, firstly, my</p> <p>20 question would be, the four pages comprising</p> <p>21 Exhibit 15 would be a true and accurate copy of</p> <p>22 your dictated operative note for the surgery in</p> <p>23 question, correct?</p>

<p style="text-align: right;">29</p> <p>1 A. Correct.</p> <p>2 Q. And this might take a minute, but is the</p> <p>3 anterior approach broach mentioned in your</p> <p>4 dictated op note?</p> <p>5 MR. BRANDT: Take your time.</p> <p>6 A. Page 3 of the operative note, there is a large</p> <p>7 paragraph at the top of the page, about halfway</p> <p>8 down -- it's a little bit more than halfway</p> <p>9 down -- "Box osteotome was used to set the</p> <p>10 appropriate version. The femur was</p> <p>11 sequentially broached to the appropriate size."</p> <p>12 Q. So the word -- well, the verb "broached" refers</p> <p>13 in essence to what we have depicted in Exhibit</p> <p>14 13, correct?</p> <p>15 A. Correct, broach refers to using the broach.</p> <p>16 Q. I follow.</p> <p>17 If we go to Page 1 of this Exhibit</p> <p>18 15, this op note, you make reference to</p> <p>19 developmental dysplasia. What do you mean by</p> <p>20 that?</p> <p>21 A. The simple statement is he had a congenital</p> <p>22 problem with his hips, and he has a shallow hip</p> <p>23 socket.</p>	<p style="text-align: right;">31</p> <p>1 A. I viewed the image.</p> <p>2 Q. So preop imaging that you reviewed for Wes</p> <p>3 Johnson's left hip led you to diagnose that he</p> <p>4 had a shallow hip socket on the left, correct?</p> <p>5 A. Correct.</p> <p>6 Q. Does preexisting dysplasia of the hip increase</p> <p>7 the risk of neurological injury in a THA?</p> <p>8 A. Yes, it does.</p> <p>9 Q. Was that discussed with the patient?</p> <p>10 A. I do not recall.</p> <p>11 Q. Excluding for the sake of this question whether</p> <p>12 the neurological injury secondary to THA is</p> <p>13 transient versus permanent, tell me what your</p> <p>14 understanding of the percentage risk of</p> <p>15 neurological injuries secondary to THA is</p> <p>16 overall.</p> <p>17 A. That really depends on the patient.</p> <p>18 Q. Have you seen any published statistics similar</p> <p>19 to one of the prior exhibits we had here today?</p> <p>20 MR. BRANDT: Are you talking about</p> <p>21 a statistic?</p> <p>22 MR. GINZKEY: Yes.</p> <p>23 MR. BRANDT: Yeah.</p>
<p style="text-align: right;">30</p> <p>1 Q. Is that specifically on the left side, or would</p> <p>2 it be for both, if you know?</p> <p>3 A. He already had a total hip replacement on the</p> <p>4 right side when I met him. I am unable to</p> <p>5 describe the preoperative deformity on the</p> <p>6 right side.</p> <p>7 Q. Okay. But on the left side, and I'm a little</p> <p>8 bit confused here, because 15, the dictation,</p> <p>9 says developmental dysplasia. You just</p> <p>10 mentioned congenital. Wouldn't those be two</p> <p>11 different etiologies?</p> <p>12 A. They are one and the same.</p> <p>13 Q. Okay. That shallow hip socket, how is that</p> <p>14 diagnosed? Is it diagnosed clinically, by</p> <p>15 imaging, both?</p> <p>16 A. In this case it was done by imaging.</p> <p>17 Q. Would that imaging have been here at MCO?</p> <p>18 A. I cannot recall specifics, but there were</p> <p>19 preoperative radiographs done that I evaluated</p> <p>20 prior to surgery.</p> <p>21 Q. And that was going to be my next question. Did</p> <p>22 you actually look at the imaging, or did you</p> <p>23 rely on the radiologist's report?</p>	<p style="text-align: right;">32</p> <p>1 A. I've read multiple studies on total hip</p> <p>2 replacement giving different numbers.</p> <p>3 BY MR. GINZKEY:</p> <p>4 Q. Okay. By how much does the risk of</p> <p>5 neurological injury subsequent to THA increase</p> <p>6 due to the presence of dysplasia?</p> <p>7 A. That really depends on the amount of dysplasia</p> <p>8 the patient has preoperatively.</p> <p>9 Q. Is there an amount of dysplasia, preexisting</p> <p>10 dysplasia, that contraindicates the performance</p> <p>11 of the THA?</p> <p>12 A. To my knowledge, there is not.</p> <p>13 MR. GINZKEY: Off the record for</p> <p>14 just a second.</p> <p>15 (Discussion off the record.)</p> <p>16 Q. Doctor, if I can have you go to Exhibit 16,</p> <p>17 that is the charting of the anesthesiologist in</p> <p>18 connection with the surgery in question, and my</p> <p>19 only question is, the surgery start time is</p> <p>20 charted as 0845 hours and the surgery finish at</p> <p>21 1032 hours.</p> <p>22 To the best of your recollection,</p> <p>23 does that seem approximately correct?</p>

<p style="text-align: right;">33</p> <p>1 A. I have no true recollection of the timing of 2 the surgery. I would have to trust this 3 document. 4 Q. Good enough. 5 Then during your procedure you use a 6 c-arm, correct? 7 A. Yes, sir. 8 Q. And Exhibit 17 through 21 would be fluoroscopic 9 images from the c-arm, correct? 10 A. Correct. 11 Q. Exhibit 17, tell me what the significance of 12 the two dark lines -- the two dark horizontal 13 lines are. What are those? 14 A. First off, these are bad copies. And I know 15 what they're picturing, though. 16 MR. BRANDT: Okay. That's fine. 17 Go ahead. He's just wanting to know what 18 these two lines represent, if you can tell. 19 A. Yes, I know. 20 BY MR. GINZKEY: 21 Q. What are the two horizontal lines? 22 A. There are pieces of -- they're long straight 23 pieces of metal that the surgeon uses to judge</p>	<p style="text-align: right;">35</p> <p>1 THE WITNESS: Fair. 2 MR. BRANDT: Okay. 3 THE WITNESS: So Exhibit 17 is an 4 intraoperative fluoroscopic image, and the 5 top line is the intertrochanteric line 6 before I started the surgery. 7 BY MR. GINZKEY: 8 Q. Okay. What would the bottom horizontal line 9 then be, or is the top the femoral neck? 10 A. The bottom is something in the picture that -- 11 it's probably the Bovie cord. It's nothing. 12 Q. Gotcha. 13 MR. BRANDT: Would that be 14 artifact? 15 THE WITNESS: Yeah, artifact. 16 Q. I follow. 17 A. I took this to demonstrate a previous leg 18 length discrepancy. 19 Q. That was my next question. So you've already 20 answered that. 21 Is that something you attempt to 22 correct during your surgery, the leg length 23 discrepancy?</p>
<p style="text-align: right;">34</p> <p>1 leg length. 2 Q. The top horizontal line on Exhibit 17, is that 3 the intertrochanteric line? 4 A. I cannot confidently say yes or no because of 5 the poor quality of these images. I think it 6 is through the center of the femoral head, the 7 top one. 8 Q. Okay. Is the bottom one then from one greater 9 trochanter to the other? 10 A. Again, I am assuming so. 11 Q. Okay. Let me hand you -- 12 MR. GINZKEY: Let's go off the 13 record. 14 (Discussion off the record.) 15 MR. BRANDT: We can go back on the 16 record. 17 We have a glossy of 17 that I don't 18 know if it's better or not, you can answer that 19 question. And then you're going to explain 20 what that shows compared to the copy you looked 21 at. 22 THE WITNESS: Okay. 23 MR. BRANDT: Is that fair?</p>	<p style="text-align: right;">36</p> <p>1 MR. BRANDT: Go back to your 2 report, please. It's Exhibit 15. You can 3 use that. 4 I think I can find it for you, if you 5 want. Take your time and read that through 6 before you answer. 7 A. So speaking with the patient preoperatively, if 8 they have a leg length discrepancy which 9 bothers them, it can be corrected with a total 10 hip replacement within reason. 11 BY MR. GINZKEY: 12 Q. Was that attempted with respect to Wes Johnson? 13 A. Yes. 14 Q. Those are my only questions on that Exhibit 17. 15 If we can go to 18, and, again, it's 16 poor quality. I can hand you mine. All that I 17 want to know is, what is depicted in Exhibit 18 18? 19 A. Exhibit 18 is insertion of the acetabular shell 20 into the pelvis. 21 Q. What are the instruments that are depicted? 22 A. There is an insertion handle and a retractor. 23 Q. And then Exhibit 19. And just, for the record,</p>

<p style="text-align: right;">37</p> <p>1 these fluoroscopic images are in chronological</p> <p>2 order. So Exhibit 19 is a subsequent. Does</p> <p>3 that show just the retractor?</p> <p>4 A. And the implanted acetabular component.</p> <p>5 Q. Okay. Sure.</p> <p>6 20 shows the implant, correct?</p> <p>7 MR. BRANDT: This is much better.</p> <p>8 If you don't understand the question,</p> <p>9 you can ask him to rephrase it.</p> <p>10 THE WITNESS: No.</p> <p>11 Due to the quality, I am uncertain if</p> <p>12 it's the broach or the implant and actually</p> <p>13 what time in the surgery this x-ray was taken.</p> <p>14 BY MR. GINZKEY:</p> <p>15 Q. There is a time; I don't know if it will help</p> <p>16 you out.</p> <p>17 A. No. I mean, I don't know the -- I don't know.</p> <p>18 Q. Okay.</p> <p>19 A. I cannot say if it is the broach -- it is</p> <p>20 either the broach, the trial or the implant.</p> <p>21 Q. Okay.</p> <p>22 A. I think it is the implant.</p> <p>23 MR. BRANDT: Well, if you don't</p>	<p style="text-align: right;">39</p> <p>1 A. To evaluate for leg length discrepancy.</p> <p>2 Q. Okay. Exhibit 22 is not a fluoroscopic image;</p> <p>3 it's a portable x-ray postop. And looking at</p> <p>4 that, Doctor, it appears to me that your</p> <p>5 acetabular shell and liner are larger than what</p> <p>6 had been implanted on the patient's right side.</p> <p>7 Would my conclusion be correct?</p> <p>8 A. On this radiograph it does appear larger.</p> <p>9 Q. I want you to assume that the patient's right</p> <p>10 hip implant had been performed by Dr. Chris</p> <p>11 Dangles. Do you know Dr. Dangles?</p> <p>12 A. Yes, I do know him.</p> <p>13 Q. Would you have reviewed any of his records</p> <p>14 concerning his right hip implant prior to your</p> <p>15 surgery?</p> <p>16 A. I do not specifically recall. I do try and get</p> <p>17 sizes from previous surgery.</p> <p>18 Q. Okay. If you know, does Dr. Dangles do most of</p> <p>19 his work at Gibson Area Community Hospital?</p> <p>20 A. Yes, he does.</p> <p>21 Q. Is there a staff member here at MCO that tries</p> <p>22 to acquire that information; in other words,</p> <p>23 again, a legal analogy would be I try to get</p>
<p style="text-align: right;">38</p> <p>1 know --</p> <p>2 THE WITNESS: I don't know for</p> <p>3 certain.</p> <p>4 MR. BRANDT: That's the best</p> <p>5 answer.</p> <p>6 BY MR. GINZKEY:</p> <p>7 Q. Okay. 21 is a similar photo, but if I'm</p> <p>8 understanding your earlier testimony correctly,</p> <p>9 we've got that straight piece of metal again to</p> <p>10 show the intertrochanteric line, correct?</p> <p>11 A. This is the -- these both are the implants --</p> <p>12 MR. BRANDT: So when you say</p> <p>13 "both," you mean Exhibits 20 and 21?</p> <p>14 THE WITNESS: Excuse me. 20 and</p> <p>15 21.</p> <p>16 MR. BRANDT: It's okay.</p> <p>17 THE WITNESS: These are both the</p> <p>18 implants, and I am evaluating the line</p> <p>19 across the bottom of the ischiums versus the</p> <p>20 intertrochanteric line and the --</p> <p>21 BY MR. GINZKEY:</p> <p>22 Q. And what's the purpose of making that</p> <p>23 determination?</p>	<p style="text-align: right;">40</p> <p>1 similar lawsuits, but I have a paralegal or</p> <p>2 some staff member do it. Is there somebody</p> <p>3 here that tries to obtain that for you?</p> <p>4 A. No specific person.</p> <p>5 Q. If you obtain that information, is it kept in</p> <p>6 the patient's chart?</p> <p>7 A. That depends.</p> <p>8 Q. Did you, in reviewing for this deposition and</p> <p>9 going through your charting, see any of Dr.</p> <p>10 Dangles' information concerning sizing and</p> <p>11 implants that he used?</p> <p>12 A. No, I did not.</p> <p>13 Q. And looking at Exhibit 23 -- and let me hand</p> <p>14 you the glossy because that's the best image --</p> <p>15 I want you to assume that this is a postop</p> <p>16 office visit here at MCO, and I believe the</p> <p>17 legend means it's from October 24 of 2016 at</p> <p>18 11:33 in the morning, that's my understanding.</p> <p>19 In any event, so it's after that.</p> <p>20 If you can take a look at that. Does</p> <p>21 there appear to be a difference in orientation</p> <p>22 with respect to the implants, right versus</p> <p>23 left?</p>

<p style="text-align: right;">41</p> <p>1 A. Yes.</p> <p>2 Q. Why would that be?</p> <p>3 A. There are multiple reasons why it could be.</p> <p>4 Q. In this case what would some of those reasons</p> <p>5 be?</p> <p>6 A. Well, the right femoral stem has subsided and</p> <p>7 it's shorter. The main reason the orientation</p> <p>8 is most likely different is intraoperative</p> <p>9 assessment and stability.</p> <p>10 Q. Okay. Meaning as you're doing the implant</p> <p>11 you're making those assessments and trying to</p> <p>12 achieve the most stable implant, correct?</p> <p>13 A. Correct.</p> <p>14 Q. Okay. Moving to Exhibit 24, the acronym ASIS</p> <p>15 would refer to the anterior superior iliac</p> <p>16 spine, correct?</p> <p>17 A. Correct.</p> <p>18 Q. And 24 is simply a diagram of the ASIS, true?</p> <p>19 A. It's a hemipelvis and a femur with the ASIS</p> <p>20 being the only thing labeled.</p> <p>21 Q. Going to Exhibit 25, again, that's just a stock</p> <p>22 image of a screen shot off the internet. I've</p> <p>23 encircled in black magic marker what would be</p>	<p style="text-align: right;">43</p> <p>1 Q. Doctor, if I can have you look at Exhibit 26.</p> <p>2 That's two pages from a DePuy brochure, and</p> <p>3 actually my only questions are with respect to</p> <p>4 the second page of this Exhibit 26, because the</p> <p>5 top photo on the second page of that exhibit</p> <p>6 shows preparation for a left hip arthroplasty,</p> <p>7 correct?</p> <p>8 A. Correct.</p> <p>9 Q. Now, there are marks in that top photo. Do you</p> <p>10 actually draw markings in your surgery?</p> <p>11 MR. BRANDT: On the patient's skin</p> <p>12 you're talking about?</p> <p>13 MR. GINZKEY: Actually there is a</p> <p>14 wrap --</p> <p>15 MR. BRANDT: I'm sorry.</p> <p>16 MR. GINZKEY: -- a plastic wrap --</p> <p>17 MR. BRANDT: You're right.</p> <p>18 MR. GINZKEY: -- an adhesive, but</p> <p>19 yes.</p> <p>20 BY MR. GINZKEY:</p> <p>21 Q. Did you draw on Wes Johnson's left hip where</p> <p>22 the greater trochanter was and where the ASIS</p> <p>23 was?</p>
<p style="text-align: right;">42</p> <p>1 the greater trochanter, correct?</p> <p>2 A. Along with the femoral neck and the lesser</p> <p>3 trochanter.</p> <p>4 Q. Okay. I follow.</p> <p>5 And ASIS, is that labeled</p> <p>6 appropriately with respect to the anterior</p> <p>7 superior iliac spine?</p> <p>8 A. No, it is not.</p> <p>9 Q. Okay. Tell me what is inaccurate.</p> <p>10 A. The ASIS is right next to the pelvic rim -- the</p> <p>11 label is right next to the pelvic rim, and the</p> <p>12 ASIS is about halfway between the pelvic rim</p> <p>13 and the top of the acetabulum.</p> <p>14 Q. Okay. So on this Exhibit 25, the acronym ASIS</p> <p>15 is a little bit too high?</p> <p>16 A. I agree with that.</p> <p>17 Q. Okay. 26 is --</p> <p>18 THE WITNESS: Real quick, can we</p> <p>19 take a break so I can use the rest room?</p> <p>20 MR. GINZKEY: Absolutely.</p> <p>21 THE WITNESS: Thanks.</p> <p>22 (Recess taken.)</p> <p>23 BY MR. GINZKEY:</p>	<p style="text-align: right;">44</p> <p>1 A. No, I did not. I did identify them prior to</p> <p>2 the surgery, but I did not specifically mark</p> <p>3 them.</p> <p>4 Q. And what this says, this Exhibit 26, that</p> <p>5 second page, top photo, it says, "Start the</p> <p>6 incision approximately 3 centimeters lateral</p> <p>7 and 1 centimeter distal to the ASIS, and</p> <p>8 continue in a posterior and distal direction</p> <p>9 toward the anterior border of the femur."</p> <p>10 Do you see that?</p> <p>11 A. I do see that.</p> <p>12 Q. And it says, "The incision will be 8 to 9</p> <p>13 centimeters and parallel with the fibres of the</p> <p>14 tensor fascia lata muscle." Do you see that,</p> <p>15 that statement?</p> <p>16 A. I do check.</p> <p>17 Q. And then the bottom picture shows the tensor</p> <p>18 fibres with respect to that fascia, correct?</p> <p>19 A. That is what the caption says. This is a bad</p> <p>20 copy. I will assume it is correct.</p> <p>21 Q. Yeah. I'm going to try to get a better</p> <p>22 picture.</p> <p>23 Well, briefly look at Exhibit 27, and</p>

<p style="text-align: right;">45</p> <p>1 obviously this is a right leg as opposed to a</p> <p>2 left leg, but as we've talked before, as</p> <p>3 depicted in this Exhibit 27, the rectus femoris</p> <p>4 and the vastus lateralis are two of the four</p> <p>5 quadriceps muscles, true?</p> <p>6 A. True.</p> <p>7 Q. Then if you look at Exhibit 28, again it's a</p> <p>8 generic screen shot off the internet, but I am</p> <p>9 primarily interested in the anatomical drawing</p> <p>10 in the upper right-hand corner. There is a</p> <p>11 label for IT band, that stands for the</p> <p>12 iliotibial band, correct?</p> <p>13 A. Correct.</p> <p>14 Q. And the TFL stands for the tensor fascia lata,</p> <p>15 correct?</p> <p>16 A. Correct.</p> <p>17 Q. Does the depiction of the TFL in this</p> <p>18 Exhibit 28 accurately depict where anatomically</p> <p>19 the tensor fascia lata is?</p> <p>20 A. Yes.</p> <p>21 Q. And then if we look at Exhibit 29, again taken</p> <p>22 off the internet, but what I'm interested in</p> <p>23 are the photos, and that happens to be a</p>	<p style="text-align: right;">47</p> <p>1 Do you see that statement?</p> <p>2 A. Yes, I do.</p> <p>3 Q. The tensor fascia lata muscle, is it actually</p> <p>4 split during an anterior -- direct anterior</p> <p>5 approach?</p> <p>6 A. No, it is not.</p> <p>7 Q. Okay. Just retracted, true?</p> <p>8 A. Correct.</p> <p>9 Q. And in this Exhibit 29, again Photo C, which</p> <p>10 happens to be the left hip, does it appear that</p> <p>11 there are drawings marking the patient's --</p> <p>12 excuse me. C is right hip, not left hip. C is</p> <p>13 right hip.</p> <p>14 In that C, Photo C on Exhibit 29,</p> <p>15 does it appear as if landmarks of the femur and</p> <p>16 the ASIS are drawn?</p> <p>17 MR. BRANDT: Object to the form.</p> <p>18 You can answer.</p> <p>19 A. There are drawings on the patient or on the</p> <p>20 drape.</p> <p>21 BY MR. GINZKEY:</p> <p>22 Q. Okay.</p> <p>23 A. I --</p>
<p style="text-align: right;">46</p> <p>1 depiction of a left hip, correct?</p> <p>2 A. You can just transpose the picture, but this is</p> <p>3 depicting a left leg.</p> <p>4 Q. Okay. And Exhibit C does show the tensor</p> <p>5 fascia, true? Actually, that's the right hip.</p> <p>6 MR. BRANDT: It says right, yes.</p> <p>7 BY MR. GINZKEY:</p> <p>8 Q. Yeah, it's the right hip in Exhibit C. A is</p> <p>9 left hip, C is right hip.</p> <p>10 A. That makes more sense.</p> <p>11 I will say, again, poor quality. I</p> <p>12 have -- I cannot anatomically identify anything</p> <p>13 but fascia and muscle, not the exact muscle; I</p> <p>14 cannot identify that muscle --</p> <p>15 Q. Okay.</p> <p>16 A. -- due to the quality of the --</p> <p>17 MR. BRANDT: Exhibit?</p> <p>18 THE WITNESS: Yeah.</p> <p>19 BY MR. GINZKEY:</p> <p>20 Q. The legend under the photos for C, it says, A</p> <p>21 right hip incision is shown with -- and they</p> <p>22 misspelled the word "the" -- the fascia over</p> <p>23 the tensor split.</p>	<p style="text-align: right;">48</p> <p>1 MR. BRANDT: It's okay. You've</p> <p>2 answered.</p> <p>3 BY MR. GINZKEY:</p> <p>4 Q. The top drawing would be the ASIS, would it</p> <p>5 not?</p> <p>6 MR. BRANDT: I'm sorry, on C</p> <p>7 you're talking about?</p> <p>8 MR. GINZKEY: Yes.</p> <p>9 MR. BRANDT: Okay.</p> <p>10 A. There is a drawing, and I cannot identify -- I</p> <p>11 was not there. I didn't draw it. I'm not</p> <p>12 going to identify it.</p> <p>13 MR. BRANDT: All right.</p> <p>14 THE WITNESS: I'm not going to</p> <p>15 identify it.</p> <p>16 MR. BRANDT: Thank you.</p> <p>17 Q. All right. With reference to the top drawing,</p> <p>18 just above the retractor shown --</p> <p>19 A. Are we still talking about C?</p> <p>20 Q. C, yes -- if it's not the ASIS, what would it</p> <p>21 be?</p> <p>22 MR. BRANDT: I object to form.</p> <p>23 You're asking him to guess. But you can go</p>

<p style="text-align: right;">49</p> <p>1 ahead.</p> <p>2 A. Again, I mean, I would -- it is labeled as</p> <p>3 the -- I would assume it is the ASIS.</p> <p>4 BY MR. GINZKEY:</p> <p>5 Q. And is the drawing immediately under the</p> <p>6 retractor the femur or the greater trochanter?</p> <p>7 A. Again, I would assume that is what they are</p> <p>8 depicting.</p> <p>9 Q. Looking at Exhibit 30, I want you to assume</p> <p>10 that this is a photo of Wes Johnson, and that's</p> <p>11 the surgical incision that you made. That</p> <p>12 incision is much too medial, isn't it?</p> <p>13 MR. BRANDT: Object to the form.</p> <p>14 I'm not sure what you mean. But you can</p> <p>15 answer.</p> <p>16 A. Do you have a better quality? Because I cannot</p> <p>17 even identify the incision on my copy.</p> <p>18 Now that I can identify the incision,</p> <p>19 could you please restate the question.</p> <p>20 Q. Isn't the incision depicted on that Exhibit 30</p> <p>21 much too medial?</p> <p>22 MR. BRANDT: Same objection. I'm</p> <p>23 not sure what you mean.</p>	<p style="text-align: right;">51</p> <p>1 avoid neurological injury with a direct</p> <p>2 anterior approach to a THA, that the surgeon</p> <p>3 has to be in the appropriate plane?</p> <p>4 MR. BRANDT: Object to the form.</p> <p>5 I'm not sure what you mean.</p> <p>6 A. Plane of what?</p> <p>7 BY MR. GINZKEY:</p> <p>8 Q. Muscle plane.</p> <p>9 A. That depends on what approach you're using.</p> <p>10 Q. Well, direct anterior. I mean, regardless of</p> <p>11 what approach you're using, you're going to</p> <p>12 have to get into the right muscle plane in</p> <p>13 order to avoid injury, neurological injury,</p> <p>14 correct?</p> <p>15 A. I would agree that staying in the intramuscular</p> <p>16 plane decreases the risk of injury.</p> <p>17 Q. Looking at Exhibit 32, I'll hand you my copy</p> <p>18 because it's a better copy, I want you to</p> <p>19 assume that this is again the patient, Wes</p> <p>20 Johnson, and this is his right hip incision.</p> <p>21 MR. BRANDT: This is --</p> <p>22 MR. GINZKEY: Dr. Dangles.</p> <p>23 THE WITNESS: 32.</p>
<p style="text-align: right;">50</p> <p>1 A. That depends on where his anatomy actually is.</p> <p>2 BY MR. GINZKEY:</p> <p>3 Q. If we compare the surgical scar that's</p> <p>4 reflected in that Exhibit 30 with Exhibit 26,</p> <p>5 the publication from DePuy, where they talk</p> <p>6 about starting the incision 3 centimeters</p> <p>7 lateral and 1 centimeter distal to the ASIS,</p> <p>8 that's not where that incision begins, is it?</p> <p>9 A. I don't know where the ASIS is in this picture.</p> <p>10 Q. Well, in the picture I want you to assume we</p> <p>11 had Wes put his two fingers on his hipbone, the</p> <p>12 pelvis. If that's true, that will give you</p> <p>13 some type of landmark, correct?</p> <p>14 A. No, because it could be anywhere on the pelvic</p> <p>15 rim.</p> <p>16 Q. Would you agree with me that what's depicted in</p> <p>17 that Exhibit 30, that incision, does not</p> <p>18 comport with the second page of Exhibit 26, the</p> <p>19 DePuy publication?</p> <p>20 MR. BRANDT: Object to the form.</p> <p>21 A. I do not agree, because there is no references</p> <p>22 in this Exhibit 30.</p> <p>23 Q. Okay. Would you agree with me that in order to</p>	<p style="text-align: right;">52</p> <p>1 MR. BRANDT: Thank you.</p> <p>2 BY MR. GINZKEY:</p> <p>3 Q. You would agree with me that the incision as</p> <p>4 reflected on 32 is in a completely different</p> <p>5 position than the incision on Exhibit 30; you</p> <p>6 would agree with that, wouldn't you?</p> <p>7 A. I would disagree that you could state that,</p> <p>8 because, again, there is no references as to</p> <p>9 where it actually is.</p> <p>10 Q. Would you at least agree with me that the</p> <p>11 incision in Exhibit 32 is much more lateral</p> <p>12 than the incision in Exhibit 30?</p> <p>13 A. I would disagree on the same grounds. There is</p> <p>14 no reference.</p> <p>15 Q. You can look, Doctor, at Exhibit 31. That's</p> <p>16 it. That is an anatomical diagram of the</p> <p>17 femoral nerve, and, again, this would be in the</p> <p>18 right leg as opposed to the left, but I want</p> <p>19 you to look at the encircled muscles, the</p> <p>20 rectus femoris and the vastus lateralis.</p> <p>21 Firstly, those two encircled muscles on Exhibit</p> <p>22 31 are the two muscles that were -- that had no</p> <p>23 motor unit activation on either of Dr.</p>

<p style="text-align: right;">53</p> <p>1 Carmichael's EMGs, correct?</p> <p>2 A. Correct.</p> <p>3 Q. And I want you to assume that the X on the</p> <p>4 nerves running to the rectus femoris and vastus</p> <p>5 lateralis, those X's were placed by Dr.</p> <p>6 Carmichael in his deposition.</p> <p>7 Making that assumption, wouldn't</p> <p>8 those two X's lie directly under the incision</p> <p>9 that's reflected in Exhibit 30 if we</p> <p>10 superimposed those two?</p> <p>11 A. I disagree.</p> <p>12 Q. In this case do you have an opinion as to</p> <p>13 whether or not the nerves running to Wes</p> <p>14 Johnson's rectus femoris and vastus lateralis</p> <p>15 were transected?</p> <p>16 A. Yes.</p> <p>17 Q. What's your opinion?</p> <p>18 A. They were not.</p> <p>19 Q. Do you have an opinion in this case as to</p> <p>20 whether or not the nerves running to Wes</p> <p>21 Johnson's rectus femoris and vastus lateralis</p> <p>22 muscles were stretched by retraction?</p> <p>23 A. I do not.</p>	<p style="text-align: right;">55</p> <p>1 means?</p> <p>2 A. I believe I do.</p> <p>3 Q. Okay. What does that mean?</p> <p>4 A. Your eyes can't follow a moving target without</p> <p>5 moving your head.</p> <p>6 Q. And is that similar to the end gaze nystagmus</p> <p>7 where the finding was that he had nystagmus in</p> <p>8 the left upper quadrant?</p> <p>9 A. Nystagmus is when you get to the end of looking</p> <p>10 in one direction and then your eye bounces.</p> <p>11 Q. Okay. What does "Saccades: Hypometric in all</p> <p>12 planes" mean?</p> <p>13 A. I do not know.</p> <p>14 Q. And the only reason that I'm asking those</p> <p>15 questions is, would you have, as you sit here</p> <p>16 today, any reason to disagree with the findings</p> <p>17 reflected in Exhibit 33?</p> <p>18 MR. BRANDT: I'll object to the</p> <p>19 form and foundation.</p> <p>20 MR. LUNDQUIST: I'll join.</p> <p>21 A. I have not examined the patient, so I cannot</p> <p>22 agree or disagree with these findings.</p> <p>23 BY MR. GINZKEY:</p>
<p style="text-align: right;">54</p> <p>1 Q. So no opinion, correct?</p> <p>2 A. No opinion.</p> <p>3 Q. Do you have an opinion as to whether or not</p> <p>4 those same two muscles were damaged by an</p> <p>5 electrocautery device?</p> <p>6 A. Yes.</p> <p>7 Q. What's your opinion?</p> <p>8 A. They were not.</p> <p>9 Q. Then, Doctor, if we go to Exhibit 33. That,</p> <p>10 for the record, is a report from a physical</p> <p>11 therapist, and I want you to assume that the</p> <p>12 individual authoring this Exhibit 33 is</p> <p>13 certified in vestibular rehab and certified as</p> <p>14 a brain injury specialist. Are you certified</p> <p>15 in either of these disciplines?</p> <p>16 A. No, I'm not.</p> <p>17 Q. On a regular basis do you treat postconcussive</p> <p>18 syndrome?</p> <p>19 A. No, I do not.</p> <p>20 Q. On the second page of this Exhibit 33, the</p> <p>21 author makes reference to some of the clinical</p> <p>22 findings. The first entry is smooth pursuits</p> <p>23 degraded in all planes. Do you know what that</p>	<p style="text-align: right;">56</p> <p>1 Q. Generally speaking, does nerve damage lead to</p> <p>2 weakness in the leg?</p> <p>3 MR. BRANDT: Object to the form.</p> <p>4 Vague. You can answer.</p> <p>5 A. That depends.</p> <p>6 BY MR. GINZKEY:</p> <p>7 Q. In this particular case if, in fact, Wes</p> <p>8 Johnson's -- two of Wes Johnson's four muscles</p> <p>9 in his left quadriceps are denervated, that</p> <p>10 would make his left leg weaker, would it not?</p> <p>11 A. That depends.</p> <p>12 Q. What does it depend on?</p> <p>13 A. It depends on the severity of the neurapraxia,</p> <p>14 the palsy, as well as the compensatory muscles,</p> <p>15 how strong his compensatory muscles would be.</p> <p>16 Q. When is the last time that you saw Wes Johnson</p> <p>17 in a clinical setting?</p> <p>18 A. It's in my records. May I look?</p> <p>19 Q. Sure.</p> <p>20 MR. BRANDT: If you've got it,</p> <p>21 that's fine.</p> <p>22 MR. GINZKEY: I don't have it.</p> <p>23 MR. BRANDT: We've got it. Give</p>

<p style="text-align: right;">57</p> <p>1 us a second here.</p> <p>2 A. That would be -- my last visit was 06/27/2017.</p> <p>3 BY MR. GINZKEY:</p> <p>4 Q. Would you have performed any type of</p> <p>5 neurological exam on Wes's left extremity?</p> <p>6 A. Yes.</p> <p>7 Q. What did it reflect?</p> <p>8 A. Decreased strength of left knee flexion and</p> <p>9 extension.</p> <p>10 Q. Would deep tendon reflexes have been measured</p> <p>11 on the left lower extremity?</p> <p>12 A. Yes.</p> <p>13 Q. What did that reflect?</p> <p>14 A. Both lower extremities were normal.</p> <p>15 Q. On that last office visit would you have done</p> <p>16 any clinical exam with reference to cranial</p> <p>17 nerves?</p> <p>18 A. No.</p> <p>19 Q. At any point during your treatment of Wes</p> <p>20 Johnson would you have tried to make a clinical</p> <p>21 determination with respect to his cranial</p> <p>22 nerves?</p> <p>23 MR. BRANDT: Don't guess.</p>	<p style="text-align: right;">59</p> <p>1 agree that incising the fascia over the tensor</p> <p>2 fascia lata offers the best protection for the</p> <p>3 femoral nerve?</p> <p>4 MR. BRANDT: Same objections.</p> <p>5 A. I still do not understand the question due to</p> <p>6 there are multiple --</p> <p>7 MR. BRANDT: That's all right.</p> <p>8 He's going to re-ask the question. If you</p> <p>9 don't understand it, don't answer it.</p> <p>10 BY MR. GINZKEY:</p> <p>11 Q. Again, with respect to a direct anterior</p> <p>12 approach for a THA, do you agree that staying</p> <p>13 within the TFL sheath and outside of the</p> <p>14 sartorial sheath offers the best protection for</p> <p>15 the femoral nerve?</p> <p>16 MR. BRANDT: Object to the form.</p> <p>17 You can answer.</p> <p>18 A. I would agree.</p> <p>19 Q. Do you ever perform a THA using a lateral</p> <p>20 subvastus approach?</p> <p>21 A. I do not.</p> <p>22 Q. Do any of your partners use that approach for</p> <p>23 THA?</p>
<p style="text-align: right;">58</p> <p>1 A. No, I did not.</p> <p>2 BY MR. GINZKEY:</p> <p>3 Q. Do you agree with the statement that the</p> <p>4 femoral nerve is at risk with distal extension</p> <p>5 of an incision for a direct anterior approach?</p> <p>6 MR. BRANDT: Object to the form.</p> <p>7 You can answer.</p> <p>8 A. That depends.</p> <p>9 Q. On what?</p> <p>10 A. On multiple different things, mainly the depth</p> <p>11 of the dissection at the time.</p> <p>12 Q. Okay. Do you agree that with respect to direct</p> <p>13 anterior approach incising the fascia over the</p> <p>14 tensor fascia lata and staying within the TFL</p> <p>15 sheath offers the best protection for the</p> <p>16 femoral nerve?</p> <p>17 MR. BRANDT: Object to the form.</p> <p>18 You can answer.</p> <p>19 A. I don't understand the question.</p> <p>20 Q. Let's break it down and make it two questions.</p> <p>21 Firstly, do you agree that incising the</p> <p>22 fascia -- and, again, we're talking about a</p> <p>23 direct anterior approach for a THA. Do you</p>	<p style="text-align: right;">60</p> <p>1 A. You called it anterior subvastus?</p> <p>2 Q. A lateral subvastus approach.</p> <p>3 A. No, they do not.</p> <p>4 Q. If you know, does that approach offer greater</p> <p>5 protection for the femoral nerve?</p> <p>6 MR. BRANDT: Object to the form.</p> <p>7 A. I do not have an opinion on that.</p> <p>8 MR. GINZKEY: I think I'm</p> <p>9 finished. Let me go through my notes.</p> <p>10 I think Troy has some questions.</p> <p>11</p> <p>12 EXAMINATION BY MR. LUNDQUIST:</p> <p>13 Q. Good morning, Doctor.</p> <p>14 A. Good morning, Doctor.</p> <p>15 Q. I'm no doctor.</p> <p>16 Do you want to take a break or are</p> <p>17 you good --</p> <p>18 MR. GINZKEY: Doctor of Juris</p> <p>19 Prudence.</p> <p>20 THE WITNESS: Yeah, you all are.</p> <p>21 MR. LUNDQUIST: Supposedly, but I</p> <p>22 don't count that. Not like you guys do.</p> <p>23 You studied way longer than we have.</p>

<p style="text-align: right;">61</p> <p>1 Do you need a break or anything? I</p> <p>2 won't be too long.</p> <p>3 THE WITNESS: No.</p> <p>4 MR. BRANDT: Are you okay?</p> <p>5 THE WITNESS: Yeah, I'm good.</p> <p>6</p> <p>7 BY MR. LUNDQUIST:</p> <p>8 Q. All right. Doctor, I represent the hospital</p> <p>9 and a couple -- one nurse and one surgical tech</p> <p>10 who have been also added to this.</p> <p>11 I've got a few questions. If</p> <p>12 anything I say doesn't make sense, please tell</p> <p>13 me, and I'll rephrase, okay.</p> <p>14 As I understand it, the concept of a</p> <p>15 known risk in medicine means that even though</p> <p>16 the caregivers act in a reasonably careful</p> <p>17 manner and consistent with the standard of care</p> <p>18 and do everything right, there can still be</p> <p>19 certain complications that occur, correct?</p> <p>20 A. I agree with that.</p> <p>21 Q. In this particular case the records indicate</p> <p>22 that there were -- there were several people</p> <p>23 who assisted in the operating room in your</p>	<p style="text-align: right;">63</p> <p>1 particular case Sarah Harden has described that</p> <p>2 she was the assistant who was scrubbed in, was</p> <p>3 in the surgical field and was there to assist</p> <p>4 you. Do you have any reason to disagree with</p> <p>5 that?</p> <p>6 A. I have no reason to disagree.</p> <p>7 Q. Okay. Both Sarah and Pam described that in</p> <p>8 general -- and I will tell you neither of them</p> <p>9 had a recollection of this procedure, okay, so</p> <p>10 they were telling us what they could based on</p> <p>11 custom and practice for a total hip like this</p> <p>12 one, okay. So that is the setup for my next</p> <p>13 questions, and I can tell you that's what they</p> <p>14 said.</p> <p>15 Both of them testified that as a</p> <p>16 custom and practice all of the incisions would</p> <p>17 be made by the surgeon. Is that a correct</p> <p>18 statement of how the procedures would work in a</p> <p>19 total hip?</p> <p>20 A. Correct.</p> <p>21 Q. So, as best we can tell, any incision made in</p> <p>22 this case with respect to Mr. Johnson would</p> <p>23 have been made by you as opposed to anybody</p>
<p style="text-align: right;">62</p> <p>1 procedure in various ways.</p> <p>2 There has been depositions taken of</p> <p>3 Pam Rolf and Sarah Harden. Do you know Pam and</p> <p>4 Sarah?</p> <p>5 A. Yes, I do.</p> <p>6 Q. Okay. Sarah and Pam, the surgical tech and the</p> <p>7 nurse, have both described that they are there</p> <p>8 to assist you as a surgeon in any way you need.</p> <p>9 Pam was in the role of passing you</p> <p>10 instruments, and she indicated that she was not</p> <p>11 the one that was in the surgical field for this</p> <p>12 particular procedure. Do you recall that to be</p> <p>13 true?</p> <p>14 A. I do not recall who was helping me. In a vast</p> <p>15 majority of cases that is her role.</p> <p>16 Q. Okay. Fair enough. And I understand some of</p> <p>17 the details like that you would defer to the</p> <p>18 records on as far as --</p> <p>19 A. Correct.</p> <p>20 Q. -- who was in what role, correct?</p> <p>21 A. Correct.</p> <p>22 Q. Fair enough.</p> <p>23 And along those same lines, in this</p>	<p style="text-align: right;">64</p> <p>1 else in the room; is that fair?</p> <p>2 A. Correct.</p> <p>3 Q. After the incision is made, your operative</p> <p>4 report, which is No. 15 -- we had that earlier,</p> <p>5 I've got an extra copy, if you need it -- it</p> <p>6 refers to basically everything that -- or I</p> <p>7 shouldn't say everything, but it refers to your</p> <p>8 procedure and the steps you took, right, in a</p> <p>9 general sense? Yes?</p> <p>10 A. Correct.</p> <p>11 Q. Throughout Exhibit 15, your operative report,</p> <p>12 there are a number of steps referred to, some</p> <p>13 of which refer to specific instrumentation,</p> <p>14 whether it be reamers, scalpels, retractors,</p> <p>15 all things like that, right?</p> <p>16 A. Correct.</p> <p>17 Q. The nurses testified that, again, by way of</p> <p>18 custom and practice for a surgery like this, it</p> <p>19 would be typical for the surgeon to place an</p> <p>20 instrument where he or she wants it, and then</p> <p>21 there may be times where you as a surgeon may</p> <p>22 ask the surgical tech or the nurse to hold it</p> <p>23 there; is that how it works?</p>

<p style="text-align: right;">65</p> <p>1 A. Sometimes, yes, that is how it works.</p> <p>2 Q. Okay. I guess when needed, I should say. You</p> <p>3 maybe don't always need to do that.</p> <p>4 A. I would agree with that.</p> <p>5 Q. Okay. So is it a fair statement that, as best</p> <p>6 you recall, with respect to Mr. Johnson's case</p> <p>7 that any placement of instruments would have</p> <p>8 initially been made by you, and then if you</p> <p>9 needed help holding something or, you know,</p> <p>10 keeping it in place, then you would ask the</p> <p>11 nurse or the surgical tech for help thereafter?</p> <p>12 A. I would agree that is usually how it happens.</p> <p>13 Q. Okay. Any reason to believe that that's not</p> <p>14 how it happened in this particular case?</p> <p>15 A. No.</p> <p>16 Q. As I said at the beginning, I talked about</p> <p>17 known risks. I guess to say this a different</p> <p>18 way, is the mere fact that a patient complains</p> <p>19 or alleges that there was an outcome that was</p> <p>20 unfortunate or unexpected, that does not mean</p> <p>21 in and of itself that anybody did anything</p> <p>22 wrong, does it?</p> <p>23 A. I agree with that.</p>	<p style="text-align: right;">67</p> <p>1 like that, you would make note of it, right?</p> <p>2 A. I would.</p> <p>3 Q. So, I guess, to connect those two dots then,</p> <p>4 the fact that we do not see anything like that</p> <p>5 in your operative report, is it fair to say</p> <p>6 that, to the best of your knowledge, the</p> <p>7 surgical tech, the nurses, did not do anything</p> <p>8 that was unexpected or anything other than what</p> <p>9 you wanted them to do or directed them to do;</p> <p>10 is that fair?</p> <p>11 A. I agree with that statement.</p> <p>12 MR. LUNDQUIST: Do I need to ask</p> <p>13 about agency?</p> <p>14 MR. GINZKEY: It's up to you.</p> <p>15 Well, I haven't alleged agency.</p> <p>16 MR. LUNDQUIST: You haven't</p> <p>17 alleged but --</p> <p>18 MR. GINZKEY: And I'm not going</p> <p>19 to.</p> <p>20 MR. LUNDQUIST: Okay. If we</p> <p>21 stipulate it's not going to be raised. I</p> <p>22 mean, I can ask.</p> <p>23 BY MR. LUNDQUIST:</p>
<p style="text-align: right;">66</p> <p>1 Q. Okay. And I'm assuming that, to the best of</p> <p>2 your knowledge, in this particular case the</p> <p>3 procedure went as expected, and you were able</p> <p>4 to achieve all of the goals and in the fashion</p> <p>5 that you wanted them to be achieved with</p> <p>6 respect to Mr. Johnson; is that a correct</p> <p>7 statement?</p> <p>8 A. I agree with that statement.</p> <p>9 Q. And I've reviewed Exhibit 15, your operative</p> <p>10 report. I don't see any reference to a nurse</p> <p>11 doing something or a surgical tech doing</p> <p>12 something that was unexpected or doing</p> <p>13 something you did not want them to do.</p> <p>14 Am I reading it correctly that there</p> <p>15 is no such reference in the operative report?</p> <p>16 A. I agree there is no reference to something of</p> <p>17 that nature.</p> <p>18 Q. And am I correct that if something like that</p> <p>19 had occurred, that would be something that,</p> <p>20 based on your custom and practice, you would</p> <p>21 chart in your operative report if there had</p> <p>22 been something done by somebody else that was</p> <p>23 unexpected or not what you wanted, something</p>	<p style="text-align: right;">68</p> <p>1 Q. Doctor, you're not employed by the hospital,</p> <p>2 are you, Advocate BroMenn?</p> <p>3 MR. BRANDT: At the time?</p> <p>4 MR. LUNDQUIST: At the time.</p> <p>5 A. No, sir.</p> <p>6 BY MR. LUNDQUIST:</p> <p>7 Q. And am I correct that your employer or</p> <p>8 employment status would be with McLean County</p> <p>9 Orthopedics at the time of this procedure?</p> <p>10 A. Correct.</p> <p>11 Q. And all of your care decisions with regard to</p> <p>12 Mr. Johnson would have been the result of your</p> <p>13 own independent and clinical judgment; is that</p> <p>14 correct?</p> <p>15 A. Correct.</p> <p>16 Q. And we haven't talked a lot about your records,</p> <p>17 but there was reference, I believe, to one at</p> <p>18 least preoperative visit that you had with</p> <p>19 Mr. Johnson before the day of the surgery, I</p> <p>20 think that was June 27.</p> <p>21 MR. BRANDT: Yes.</p> <p>22 Q. Would that have been here at the building we're</p> <p>23 sitting at now, McLean County Orthopedics?</p>

<p style="text-align: right;">69</p> <p>1 A. June of 2016?</p> <p>2 MR. BRANDT: He's talking about</p> <p>3 this preop visit.</p> <p>4 BY MR. LUNDQUIST:</p> <p>5 Q. The preoperative visit. I'm on to something</p> <p>6 else now.</p> <p>7 MR. BRANDT: So his question is,</p> <p>8 did the visit take place here or someplace</p> <p>9 else?</p> <p>10 Q. Yeah, that's what I'm asking.</p> <p>11 A. Well, it took place within McLean County</p> <p>12 Orthopedics, whether that be in this building</p> <p>13 or 2502; I have forgotten when we moved.</p> <p>14 Q. Okay. Fair enough. But it would have been at</p> <p>15 the McLean County Orthopedics office?</p> <p>16 A. Correct.</p> <p>17 Q. Okay. As opposed to Advocate BroMenn Hospital</p> <p>18 here in town?</p> <p>19 A. It was not at BroMenn Hospital.</p> <p>20 Q. And, Doctor, are you on staff -- you're</p> <p>21 obviously on staff at BroMenn. Were you on</p> <p>22 staff at any other hospitals here in town back</p> <p>23 in '16?</p>	<p style="text-align: right;">71</p> <p>1 to that extent, I apologize to you, Doctor.</p> <p>2 Your care in this case, having reviewed the</p> <p>3 records from your surgery in the preop and</p> <p>4 postop, was it appropriate, did it meet the</p> <p>5 standards of care, and did you act as a careful</p> <p>6 orthopaedic surgeon in performing Mr. Johnson's</p> <p>7 surgery?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. You were asked regarding whether</p> <p>10 Mr. Johnson's lower extremity muscles were --</p> <p>11 MR. GINZKEY: Denervated.</p> <p>12 MR. BRANDT: Denervated, thank</p> <p>13 you.</p> <p>14 Q. -- denervated. The last time you saw him was</p> <p>15 two years ago; is that right?</p> <p>16 A. Yes. I think it was June --</p> <p>17 Q. I think it was June of 2017.</p> <p>18 A. June 27, I think, specifically.</p> <p>19 Q. Okay.</p> <p>20 A. 6/27/2017, 10:00 a.m.</p> <p>21 Q. Okay. And so regarding his condition today,</p> <p>22 you don't have a basis for an opinion because</p> <p>23 you haven't seen him and you haven't looked at</p>
<p style="text-align: right;">70</p> <p>1 A. Yes.</p> <p>2 Q. And would you do surgery at any of the other</p> <p>3 hospitals, other than BroMenn, on occasion?</p> <p>4 A. Yes, I do.</p> <p>5 Q. Okay. In this particular case with</p> <p>6 Mr. Johnson, did you opt -- you made the</p> <p>7 decision and opted to do this procedure,</p> <p>8 recommended it be done at BroMenn; is that</p> <p>9 correct?</p> <p>10 A. I do not recall if it was my preference, the</p> <p>11 patient preference or both.</p> <p>12 MR. LUNDQUIST: Okay. Fair</p> <p>13 enough.</p> <p>14 All right. Thank you, Doctor.</p> <p>15 That's all the questions I have.</p> <p>16 MR. GINZKEY: Nothing further.</p> <p>17 MR. BRANDT: Let me take a break</p> <p>18 here, and we'll be back. I may have a</p> <p>19 couple questions.</p> <p>20 (Recess taken.)</p> <p>21</p> <p>22 EXAMINATION BY MR. BRANDT:</p> <p>23 Q. I think some of this may have been covered, but</p>	<p style="text-align: right;">72</p> <p>1 records from June 27 of 2017; am I correct</p> <p>2 about that?</p> <p>3 A. Correct.</p> <p>4 Q. Okay. The literature that you were shown,</p> <p>5 Exhibit 8, this was an abstract of an article</p> <p>6 by Dr. Gorab, G-o-r-a-b, and Dr. Matta. Would</p> <p>7 you agree with me that whether that article,</p> <p>8 since you don't have it in its entirety,</p> <p>9 whether it's reasonably reliable or not, you</p> <p>10 don't have an opinion; would that be a fair</p> <p>11 statement?</p> <p>12 A. I do not have an opinion, because I have not</p> <p>13 read the entirety of the article.</p> <p>14 Q. Okay. Regardless of whether Dr. Matta has</p> <p>15 written a lot of publications regarding the</p> <p>16 anterior approach to total hip replacement,</p> <p>17 would it be a fair statement that you may or</p> <p>18 may not agree with everything he's written or</p> <p>19 said?</p> <p>20 A. Correct.</p> <p>21 Q. Okay. In other words, there may be some things</p> <p>22 that he's written that you agree with, and</p> <p>23 there may be some things that he's written that</p>

<p style="text-align: right;">73</p> <p>1 you disagree with; would that be true?</p> <p>2 A. True.</p> <p>3 Q. How many total hip replacement procedures have</p> <p>4 you performed in your career, using the</p> <p>5 anterior approach?</p> <p>6 A. I do not know that data exactly.</p> <p>7 Q. How many total hip replacement procedures have</p> <p>8 you performed regardless of the approach?</p> <p>9 A. Again, I do not know. I can estimate.</p> <p>10 Q. What would be your best estimate?</p> <p>11 A. Approximately 400.</p> <p>12 Q. Okay. You were asked -- let me just ask one</p> <p>13 more question about that. Do you perform the</p> <p>14 total hip procedure using an approach other</p> <p>15 than the direct anterior approach that you used</p> <p>16 with Mr. Johnson?</p> <p>17 A. Yes.</p> <p>18 Q. Was the approach that you used for Mr. Johnson</p> <p>19 appropriate as opposed to a different approach?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. You were asked about whether you</p> <p>22 discussed with Mr. Johnson the proposition of</p> <p>23 permanent nerve damage as a part of the</p>	<p style="text-align: right;">75</p> <p>1 A. The preference card does not need to state</p> <p>2 everything.</p> <p>3 Q. Okay.</p> <p>4 A. It's understood that that needs to be there.</p> <p>5 Q. Is the preference card -- strike that.</p> <p>6 Is the purpose of the preference card</p> <p>7 to list those things that you prefer to have</p> <p>8 present at surgery that are not otherwise there</p> <p>9 or provided?</p> <p>10 A. That is correct.</p> <p>11 Q. You were asked questions about the Anterior Hip</p> <p>12 Foundation. An orthopaedic surgeon who</p> <p>13 performs anterior hip surgery, is there a</p> <p>14 requirement that you be a member of that</p> <p>15 foundation to perform anterior hip surgery?</p> <p>16 A. No.</p> <p>17 Q. Okay. You were asked questions about Dr.</p> <p>18 Dangles' records. I think you indicated that</p> <p>19 you try and get those or obtain those prior</p> <p>20 surgery records before you proceed with</p> <p>21 surgery.</p> <p>22 My question is, does the standard of</p> <p>23 care require that you obtain in this case Dr.</p>
<p style="text-align: right;">74</p> <p>1 consent. Do you remember those questions?</p> <p>2 A. Yes, I do.</p> <p>3 Q. When you had the discussion with Mr. Johnson</p> <p>4 about the risk of nerve injury during this</p> <p>5 procedure on January -- I'm sorry -- on</p> <p>6 June 27, 2016, were you aware at that time</p> <p>7 with -- or apprized that the patient had</p> <p>8 dysplasia of the left hip?</p> <p>9 A. Let me just look at my note.</p> <p>10 Q. Sure.</p> <p>11 A. Yes, I was.</p> <p>12 Q. Okay. You were asked questions about Exhibit</p> <p>13 9, which was the -- let me refer to it as the</p> <p>14 Advocate BroMenn stock or appliance/prosthetic</p> <p>15 list, okay, and then you were also asked about</p> <p>16 Exhibit 10 -- pardon me -- about Exhibit 14,</p> <p>17 which was your preference card, okay?</p> <p>18 A. Yes, I was.</p> <p>19 Q. Your preference card made no mention of the</p> <p>20 anterior approach broach, which was a -- a</p> <p>21 photograph of which was Exhibit 13. Why? Why</p> <p>22 was that broach not mentioned, if you know, in</p> <p>23 your preference card?</p>	<p style="text-align: right;">76</p> <p>1 Dangles' records from the right hip surgery</p> <p>2 that he performed before you perform surgery on</p> <p>3 the left?</p> <p>4 A. No.</p> <p>5 Q. What is the purpose then -- what would then be</p> <p>6 the purpose for obtaining Dr. Dangles' records?</p> <p>7 Is there anything you're going to learn?</p> <p>8 A. Strictly for preoperative planning.</p> <p>9 Q. Okay. There was a -- Exhibit 23 was a postop</p> <p>10 plain film, 10/24/16 was the film. There is a</p> <p>11 difference in the orientation of the right and</p> <p>12 the left. My question is, is that concerning</p> <p>13 to you?</p> <p>14 A. No.</p> <p>15 Q. Why not?</p> <p>16 A. There is a range of orientation that are</p> <p>17 acceptable, and they are both within that</p> <p>18 range.</p> <p>19 Q. Exhibit 26 was the DePuy brochure. It talks</p> <p>20 about the proposition or makes reference to the</p> <p>21 proposition of drawing on either the skin or</p> <p>22 the film that's covering the skin at the time</p> <p>23 of the preop prep for the patient.</p>

<p style="text-align: right;">77</p> <p>1 Did the standard of care require such</p> <p>2 a drawing on the patient's skin or the film</p> <p>3 covering the skin?</p> <p>4 A. No.</p> <p>5 Q. What does the standard of care require with</p> <p>6 respect to identifying the anatomy, you know, I</p> <p>7 guess, without drawing on the patient's skin or</p> <p>8 the covering? In other words -- it was a poor</p> <p>9 question.</p> <p>10 Does the standard of care require</p> <p>11 that you identify the various anatomy prior to</p> <p>12 doing surgery; is that required?</p> <p>13 A. I am unaware of any requirement. I always do</p> <p>14 that.</p> <p>15 Q. Okay. And can it be done without actually</p> <p>16 drawing on the patient's skin or a film</p> <p>17 covering the skin within the standard of care?</p> <p>18 A. Yes.</p> <p>19 Q. You were asked questions about the location of</p> <p>20 Mr. Johnson's incisions, and you were shown</p> <p>21 Exhibit 30, which is a photograph, an actual</p> <p>22 photograph, I'm not sure when it was taken, but</p> <p>23 it was a photograph of his left hip and his</p>	<p style="text-align: right;">79</p> <p>1 Q. And when it does, can the cause of the</p> <p>2 neurapraxia or injury to the branches of the</p> <p>3 femoral nerve be brought about in several</p> <p>4 different fashions or modalities?</p> <p>5 A. Yes, it can.</p> <p>6 Q. Okay. And does your knowledge of the</p> <p>7 literature support the proposition that there</p> <p>8 is a list of different mechanisms by which</p> <p>9 femoral neuropathy or injury to the branches of</p> <p>10 the femoral nerve can occur even when the</p> <p>11 procedure is performed appropriately, using the</p> <p>12 anterior approach?</p> <p>13 A. Yes.</p> <p>14 Q. Okay.</p> <p>15 A. Yes. Excuse me.</p> <p>16 Q. You were asked questions about whether the</p> <p>17 retractor -- a retractor caused injury to the</p> <p>18 branches of the femoral nerve.</p> <p>19 When you looked at the report and</p> <p>20 reviewed what you had dictated in terms of your</p> <p>21 performance of this procedure, was there a</p> <p>22 retractor placed in proximity to the femoral</p> <p>23 nerve branches that we've been talking about</p>
<p style="text-align: right;">78</p> <p>1 right hip; I think it was 32 or 33.</p> <p>2 The location of the incision in this</p> <p>3 case, did it increase his risk of injury to the</p> <p>4 femoral nerve branches in your opinion?</p> <p>5 A. No.</p> <p>6 Q. Okay. When you made the incision and began the</p> <p>7 surgery, did you make an incision and proceed</p> <p>8 within the appropriate muscle planes in your</p> <p>9 opinion?</p> <p>10 A. Yes.</p> <p>11 Q. Do you have an opinion, to a reasonable degree</p> <p>12 of medical certainty, whether the incision that</p> <p>13 you made caused injury to the branches of the</p> <p>14 femoral nerve for this patient?</p> <p>15 A. Yes, I do not agree the incision caused the</p> <p>16 damage to the branches.</p> <p>17 Q. Okay. From your education, training,</p> <p>18 experience and knowledge, can femoral</p> <p>19 neuropathy or neurapraxia occur during the</p> <p>20 procedure that you performed for Mr. Johnson</p> <p>21 even when the care is appropriate and meets the</p> <p>22 standard of care?</p> <p>23 A. Yes, it can.</p>	<p style="text-align: right;">80</p> <p>1 here today so as to cause injury?</p> <p>2 A. No.</p> <p>3 MR. BRANDT: Okay.</p> <p>4 MR. GINZKEY: My only statement on</p> <p>5 the record, I mislabeled Dr. Armstrong's CV</p> <p>6 as Exhibit 36. It should be Exhibit 34 so</p> <p>7 that it is in sequence.</p> <p>8 MR. BRANDT: Okay. He's going to</p> <p>9 review and sign.</p> <p>10 (Discussion off the record.)</p> <p>11 (Exhibit No. 35 marked.)</p> <p>12 FURTHER DEPONENT SAITH NOT.</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p>

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1 STATE OF ILLINOIS)
2)

3 COUNTY OF TAZEWELL)
4

5 C E R T I F I C A T E

6 I, Gina Fick, CRR, RMR, CSR, DO HEREBY CERTIFY
7 that, pursuant to notice, there came before me on
8 the 15th day of October, 2019, at McLean County
9 Orthopedics, 1111 Trinity Lane, Suite 111, in the
10 City of Bloomington, County of McLean, and State of
11 Illinois, the following named person, to wit:

12 LUCAS ARMSTRONG, MD,
13

14 who was by me first duly sworn to testify to the
15 truth and nothing but the truth of his knowledge
16 touching and concerning the matters in controversy
17 in this cause and that he was thereupon carefully
18 examined upon his oath and his examination
19 immediately reduced to shorthand by means of
20 stenotype by me.

21 I ALSO CERTIFY that the deposition is a true
22 record of the testimony given by the witness and
23 that the necessity of calling the court reporter at

1 STATE OF ILLINOIS)
2)

3 COUNTY OF TAZEWELL)
4 IN THE CIRCUIT COURT OF THE NINTH JUDICIAL
5 CIRCUIT OF ILLINOIS, MCLEAN COUNTY

6 WILLIAM "WES" JOHNSON v. LUCAS ARMSTRONG, et al.
7 ILLINOIS RULE 207 (a) STATEMENT BY WITNESS:
8 SIGNATURE PAGE

9 I hereby state that I have read the foregoing
10 transcript of my deposition given at the time and
11 place aforesaid and I do again subscribe and make
12 oath that the same is a true, correct, and complete
13 transcript of my deposition given as aforesaid, with
14 corrections based on the reporter's errors in
15 reporting or transcribing the answer or answers
16 involved, if any, as they appear on the attached,
17 signed correction sheet.

18 _____ Correction sheet(s) attached.

19 Dated this _____ day of _____,
20 A.D., 2019.

21 SIGNED _____
22 LUCAS ARMSTRONG
23

82

1 time of trial for the purpose of authenticating said
2 transcript was also waived.

3 I FURTHER CERTIFY THAT I am neither attorney or
4 counsel for, nor related to or employed by, any of
5 the parties to the action in which this deposition
6 is taken, and further, that I am not a relative or
7 employee of any attorney or counsel employed by the
8 parties hereto, or financially interested in the
9 action.

10 IN WITNESS WHEREOF, I have hereunto set my hand
11 this 25th day of October, 2019.

12
13
14 GINA FICK, CRR, CSR, RMR



CORRECTION SHEET

WILLIAM "WES" JOHNSON v. LUCAS ARMSTRONG, et al.

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Gina Fick, CRR, RMR, CSR
(309) 264-0565

Deposition of
Sarah Harden

October 7, 2019

William "Wes" Johnson v. Lucas Armstrong, et al.



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<p style="text-align: right;">1</p> <p style="text-align: center;">IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT OF ILLINOIS MCLEAN COUNTY</p> <p>WILLIAM "WES" JOHNSON,)) Plaintiff,)) -vs-) No. 2018 L 0000126) LUCAS ARMSTRONG, MCLEAN) COUNTY ORTHOPEDICS, LTD.,) SARAH HARDEN, PAMELA) ROLF, and ADVOCATE HEALTH) AND HOSPITALS CORPORATION) d/b/a ADVOCATE BROMENN) MEDICAL CENTER,)) Defendants,)) and)) BRIAN STENGER and JORDAN) PROSSER,)) Respondents) In Discovery.)</p> <p>THE DISCOVERY DEPOSITION OF SARAH HARDEN, a witness, called by the Plaintiff, for examination pursuant to notice, taken before Gina Fick, Illinois CSR 084-003872, CRR, RMR, on Monday, the 7th day of October, 2019, commencing at the hour of 11:00 a.m., at Advocate Bromenn Medical Center, 1304 Franklin Avenue, QRM CR #2, in the City of Normal, County of McLean, and State of Illinois.</p>	<p style="text-align: right;">3</p> <p>1 SARAH HARDEN, 2 having been first duly sworn, was examined and 3 testified as follows: 4 5 EXAMINATION BY MR. GINZKEY: 6 Q. Will you please state your name for our court 7 reporter, and spell both your first and last 8 name for her. 9 A. Sarah, S-a-r-a-h, Harden, H-a-r-d-e-n. 10 Q. You are an RN? 11 A. I am a scrub tech. 12 Q. Scrub tech? 13 A. Surgical technologist. 14 Q. How long have you been with Advocate BroMenn? 15 A. Just over three years. 16 Q. And where had you practiced prior to coming to 17 Advocate BroMenn? 18 A. Nowhere. 19 Q. Okay. When did you obtain your certification 20 as a scrub technician? 21 A. July of '16. 22 Q. May I call you Sarah? 23 A. You may.</p>
<p style="text-align: right;">2</p> <p>1 PRESENT: 2 JAMES P. GINZKEY, ESQ. 221 East Washington Street 3 Bloomington, Illinois BY: James P. Ginzkey, Esq. 4 Chase Molchin, Esq. (309)821-9707 5 jim@ginzkeylaw.com for the Plaintiff; 6 LIVINGSTON, BARGER, BRANDT & SCHROEDER 7 115 West Jefferson Street P.O. Box 3457 8 Bloomington, Illinois 61702 BY: Peter W. Brandt, Esq. 9 (309)828-5281 pbrandt@lbbs.com 10 for Lucas Armstrong, MD 11 LANGHENRY, GILLEN, LUNDQUIST & JOHNSON 605 South Main Street 12 Princeton, Illinois 61356 BY: Troy A. Lundquist, Esq. 13 (815)726-3600 tlundquist@lgfirm.com 14 for Sarah Harden, Pamela Rolf and Advocate Health and Hospitals; 15 16 INDEX OF EXAMINATIONS 17 Witness Page 18 SARAH HARDEN 19 Examination by Mr. Ginzkey 3 20 Examination by Mr. Lundquist 15 21 Certificate of Reporter 18 22 EXHIBITS 23 Exhibit Nos. 1 through 4 premarked</p>	<p style="text-align: right;">4</p> <p>1 Q. Sarah, what we have in front of us are some 2 exhibits that I have marked. Exhibit No. 1 is 3 a copy of certain pages from the Surgical Case 4 Record. 5 My first question is, with respect to 6 this type of form, you're familiar with this 7 form, are you not? 8 A. I don't normally see these, no. 9 Q. Okay. And I understand that. 10 This happens to be a total hip 11 arthroplasty performed by Dr. Lucas Armstrong. 12 Do you know Dr. Armstrong? 13 A. I do. 14 Q. Have you talked to him about this Wes Johnson 15 case at all? 16 A. No. 17 Q. Have you talked with Pamela Rolf about this 18 case at all? 19 A. No. 20 Q. Or anybody, other than your attorney or 21 hospital staff, such as Janet Sutter? 22 A. No. 23 Q. Do you have any independent recollection of</p>

<p style="text-align: right;">5</p> <p>1 this procedure?</p> <p>2 A. No.</p> <p>3 Q. Okay. On Page 1 of this Exhibit 1, both you</p> <p>4 and Pam Rolf are listed as having scrubbed in,</p> <p>5 correct?</p> <p>6 A. Correct.</p> <p>7 Q. And scrubbing in means obviously you did scrub,</p> <p>8 and you were within the surgical field,</p> <p>9 correct, the sterile field?</p> <p>10 A. Correct.</p> <p>11 Q. Now, I've got highlighted the circulator, an</p> <p>12 x-ray tech by the name of Jonathan Simmons --</p> <p>13 A. Uh-huh.</p> <p>14 Q. -- and then two other individuals who happen to</p> <p>15 be sales reps from DePuy.</p> <p>16 A. Uh-huh.</p> <p>17 Q. Would I be correct in assuming that the</p> <p>18 circulator, the x-ray tech and the two DePuy</p> <p>19 individuals are not within the surgical field?</p> <p>20 A. Correct.</p> <p>21 Q. They don't scrub in, and they're not within the</p> <p>22 sterile field, correct?</p> <p>23 A. Correct.</p>	<p style="text-align: right;">7</p> <p>1 second scrub?</p> <p>2 A. Second scrub.</p> <p>3 Q. Okay. It makes sense to me.</p> <p>4 Generally, not specifically with</p> <p>5 reference to this particular surgery, but</p> <p>6 generally what does the second scrub do?</p> <p>7 A. What the doctor tells her to do.</p> <p>8 Q. Okay. Would I be correct in assuming that the</p> <p>9 first scrub is the individual who is handing</p> <p>10 the surgical instrumentation to the doctor as</p> <p>11 he's performing the surgery?</p> <p>12 A. Correct.</p> <p>13 Q. Would I be correct in assuming that with</p> <p>14 respect to the implants that I've got</p> <p>15 highlighted on the fourth page of this Exhibit</p> <p>16 1, you would be the one opening the sterile</p> <p>17 packages?</p> <p>18 A. No.</p> <p>19 Q. That would still be the first scrub?</p> <p>20 A. Opening -- well, they are opened -- the</p> <p>21 packages are opened to the sterile field in a</p> <p>22 sterile package, and then those would be opened</p> <p>23 normally by the first scrub or the doctor.</p>
<p style="text-align: right;">6</p> <p>1 Q. And none of those individuals handle any of the</p> <p>2 surgical instrumentation or the implants,</p> <p>3 correct?</p> <p>4 A. Correct. After they're opened, correct.</p> <p>5 Q. Right.</p> <p>6 A. Yes.</p> <p>7 Q. And if we can go to what would be Page 4 of</p> <p>8 that Exhibit 1, I've highlighted the section</p> <p>9 called Implants.</p> <p>10 A. Uh-huh.</p> <p>11 Q. Now, we've already deposed Pam Rolf, and she</p> <p>12 indicated to me that she was not the first</p> <p>13 assistant, that you were, is that correct, the</p> <p>14 first scrub?</p> <p>15 A. No.</p> <p>16 MR. LUNDQUIST: The other way</p> <p>17 around.</p> <p>18 BY MR. GINZKEY:</p> <p>19 Q. It's the other way around, yeah.</p> <p>20 Looking at my notes, Pam Rolf was</p> <p>21 what is designated first scrub?</p> <p>22 A. Correct.</p> <p>23 Q. Do you have a designation? Are you called</p>	<p style="text-align: right;">8</p> <p>1 Q. Okay. And you've said you do whatever the</p> <p>2 doctor tells you to do. Tell me just generally</p> <p>3 what a second scrub does.</p> <p>4 A. A second scrub will hold a retractor wherever</p> <p>5 it is placed by the doctor, and that is pretty</p> <p>6 much it.</p> <p>7 Q. So, to the best of your recollection, that</p> <p>8 would have been your role in this particular</p> <p>9 surgical procedure, correct?</p> <p>10 A. Correct.</p> <p>11 Q. All right. So if I understand your testimony</p> <p>12 correctly, in this particular case with Wes</p> <p>13 Johnson, you would have been holding retractors</p> <p>14 that would have been placed by somebody other</p> <p>15 than yourself, true?</p> <p>16 MR. LUNDQUIST: And just let me</p> <p>17 interject real quick. She doesn't have a</p> <p>18 memory of that. But I'll let you answer.</p> <p>19 A. Okay. He places them. I hold them, yes.</p> <p>20 BY MR. GINZKEY:</p> <p>21 Q. You wouldn't be placing them, correct?</p> <p>22 A. Correct.</p> <p>23 Q. You wouldn't be repositioning them, correct?</p>

<p style="text-align: right;">9</p> <p>1 A. Correct.</p> <p>2 Q. Everything that you do with respect to the</p> <p>3 retractors is at the specific direction of the</p> <p>4 doctor, correct?</p> <p>5 A. Correct.</p> <p>6 Q. With respect to the implants that are listed on</p> <p>7 this Page 4 of Exhibit 1, we've got the</p> <p>8 acetabular shell, the bone screws, the liners,</p> <p>9 the femoral stem, femoral head. Would you be</p> <p>10 placing any of those with respect to the</p> <p>11 patient himself?</p> <p>12 A. No, I would not.</p> <p>13 Q. And if custom and habit would obtain in this</p> <p>14 case, would it be Pam Rolf that would be</p> <p>15 handing these implants to the doctor as he's</p> <p>16 about to put them into the patient?</p> <p>17 A. Yes.</p> <p>18 Q. Exhibit 2 is basically again some of the</p> <p>19 implants that were used.</p> <p>20 A. Uh-huh.</p> <p>21 Q. Would you have placed any of those implants</p> <p>22 into the patient?</p> <p>23 A. No.</p>	<p style="text-align: right;">11</p> <p>1 Q. And then if I can have you, Sarah, look at what</p> <p>2 I've marked as Exhibit 4, and specifically look</p> <p>3 at the highlighted areas. Exhibit 4, for the</p> <p>4 record, is Dr. Armstrong's four-page op note.</p> <p>5 A. Uh-huh.</p> <p>6 Q. And what I've tried to do is highlight the</p> <p>7 instruments and the implants that were used.</p> <p>8 And, again, my question simply is, would you</p> <p>9 have been inserting those, applying those</p> <p>10 directly on or into the patient?</p> <p>11 A. No.</p> <p>12 Q. And go ahead and take a minute and just look</p> <p>13 through that --</p> <p>14 A. Okay.</p> <p>15 Q. -- just to make sure your answer is correct.</p> <p>16 A. I really wouldn't have to look through it</p> <p>17 because I don't place anything.</p> <p>18 Q. Okay. Is it customary to do a timeout before</p> <p>19 the procedure actually begins?</p> <p>20 A. Correct.</p> <p>21 Q. Who calls the timeout and who directs it?</p> <p>22 A. Normally the circulator, the RN.</p> <p>23 Q. In this case Elizabeth Riddle?</p>
<p style="text-align: right;">10</p> <p>1 Q. Then we've got instruments listed on Exhibit 3,</p> <p>2 starting at the bottom and going through to</p> <p>3 Page 2 of this Exhibit 3.</p> <p>4 A. Uh-huh.</p> <p>5 Q. And I need to know if you would have been using</p> <p>6 any of those instruments that are listed on</p> <p>7 this preference card, if you would have been</p> <p>8 using any of those directly on the patient?</p> <p>9 MR. LUNDQUIST: Let me just</p> <p>10 quickly interject. I have an objection to</p> <p>11 the word "using," because I think it can be</p> <p>12 interpreted different ways. But you can</p> <p>13 answer.</p> <p>14 A. I don't use anything. I hold things.</p> <p>15 BY MR. GINZKEY:</p> <p>16 Q. Okay.</p> <p>17 A. I hold what I'm told to hold -- whatever the</p> <p>18 doctor tells me to do, I do.</p> <p>19 Q. You would not have been using any of the</p> <p>20 instruments that we've got listed on this</p> <p>21 Exhibit 3 and highlighted directly on the</p> <p>22 patient, correct?</p> <p>23 A. Correct.</p>	<p style="text-align: right;">12</p> <p>1 A. Uh-huh.</p> <p>2 Q. You'll have to say yes.</p> <p>3 A. I'm sorry. Yes.</p> <p>4 MR. LUNDQUIST: You caught it</p> <p>5 before --</p> <p>6 THE WITNESS: Yes.</p> <p>7 BY MR. GINZKEY:</p> <p>8 Q. Tell me what that entails. Based upon your</p> <p>9 experience, not particularly in this case,</p> <p>10 because you have no independent recollection,</p> <p>11 but tell me what occurs in a timeout.</p> <p>12 A. Timeout verifies a patient's name, date of</p> <p>13 birth, operative site, any fire hazards, any</p> <p>14 allergies, any current medications, the doctor</p> <p>15 performing the surgery.</p> <p>16 Q. And that's done verbally just before the</p> <p>17 procedure starts, correct?</p> <p>18 A. Correct.</p> <p>19 Q. Is it before anesthesia is induced, if you</p> <p>20 know? Is the patient conscious, or is it</p> <p>21 typically done after the patient is asleep?</p> <p>22 A. Typically after the patient is asleep.</p> <p>23 Q. Okay. And that's custom and habit here at</p>

<p style="text-align: right;">13</p> <p>1 Advocate BroMenn, correct?</p> <p>2 A. Yes.</p> <p>3 MR. LUNDQUIST: I'll just</p> <p>4 object --</p> <p>5 THE WITNESS: I'm sorry.</p> <p>6 MR. LUNDQUIST: -- because I don't</p> <p>7 know if it's broad as to everything; but you</p> <p>8 can answer, that's fine.</p> <p>9 A. Yes, in the cases I've done, as far as I know,</p> <p>10 every case here has that procedure.</p> <p>11 BY MR. GINZKEY:</p> <p>12 Q. What type of cases do you actually participate</p> <p>13 in, Sarah?</p> <p>14 A. This would be an ortho case, general cases,</p> <p>15 gyne, eyes, ENT.</p> <p>16 Q. The whole gamut?</p> <p>17 A. Yeah. Jack of all trades, I guess.</p> <p>18 Q. If there is a standstill -- firstly, if I use</p> <p>19 that phrase, do you know what that means?</p> <p>20 A. No.</p> <p>21 Q. Okay. Have you ever been involved in a</p> <p>22 procedure where there is a concern and</p> <p>23 everybody stands down just for a minute to</p>	<p style="text-align: right;">15</p> <p>1 Q. Would you have had any interaction with this</p> <p>2 patient after the surgery itself?</p> <p>3 A. No.</p> <p>4 MR. GINZKEY: Those are the only</p> <p>5 questions I have. Thank you, ma'am.</p> <p>6 MR. BRANDT: Thanks, Sarah. I</p> <p>7 don't have any questions. Thank you.</p> <p>8</p> <p>9 EXAMINATION BY MR. LUNDQUIST:</p> <p>10 Q. I just have a couple questions that might sound</p> <p>11 somewhat repetitive.</p> <p>12 A. Okay.</p> <p>13 Q. First of all, Sarah, you've already answered</p> <p>14 all of Mr. Ginzkey's questions about your role</p> <p>15 in this procedure, and I know that you have no</p> <p>16 memory about it at all --</p> <p>17 A. Uh-huh.</p> <p>18 Q. -- but is it fair to say that as it pertains to</p> <p>19 you, based on your knowledge of the custom and</p> <p>20 practice for any surgery like this that you</p> <p>21 would do, that you would not be in control of</p> <p>22 any of the instrumentation even if you were</p> <p>23 asked to hold something, true?</p>
<p style="text-align: right;">14</p> <p>1 double check what's going on?</p> <p>2 A. I --</p> <p>3 MR. LUNDQUIST: I'd just object to</p> <p>4 form, but you can answer.</p> <p>5 A. I don't believe so. That's why we have our</p> <p>6 timeouts. I mean, we stop everything and</p> <p>7 listen to the timeout. So that would be a</p> <p>8 standstill to me.</p> <p>9 As far as during a procedure?</p> <p>10 BY MR. GINZKEY:</p> <p>11 Q. During a procedure.</p> <p>12 A. Not to my knowledge, no.</p> <p>13 Q. Okay. You've never been in a procedure where,</p> <p>14 for instance, the patient's blood pressure</p> <p>15 drops to critical levels and everybody stands</p> <p>16 still? You've never witnessed one of those?</p> <p>17 A. Yes.</p> <p>18 Q. Okay.</p> <p>19 A. Yes.</p> <p>20 Q. How is that charted, if you know?</p> <p>21 A. I do not know. I don't do any charting.</p> <p>22 Q. Okay. Is it charted, if you know?</p> <p>23 A. I do not know.</p>	<p style="text-align: right;">16</p> <p>1 A. Correct. Yes.</p> <p>2 Q. The exclusive control of all instrumentation,</p> <p>3 whether it be clamps, retractors, scalpels,</p> <p>4 anything at all, is always with the surgeon,</p> <p>5 correct?</p> <p>6 A. Correct.</p> <p>7 Q. And even in an instance, hypothetically, where</p> <p>8 you may be asked to hold something, it's still</p> <p>9 under the direct control of the surgeon because</p> <p>10 you only do exactly what he tells you to do?</p> <p>11 A. Correct.</p> <p>12 Q. And you have no knowledge whatsoever that would</p> <p>13 indicate that that concept was deviated from in</p> <p>14 any way in this case, do you?</p> <p>15 A. No.</p> <p>16 Q. I have asked you to review the operative record</p> <p>17 that counsel marked as Exhibit 1 and the</p> <p>18 materials we have here.</p> <p>19 A. Uh-huh.</p> <p>20 Q. I know you have no memory of this case, but</p> <p>21 based on your review of everything, and all of</p> <p>22 that, to the best of your knowledge, was all of</p> <p>23 your care and conduct and involvement in this</p>

Sarah Harden
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<p style="text-align: right;">17</p> <p>1 case consistent with the standard of care for a 2 surgical scrub tech? And what I mean by that 3 is, to the best of your knowledge, did you act 4 as a reasonably careful surgical scrub tech at 5 all times? 6 A. Yes. 7 MR. LUNDQUIST: Thank you. 8 MR. GINZKEY: No other questions. 9 MR. BRANDT: I have no other 10 questions. 11 MR. GINZKEY: Signature? 12 MR. LUNDQUIST: Let's show 13 signature reserved, just because I always do 14 it, it's not that we don't trust you. You 15 can handle that through me, and I'll take 16 care of it. 17 FURTHER DEPONENT SAITH NOT. 18 19 20 21 22 23</p>	<p style="text-align: right;">19</p> <p>1 time of trial for the purpose of authenticating said 2 transcript was also waived. 3 I FURTHER CERTIFY THAT I am neither attorney or 4 counsel for, nor related to or employed by, any of 5 the parties to the action in which this deposition 6 is taken, and further, that I am not a relative or 7 employee of any attorney or counsel employed by the 8 parties hereto, or financially interested in the 9 action. 10 IN WITNESS WHEREOF, I have hereunto set my hand 11 this 20th day of October, 2019. 12 13  14 GINA FICK, CRR, RMR, CSR 15 16 17 18 19 20 21 22 23</p>
<p style="text-align: right;">18</p> <p>1 STATE OF ILLINOIS) 2) 3 COUNTY OF TAZEWELL) 4 5 C E R T I F I C A T E 6 I, Gina Fick, CRR, RMR, CSR, DO HEREBY CERTIFY 7 that, pursuant to notice, there came before me on 8 the 7th day of October, 2019, at 1304 Franklin 9 Avenue, QRM CR #2, in the City of Normal, County of 10 McLean, and State of Illinois, the following named 11 person, to wit: 12 13 SARAH HARDEN, 14 15 who was by me first duly sworn to testify to the 16 truth and nothing but the truth of her knowledge 17 touching and concerning the matters in controversy 18 in this cause and that she was thereupon carefully 19 examined upon her oath and her examination 20 immediately reduced to shorthand by means of 21 stenotype by me. 22 I ALSO CERTIFY that the deposition is a true 23 record of the testimony given by the witness and that the necessity of calling the court reporter at</p>	<p style="text-align: right;">20</p> <p>1 STATE OF ILLINOIS) 2) 3 COUNTY OF TAZEWELL) 4 IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL 5 CIRCUIT OF ILLINOIS, MCLEAN COUNTY 6 7 WILLIAM "WES" JOHNSON v. LUCAS ARMSTRONG, et al. 8 ILLINOIS RULE 207 (a) STATEMENT BY WITNESS: 9 SIGNATURE PAGE 10 I hereby state that I have read the foregoing 11 transcript of my deposition given at the time and 12 place aforesaid and I do again subscribe and make 13 oath that the same is a true, correct, and complete 14 transcript of my deposition given as aforesaid, with 15 corrections based on the reporter's errors in 16 reporting or transcribing the answer or answers 17 involved, if any, as they appear on the attached, 18 signed correction sheet. 19 _____ Correction sheet(s) attached. 20 Dated this _____ day of _____, 21 A.D., 2019. 22 23 SIGNED _____ SARAH HARDEN</p>

Gina Fick, CRR, RMR, CSR
(309) 264-0565

Sarah Harden
October 7, 2019

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22 Reporter's Note: The original exhibits were attached
23 to the original transcript.

24

25

1 STATE OF ILLINOIS
 2 IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT
 3 COUNTY OF MCLEAN
 4 WILLIAM "WES" JOHNSON,)
 5)
 6 Plaintiff,)
 7)
 8 vs.) Case No. 2018L0000126
 9)
 10 LUCAS ARMSTRONG, McLEAN)
 11 COUNTY ORTHOPEDICS, LTD,)
 12 SARAH HARDEN,)
 13 PAMELA ROLF, AND)
 14 ADVOCATE HEALTH AND)
 15 HOSPITALS CORPORATION)
 16 d/b/a ADVOCATE BROMENN)
 17 MEDICAL CENTER,)
 18)
 19 Defendants.)

20 VIDEOCONFERENCE DEPOSITION OF SONNY BAL, MD,
 21 MBA, JD, PHD, produced, sworn, and examined on the
 22 29th day of June, 2020, between the hours of nine
 23 o'clock in the morning and eleven o'clock in the
 24 morning of that date at the offices of
 25 ALARIS LITIGATION SERVICES, 2511 Broadway Bluffs,
 Suite 201, Columbia, Missouri, before LISA BALLALATAK,
 a Certified Court Reporter within and for the State of
 Missouri, in a certain cause now pending STATE OF
 ILLINOIS, IN THE CIRCUIT COURT OF THE ELEVENTH
 JUDICIAL CIRCUIT, COUNTY OF MCLEAN, wherein WILLIAM
 "WES" JOHNSON is the Plaintiff and LUCAS ARMSTRONG, et
 al., are the Defendants.

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20 Also present:
21
Dr. Lucas Armstrong (Telephonically)
22
The Court Reporter:
23
MS. LISA BALLALATAK, CCR
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Missouri CCR No. 1336
ALARIS LITIGATION SERVICES
25 2511 Broadway Bluffs, Suite 201
Columbia, Missouri 65201

1 (The deposition commenced at 9:04 a.m.)

2 SONNY BAL, MD, MBA, JD, PHD,
3 of lawful age, being produced, sworn, and examined on
4 behalf of the defendants, deposes and says:

5 EXAMINATION

6 BY MR. BRANDT:

7 Q. Dr. Bal, good morning.

8 A. Good morning.

9 Q. My name is Peter Brandt. I represent the
10 defendant, Dr. Armstrong and McLean County
11 Orthopedics, LTD. We're here to take your
12 deposition in Columbia, Missouri. This is taken
13 pursuant to notice under the applicable Illinois
14 Supreme Court Rules.

15 You've given a deposition before?

16 A. Yes.

17 Q. One or two. And so I'll dispense with
18 going through the rules. We have here marked as
19 Exhibit 2 a notice of the deposition, and it
20 directed that you bring certain items to the
21 deposition.

22 A. Right.

23 Q. Take a look at that. Did you bring your
24 file with you?

25 A. Yes.

1 Q. Okay. Is it on that thumb drive?

2 A. It's on the thumb drive.

3 Q. Is that a thumb drive I can have?

4 A. Yeah, you can have it.

5 Q. Let me ask you, did you prepare any notes
6 with respect to the case?

7 A. No.

8 Q. Okay. Did you write on any of the
9 deposition transcripts?

10 A. No.

11 Q. Okay. Did you write any letters to
12 Mr. Ginzkey with your thoughts or opinions?

13 A. No.

14 Q. Okay. Do you know any of the parties in
15 the case? In other words, do you know Dr.
16 Armstrong?

17 A. No.

18 Q. Okay. Look over the exhibit and see if
19 there is anything in that list that's not on the
20 thumb drive.

21 A. Number 6, list of publications.

22 Q. Okay. Is that in your CV?

23 A. That will be in the CV, though.

24 Q. Okay.

25 A. And I can get you a recent copy.

1 Q. Okay.

2 A. I don't know if I copied it.

3 Q. Did you make a copy of the thumb drive for
4 Mr. Ginzkey? I just need to know so I can make a
5 copy for him, if I need to.

6 A. No, I haven't made it, so ...

7 Q. Okay. All right. Let me just take this
8 now so I don't forget it, because I could easily
9 walk out of here without it.

10 We've marked as Exhibit 3 what we call
11 213(f) (3) disclosures, which is basically a listing
12 of your opinions in the case, and then attached to
13 it is a CV dated February 10, 2019. Let me hand you
14 that.

15 With respect to -- we'll go the CV, since
16 you brought that up. Is that CV relatively current?

17 A. Yes.

18 Q. Is there a more current version?

19 A. Yes.

20 Q. Okay. Can you send me or Mr. Ginzkey a
21 current version?

22 A. Yes.

23 Q. Okay. And what's changed, just generally?
24 I know that you've retired from the practice, but
25 that was 2017.

1 A. Yeah. More publications.

2 Q. Okay.

3 A. That's it.

4 Q. And have -- if you know, do any of the
5 publications deal with total hip replacement?

6 A. No, they don't.

7 Q. What have you written on since February?

8 A. Mostly on the biochemistry of silicon
9 nitride ceramics.

10 Q. Okay. All right. I want to give you my
11 card, and then if you can send me a copy of the
12 CV --

13 A. Sure.

14 Q. -- and you can send one to Mr. Ginzkey,
15 that'd be great.

16 A. Okay.

17 Q. This -- while we're on Exhibit 2 there, it
18 has what Mr. Ginzkey prepared as your opinions in
19 the case. Take a look at that and see if it's
20 accurate.

21 A. Exhibit 3?

22 Q. Exhibit 3. Sorry.

23 A. Okay.

24 Q. All right. Have you seen that document?

25 A. Yes.

1 Q. All right. Did you prepare any drafts of
2 that document for Mr. Ginzkey?

3 A. I don't remember. No, I don't think so.

4 Q. Okay. Do you know if he sent you a draft
5 that you've edited?

6 A. I don't remember that, either.

7 Q. Okay. If you had such a document, would
8 it be on the thumb drive?

9 A. Yes.

10 Q. Okay. Are the correspondence that you
11 exchanged with Mr. Ginzkey or his office, the email,
12 are those on the thumb drive, also?

13 A. They are.

14 Q. Okay. Did you send any literature or
15 reference any literature to Mr. Ginzkey or his
16 office?

17 A. No, I don't think I sent him anything.

18 Q. Okay.

19 A. But there's literature on the thumb drive.

20 Q. Okay. And the literature that you cited,
21 do you have any recollection of what you cited to
22 him?

23 A. Yes.

24 Q. Can you tell me?

25 A. There's an article from Missouri Medicine

1 by a surgeon in St. Louis from 2008 that generally
2 described the surgical technique of anterior hip
3 replacement that is relevant to this case. There is
4 one case report of a late onset of a femoral nerve
5 palsy from a small bleed in the psoas muscle, and
6 there are two general review articles dealing with
7 femoral nerve palsy and anterior hip replacement;
8 one from Japan and the other, I believe, is a United
9 States series.

10 **Q. Okay. Does any of the literature that**
11 **you get -- is that comprehensive, what you just gave**
12 **me?**

13 A. Yeah.

14 **Q. Does any of the literature that you gave**
15 **Mr. Ginzkey suggest or make any reference to the**
16 **location of the incision as a cause of femoral nerve**
17 **injury or neuropathy?**

18 A. One -- the Missouri Medicine article
19 describes a proper placement of the incision, but it
20 doesn't say that more medial placement would put the
21 femoral nerve at risk.

22 **Q. Okay. Would it be a true statement that**
23 **you don't know of any literature that suggests that**
24 **the location of the incision -- the skin incision --**
25 **is a cause or increases the risk of femoral nerve**

1 **injury?**

2 A. No. That would not be true, because based
3 on my own experience and -- well --

4 **Q. And my question was literature -- whether**
5 **you could point to any literature that supports the**
6 **proposition that the location of the incision would**
7 **put the patient at risk for a femoral nerve injury.**

8 A. No. Sitting here, I cannot, but in
9 fairness, I haven't looked for that literature.

10 **Q. Okay. Your bills for the services that**
11 **you've rendered in this case, they're on the thumb**
12 **drive, also?**

13 A. They are.

14 **Q. Okay. And what's -- do you have an**
15 **understanding of what your rate is for review,**
16 **deposition, and trial testimony?**

17 A. Yes. \$660 per hour, and for trial, it's
18 \$6,000 per day.

19 **Q. Okay. Do you know how much you've billed**
20 **Mr. Ginzkey up until this morning?**

21 A. 1,500.

22 **Q. Okay. Do you have on this thumb drive the**
23 **documents that you reviewed? In other words, the**
24 **discovery that you looked at in this case?**

25 A. Yes.

1 Q. If you look at the exhibit in front of
2 you, Exhibit 3. I think on the third page there's a
3 listing of the documents that were sent to you --
4 maybe 2 -- maybe page 2.

5 A. Yes.

6 Q. Okay. Is that a complete list of
7 everything that you've looked at?

8 MR. GINZKEY: Other than the literature?

9 Q. (By Mr. Brandt) I'm sorry. Other -- and
10 I'm just limiting my question to discovery in the
11 case.

12 A. Yes, that's what I've looked at.

13 Q. Okay. Did you look at any images?

14 A. Yes. He sent me a CD with imaging that's
15 also on the drive.

16 Q. Okay. And do you remember what images you
17 looked at?

18 A. The MARS MRI of 9/30/2019.

19 Q. Okay. Anything else? Any other imaging?

20 A. No.

21 Q. Okay. You've retired from practice --
22 active practice as of November 2017?

23 A. Correct.

24 Q. And do you hold any positions with the
25 university?

1 A. No.

2 Q. Okay. How do you spend your days now, now
3 that you've retired from practice?

4 A. I run a company calls SINTX, S-I-N-T-X,
5 Technologies out of Salt Lake City. It's a
6 full-line manufacturing of silicon nitride ceramics
7 that are used in industry and also used to
8 manufacture spine implants.

9 Q. Okay. And do you spend time in Salt Lake
10 City?

11 A. Yes.

12 Q. How many days a year might you be in
13 Salt Lake City?

14 A. Oh, I might make five or six trips in a
15 year, but a lot more Zoom conferences and telephone
16 calls.

17 Q. Okay. You were associated with a law firm
18 in South Carolina at one point in time; is that
19 right?

20 A. Yes.

21 Q. That association has dissolved?

22 A. Yes.

23 Q. Okay. Do you practice law?

24 A. No.

25 Q. Okay. Have you ever practiced law?

1 A. No.

2 Q. Okay. Do you -- when you were associated
3 with the firm in South Carolina -- South Carolina;
4 right?

5 A. Yes.

6 Q. Did you practice law through that firm at
7 all?

8 A. Never.

9 Q. In other words, did you see clients?

10 A. No.

11 Q. Okay. Do you advertise your services as
12 an expert?

13 A. No.

14 Q. Are you associated with any services?

15 A. Not voluntarily, no.

16 Q. Okay. To the extent that you're not
17 voluntarily associated, what services might have
18 your name, if you know?

19 A. One comes to mind called AMFS. I don't
20 know where they got my name.

21 Q. Okay. Did they send you cases to review?

22 A. They have one or two times.

23 Q. Okay. How many depositions did you give
24 last year in medical/legal matters?

25 A. Oh -- I don't remember. I have -- and I

1 can forward you the four-year records for trial and
2 deposition testimony.

3 Q. Okay. Give me your best estimate. Did
4 you give one deposition a year -- I'm sorry -- a
5 month last year or ...

6 A. Last year, maybe seven.

7 Q. How many files in your file drawer?

8 A. At this time, maybe six.

9 Q. Okay. So to speak. I understand it's
10 electronic, but ...

11 A. Right.

12 Q. So are you doing more expert work now that
13 you have retired from the active practice or less?

14 A. Less.

15 Q. Okay. Any other groups that you're
16 associated with, even involuntarily, that send --
17 basically put lawyers together with expert
18 witnesses?

19 A. No.

20 Q. Okay. What was your income from expert
21 witness work last year?

22 A. I don't even know.

23 Q. Can you give me your best estimate?

24 A. No. I wouldn't know. I don't draw an
25 income, I -- well, I do draw an income through an

1 entity called Bal Consulting, but it's mixed in with
2 income from royalties on some products and clinical
3 advisory roles for a spine implant company.

4 Q. Okay. And so if you had six cases last
5 year, what would be the average that you would --
6 you might bill in a particular case through
7 deposition? Six-, 7,000 bucks?

8 A. 3,500 bucks.

9 Q. \$3,500? Okay. Bal Consulting is still an
10 active corporation?

11 A. Yes.

12 Q. And it's incorporated in Missouri?

13 A. Yes.

14 Q. Okay. Do you -- let me ask it this way:
15 The fees that you receive for expert
16 witness work, do they go to Bal Consulting?

17 A. Yes.

18 Q. At one time they went to a foundation for
19 a seat at the university. That foundation has
20 dissolved; is that right?

21 A. No. It's still there.

22 Q. Oh, okay. Do you still fund it?

23 A. Yes.

24 Q. Okay. And do you fund it from fees on
25 your expert witness work?

1 A. Yes.

2 Q. So approximately how much have you
3 contributed, let's say, last year in the foundation?

4 A. Last year I gave \$10,000.

5 Q. Okay. And is that the Bal chair? Is that
6 what they call it?

7 A. No. It's just an orthopedic endowment.

8 Q. Do you remember the name of it?

9 A. It's Dana and Sonny Bal Orthopedic
10 Endowment.

11 Q. Dana is your wife?

12 A. Yes.

13 Q. Do you do any teaching currently?

14 A. No.

15 Q. Do you have privileges anywhere?

16 A. No.

17 Q. You've been sued before as an orthopedic
18 surgeon?

19 A. Yes.

20 Q. How many times?

21 A. Four.

22 Q. Okay. Any of those involve total hip?

23 A. Yes.

24 Q. Okay. How many?

25 A. Two.

1 Q. Okay. Those cases go to trial?

2 A. No. They both got dismissed.

3 Q. Okay. Have you paid any settlements in
4 any cases where you've been named a defendant?

5 A. The first two, some 25 years ago. The
6 insurance company went bankrupt, and there was some
7 state fund that wanted to settle them.

8 Q. Okay. So two of them got settled?

9 A. Yeah.

10 Q. Okay. Before you retired, is it accurate
11 you were doing about 100 to 200 hips a year?

12 A. Yes.

13 Q. And by that I mean THAs.

14 A. Yes.

15 Q. Okay. And those were all at the
16 University Hospital?

17 A. All at the university.

18 Q. What's the name of the University Hospital
19 that you worked at? I just don't know it.

20 A. The -- it's called the Missouri
21 Orthopaedic Institute.

22 Q. Okay. And did you do those -- you did
23 your surgeries at the hospital or a surgery center
24 or both?

25 A. The Missouri Orthopaedic Institute is the

1 surgery center for orthopedic procedures.

2 Q. Okay.

3 A. It belongs to the university.

4 Q. Okay. The Bal Research Foundation, that's
5 the one I was thinking of earlier. Has that been
6 closed?

7 A. Yes.

8 Q. Okay. I think I know the answer to this,
9 but have you ever been disciplined by any state in
10 which you hold a license?

11 A. No. I still have an active license.

12 Q. Okay. Never been suspended?

13 A. Never been suspended.

14 Q. Privileges ever revoked or diminished?

15 A. No.

16 Q. Okay. It looked to me that about at least
17 70 percent of the time when you're asked to look at
18 cases, you're testifying on behalf of the plaintiff.

19 A. Yes.

20 Q. Does that sound right?

21 A. Correct.

22 Q. We have a -- marked as Exhibit 1, this is
23 a four-year record of trial testimony. Is this what
24 you were referring to earlier?

25 A. Yes.

1 Q. Okay. I'm going to hand you that, and I'm
2 just going to ask you if that's complete.

3 A. Yes, it's complete.

4 Q. Okay. Looking at that list, are there any
5 cases where you believe you testified about a
6 femoral nerve injury?

7 A. No.

8 Q. Okay. You have testified in cases where
9 there was a femoral nerve injury as part of the
10 complaint; true?

11 A. Yes.

12 Q. All right. And give me your best estimate
13 as to the approximate number of times. I mean, I
14 can find out, but I just want to get your thoughts
15 about that.

16 A. Two, maybe three.

17 Q. Okay. Do you think it's more than that?

18 A. Don't know.

19 Q. Okay. Have you testified in other cases
20 where you've had some criticism of the location of
21 the incision or that the testimony amounted to a
22 statement that the incision was too medial?

23 A. I don't remember.

24 Q. Okay. Do you think you may have?

25 A. I may have.

1 Q. Okay. In those cases where you may have
2 testified where you believe the incision was too
3 medial, do you know if those cases ever went to
4 trial?

5 A. No. I don't know.

6 Q. Okay. You were barred from testifying in
7 the federal courts on two occasions, 2014 and 2017?

8 A. One, to my knowledge.

9 Q. Just one, to your knowledge?

10 A. Yes.

11 Q. And this was the Nexium product liability
12 case?

13 A. Correct. Correct.

14 Q. And in that case, you were contacted by
15 the defense attorneys or the plaintiff's attorneys?
16 Do you remember?

17 A. Plaintiffs.

18 Q. Okay. And, clearly, you were barred
19 because you were giving testimony that was outside
20 of your specialty; true?

21 A. No.

22 Q. Okay. Did you testify in that case?

23 A. In a deposition, yes.

24 Q. Okay. Your trial testimony was later
25 barred; is that right?

1 A. We never went to trial.

2 Q. Okay. Have you testified in other cases
3 that your testimony was barred?

4 A. Not to my knowledge.

5 Q. Okay. Do you know if it was barred? In
6 other words, if there was an order entered?

7 A. No. I don't know.

8 Q. Okay. If there was an order entered
9 barring your testimony, you'd have no disagreement
10 with that, if those are the facts; true?

11 A. If those are the facts, then I wouldn't
12 disagree with them.

13 Q. The case involved epidemiology and
14 gastroenterology?

15 A. The Nexium, yes.

16 Q. And those aren't areas of your expertise;
17 true?

18 A. Correct.

19 Q. You don't have any expertise in bone
20 biology?

21 A. I do have expertise in bone biology,
22 because that's part of what orthopedic surgeons
23 study.

24 Q. Have you ever testified that you have no
25 experience in bone biology?

1 A. Don't know.

2 Q. You don't have any experience in vitamin
3 or mineral metabolism; true?

4 A. To the extent that orthopedic surgeons
5 know about vitamin D and vitamin A and the pathways
6 and we're tested on that, I have that expertise, but
7 not to the extent that an epidemiologist may have.

8 Q. Okay. Have you ever seen the opinion from
9 the district court disqualifying you as a witness in
10 the case?

11 A. No.

12 Q. Have you ever testified that you're not an
13 expert in vitamin or mineral metabolism?

14 A. Don't know.

15 Q. Okay. The reason that you were asked to
16 look at the Nexium cases is because of a problem
17 with bone breakdown fractures?

18 A. Yes.

19 Q. Okay. Is it important as an expert
20 witness to be experienced in the science in which
21 you have practice before rendering an opinion?

22 A. Yes.

23 Q. Okay. Is there a standard by the American
24 College of Orthopedic Surgery on expert testimony?

25 A. Yes.

1 Q. Are you -- do you follow those standards?

2 A. Yes.

3 Q. Okay. Is it important to give unbiased
4 opinion testimony?

5 A. It is.

6 Q. You've spoken with Mr. Ginzkey this
7 morning?

8 A. Yes.

9 Q. And I assume you've spoken to him on the
10 phone; is that right?

11 A. That is correct.

12 Q. Can you give me the gist of your
13 conversations with him?

14 A. Oh, just -- we went over the files and my
15 USB drive and the documents that you see in front of
16 us.

17 Q. Okay. Have you worked on any other cases
18 for Mr. Ginzkey?

19 A. I don't think so.

20 Q. How did he find you?

21 A. I do not know.

22 Q. Okay. Did he reference a colleague or
23 another lawyer that had retained you?

24 A. No.

25 Q. Okay. Do you have any other cases that

1 you're looking at for Mr. Ginzkey?

2 A. No.

3 Q. Okay. Is it -- Dr. Bal, is it an accurate
4 statement that nerve palsies are a recognized
5 complication of hip replacement surgery?

6 A. As a general proposition, yes.

7 Q. Did you see the consent reference that
8 Dr. Armstrong made in his clinic note before the
9 surgery?

10 A. Yes.

11 Q. And you saw that he advised Mr. Johnson
12 that the -- that nerve injury was one of the risks
13 of the procedures; right?

14 A. Right.

15 Q. And that would be appropriate for him to
16 make that statement and advise Dr. -- or Mr. Johnson
17 that femoral nerve injuries are a risk of this
18 procedure; true?

19 A. True.

20 Q. Okay. You saw Mr. Johnson's deposition
21 testimony; right?

22 A. Yeah.

23 Q. You read that; true?

24 A. Correct.

25 Q. All right. And Mr. Johnson, I think,

1 testified, if can I paraphrase him, that he had
2 already had one hip replacement surgery and that he
3 already knew about the risks, generally, going into
4 this surgery. Is that how you read it?

5 A. Yes.

6 Q. Okay. The plaintiff in this case signed a
7 consent indicating that he had been given an
8 informed consent; true?

9 A. Correct.

10 Q. Is that right?

11 A. Yes.

12 Q. Okay. The approach that Dr. Armstrong
13 used, which is an anterior femoral approach -- I'm
14 sorry -- it's an anterior approach -- let me start
15 over.

16 The approach that he used -- that
17 Dr. Armstrong used is an anterior approach; true?

18 A. Yes.

19 Q. Is that an approach that you use?

20 A. Yes.

21 Q. You've actually written on that topic;
22 true?

23 A. Yes.

24 Q. Is it the preferred approach today?

25 A. Some surgeons prefer it; some don't.

1 Q. Okay. All right. There's a lateral
2 approach, also; is that right?

3 A. Yes.

4 Q. Is that -- is the anterior approach
5 preferred over the lateral approach?

6 A. Both have advantages and disadvantages.

7 Q. And some use a posterior approach; is that
8 right?

9 A. Yes.

10 Q. Have you used all three?

11 A. Yes.

12 Q. Most commonly when you were doing 200-plus
13 hips a year, would you most commonly do an anterior
14 approach?

15 A. Yes.

16 Q. Okay. Let me just make sure I'm clear up
17 front. You're not here to give an opinion that
18 because a femoral nerve injury occurs, that it's a
19 breach in the standard of care; true?

20 A. As a general proposition, true. I would
21 need more data.

22 Q. Okay. And a femoral nerve injury with the
23 approach used by Dr. Armstrong here does not
24 automatically equal negligence or breach in the
25 standard of care; true?

1 A. Correct.

2 Q. You've had patients that have developed a
3 femoral nerve palsy or injury; true?

4 A. Yes.

5 Q. And was that with the anterior approach?

6 A. With the anterior approach, yes.

7 Q. Okay. Tell me, if you know, what you
8 believe caused the femoral nerve injury in the two
9 patients that you had -- two or three.

10 A. One was a bleed --

11 Q. Okay.

12 A. -- right after surgery. The other one, I
13 never knew.

14 Q. Okay. Did you have a suspicion one way or
15 the other?

16 A. No.

17 Q. And so that would be consistent with a lot
18 of femoral nerve injuries, and that is that the
19 actual cause of the femoral nerve injury is unknown;
20 true?

21 A. Correct.

22 Q. Okay. And in this case, there's no
23 evidence -- you can't point to any evidence or
24 anything that you saw that would indicate the actual
25 cause of a femoral nerve injury in this case; true?

1 A. I have an opinion, but I didn't see
2 anything in the factual data, aside from the medial
3 incision, which, in my opinion, will increase a risk
4 of a femoral nerve palsy.

5 Q. Okay. The median -- the incision that
6 Dr. Armstrong made, in your opinion, will increase
7 the risk. I understand that's your opinion, but
8 there isn't evidence in this case that you found
9 that would support an opinion as to the actual
10 cause; true?

11 A. True.

12 Q. Okay. So the literature that I've looked
13 at, and certainly, I think, you've testified in the
14 past and in your own circumstance, many times the
15 actual cause is unknown; true?

16 A. Correct.

17 Q. Okay. We know, because you have had
18 femoral nerve injury as a result of total hip
19 surgery and total hip arthroplasty, that it can
20 occur without negligence; true?

21 A. True.

22 Q. In other words, in the circumstance that
23 you had a patient with a total hip arthroplasty
24 where they develop postoperative femoral neuropathy,
25 and you couldn't identify the cause, you'd agree

1 with me that your care was not negligent; true?

2 A. Yes.

3 Q. Okay. You mentioned a moment ago when we
4 started the deposition that you -- in the thumb
5 drive that you gave me, you were kind enough to
6 bring here today, that you made reference to a -- I
7 think it was a case report where there was a femoral
8 nerve due to a psoas bleed.

9 A. Correct.

10 Q. Do you remember that?

11 A. Yes.

12 Q. Do you believe a psoas bleed or a bleed
13 was the cause of the femoral nerve injury in this
14 case?

15 A. No.

16 Q. Okay. A femoral nerve palsy can occur
17 from a competently performed hip replacement
18 surgery. I think that's what you're saying; true?

19 A. Right.

20 Q. You looked at Dr. Armstrong's operative
21 note?

22 A. Yes.

23 Q. And would you agree with me that from the
24 operate note, it appeared that he competently
25 performed the hip replacement surgery for

1 **Mr. Johnson?**

2 A. Yes.

3 **Q. Okay. You're not here to offer an opinion**
4 **that surgery itself or the placement of the**
5 **prosthesis itself in this case was done below the**
6 **standard of care? Is that true?**

7 A. Yes.

8 **Q. Okay. Would you agree with me that**
9 **there's nothing in this case that would indicate**
10 **that but for the negligence of the surgeon, the**
11 **injury would not have happened?**

12 MR. GINZKEY: I'm going to object. That's
13 a very vague and ambiguous question.

14 MR. BRANDT: Okay. I'll rephrase it.

15 **Q. (By Mr. Brandt) You have a law degree;**
16 **right?**

17 A. Yes.

18 **Q. Okay. You understand the concept of res**
19 **ipsa loquitur?**

20 A. Correct.

21 **Q. Right? You studied it; right?**

22 A. Right.

23 **Q. You've testified about it; right?**

24 A. Yes.

25 **Q. You understand the concept of but for,**

1 right, in the concept of res ipsa loquitur; true?

2 A. True.

3 Q. Okay. And you would agree with me that
4 there's nothing in this case that would support the
5 proposition that but for the negligence of
6 Dr. Armstrong, the injury would have occurred;
7 right?

8 A. I'm still not clear what you're --

9 Q. Okay. That's my fault, then. I'll ask a
10 better question.

11 There's an allegation in the complaint,
12 and the allegation -- let me just read it to you.

13 The allegation -- well, the concept of res
14 ipsa loquitur, would, you'd agree with me, is that
15 this injury that this patient had could not have
16 occurred without negligence; true?

17 A. True.

18 Q. And we haven't identified anything -- you
19 haven't identified anything -- you haven't
20 identified anything that you think is the actual
21 cause or mechanism of injury; true?

22 A. Not true. My opinion is that this injury
23 was most likely caused by a retractor.

24 Q. And that's not contained in anything that
25 you have disclosed to Mr. Ginzkey or in any of the

1 documents we've looked at; true?

2 A. True.

3 Q. Okay.

4 MR. GINZKEY: Let me pose an objection.
5 The disclosure does specifically mention the
6 instrumentation, generically; so I think that's a
7 complete mischaracterization of the disclosure, and
8 I object on that basis.

9 Q. (By Mr. Brandt) There's no evidence from
10 what you've looked at, however, as to how a
11 retractor came in contact with these two branches of
12 the femoral nerve; true?

13 A. I'm not sure I understand the question.

14 Q. Well, I guess my question, Dr. Bal, is
15 this: There's no evidence in this case -- and I
16 think you've told me that you can't point to
17 anything in particular that you believe or that
18 there is evidence of direct injury to the femoral
19 nerve; true?

20 A. No, that's not true. There's evidence of
21 direct injury to the nerve based on the EMG
22 findings.

23 Q. I understand. But in terms of the actual
24 performance of the surgery, you can't point to
25 anything, by way of evidence in this case, that

1 **supports that a retractor or any other**
2 **instrumentation came in contact with the nerve;**
3 **true?**

4 MR. GINZKEY: So is the question
5 Dr. Armstrong didn't put that in his op note? Is
6 that the question?

7 MR. BRANDT: I'm just asking him -- he --

8 **Q. (By Mr. Brandt) Can you point to any**
9 **evidence in this case -- looking at the discovery in**
10 **case, the medical records, is there any evidence**
11 **that a retractor caused this injury, based upon the**
12 **documents that you've reviewed?**

13 A. Yes. The documents I reviewed show
14 misplacement too far medial of the incision, and
15 then twice in the operative record, the doctor
16 documents the placement of the anterior retractor.
17 While documentation does not say that the retractor
18 was up against the femoral nerve, that is my
19 opinion, based on my reading of the records.

20 **Q. Is that your opinion, based upon the fact**
21 **that postoperatively, the patient had a femoral**
22 **neuropathy?**

23 A. In part, and in part on the EMG findings.

24 **Q. Okay. Anything else?**

25 A. No.

1 Q. Okay. There's nothing in his operative
2 note that he placed a retractor in proximity to the
3 rectus femoris or the -- the branches -- the two
4 branches of the femoral nerve that we've been
5 talking about -- that are talked about in this case;
6 right?

7 A. Well, that's not right. He does mention
8 placing the retractor up against the rectus femoris
9 muscle, which is where it should be placed, and then
10 moving it to an intracapsular location when he
11 repositioned it once during the operation.

12 Q. Okay. Nothing inappropriate about that;
13 true?

14 A. As it's stated, no, nothing inappropriate
15 about that.

16 Q. All right. And, in fact, if we look at
17 the entirety of the medical record -- and I'm
18 talking about his operative note -- I'll be happy to
19 mark this. Now, this has my highlighting on it, so
20 you don't have to necessarily pay attention to
21 that -- you can look at anything you want to look
22 at -- but take a look at that, and I want you to
23 tell me if there's anything that operative note that
24 you find to be inappropriate in the way in which he
25 approached the surgery.

1 A. No.

2 (Deposition Exhibit No. 4 was marked for
3 identification.)

4 Q. (By Mr. Brandt) Okay. The -- I want to
5 talk to you a little bit about this incision.

6 The -- I believe your opinion is, is that
7 the incision is too medial, and I want to make sure
8 I understand what is it about the incision that you
9 believe is inappropriate, just so I understand. And
10 I think I have a photograph here -- bear with me,
11 because I'm not -- I was digging through this stuff
12 yesterday, and I think this is Mr. Johnson.

13 (Deposition Exhibit No. 5 was marked for
14 identification.)

15 MR. GINZKEY: I can't identify that.

16 MR. BRANDT: I can't tell you, either.

17 Let me hand it to the witness and see if --

18 Q. (By Mr. Brandt) Is that the incision or is
19 that a photograph of the incision that brought you
20 to the conclusion that the incision was too medial,
21 if you know?

22 A. No. I haven't seen this before.

23 Q. Okay. Why don't you give me this back.
24 I'll make it part of the record, but we'll establish
25 that we not -- or I'll state for the record that we

1 **haven't established that this is Mr. Johnson. Okay?**

2 A. Okay.

3 **Q. So I won't hit you with that later. All**
4 **right?**

5 A. Uh-huh.

6 **Q. So maybe the easiest thing for you to do**
7 **is maybe you can draw for me, if you're willing to**
8 **do it, how the incision went and how you think it**
9 **should go.**

10 A. The photographs in the record of his left
11 thigh -- of Mr. Johnson's left thigh versus right
12 thigh.

13 **Q. Okay.**

14 A. And the right thigh incision is
15 appropriately placed.

16 **Q. Okay.**

17 MR. GINZKEY: Yeah. And I don't have a
18 problem with disassembling this and making these as
19 exhibits, simply because I know these are
20 Wes Johnson. I've never seen Exhibit 5. There are
21 two consecutive photographs.

22 MR. BRANDT: Let's just take a break, and
23 we'll have those -- as long as we're on this, and
24 we'll cover it.

25 (A recess was taken.)

1 (Deposition Exhibit No. 6 and 7 was marked
2 for identification.)

3 Q. (By Mr. Brandt) Doctor, thanks for the
4 break. I'm going to hand you what's marked as 6
5 and 7. And those are different photographs, but if
6 you can tell me what 6 shows and what 7 shows, that
7 would be great.

8 A. Six shows the incision from the right hip
9 replacement done two to three years before the left
10 one by a different physician.

11 Q. Right. And 7?

12 A. And 7 shows the incision on the left hip
13 replacement done by the defendant physician in this
14 case.

15 Q. Okay. And so your position is that
16 Exhibit 7 shows an incision that is too medial. If
17 you would -- I'll hand you a pen, and maybe you can
18 draw on there where you think it ought to be.

19 A. (Witness complies.)

20 Q. Okay. And so -- thank you, sir. And let
21 the record reflect that Dr. Bal has done with a
22 dotted line -- written with a dotted line on
23 Exhibit 7 the location where you think the incision
24 should have been; is that right?

25 A. Right.

1 Q. And the incision location in No. 7 -- not
2 the one that you drew, but the one that is showed by
3 the image, is that, nonetheless, within the standard
4 of care?

5 A. The location of the incision?

6 Q. Yeah.

7 A. Yeah.

8 Q. Okay. The -- I want to ask you about the
9 branches of the femoral nerve that were part of the
10 injury; right?

11 A. Right.

12 Q. You read the EMG; right?

13 A. Correct.

14 Q. And the EMG talked about two branches of
15 the femoral nerve; is that right?

16 A. Yes.

17 Q. And their course, if you will -- they
18 branch off the femoral nerve at a location that is
19 distal to where this incision is in Exhibit 7? Is
20 that right?

21 A. It's highly variable how the femoral nerve
22 branches out in the proximal thigh.

23 Q. But you know fairly typically that's going
24 to be -- those two branches, the rectus femoris and
25 the vastus lateralis branch off in a location distal

1 to that incision; true?

2 MR. GINZKEY: Which incision?

3 Q. (By Mr. Brandt) The incision that
4 Dr. Armstrong made. I'm sorry.

5 A. No, not necessarily, but, yes, they can.

6 Q. Okay. And so I'm going to show you what
7 I've marked as Exhibit 8.

8 (Deposition Exhibit No. 8 was marked for
9 identification.)

10 Q. (By Mr. Brandt) So this is a drawing of
11 the femoral nerve that I pulled off. It does show
12 the rectus femoris and the vastus lateralis, they
13 are both marked. Okay?

14 A. Uh-huh.

15 Q. So, first off, would this -- Exhibit No. 8
16 show fairly typical anatomy?

17 A. Yes.

18 Q. Okay. And it -- would the location that
19 they've marked there as the branch of the vastus
20 lateralis and the rectus femoris, would those be
21 fairly typical?

22 A. Yes.

23 Q. And would you agree with me that if we
24 look at this Exhibit 8, that the location of the
25 incision by Dr. Armstrong would be proximal to the

1 **branches of those nerves?**

2 A. Yes and no. The incision location would
3 be proximal, but these -- this is a -- this is a
4 drawing, not an accurate cadaveric dissection
5 specimen. And point of fact, these branches run in
6 a sheath in the nerve bundle, and in many cases, the
7 arborization -- the branching off of the various
8 branches -- is at the level of the hip itself, and
9 then the branches run in a sheath and penetrate or
10 innervate each muscle at a variable level.

11 **Q. Okay. And I understand what you're**
12 **saying. I'm just saying that the actual branches**
13 **themselves, though, are distal to where the incision**
14 **was made; true?**

15 A. Yeah. The branches representing
16 innervation of the muscles are distal to where the
17 incision is.

18 **Q. Okay. Right. No one has reexplored this**
19 **nerve?**

20 A. Correct.

21 **Q. Okay. So would you -- we know there's**
22 **EMGs, but no one has reoperated on this individual**
23 **to see where the location -- the actual location of**
24 **the neuroma or injury might have occurred; true?**

25 A. True.

1 **Q. Okay. Have you any experience with the**
2 **bikini incision?**

3 A. Yes.

4 **Q. Okay. And what is the bikini incision?**

5 A. Kind of follows a contour that's
6 compatible with wearing a bikini, I guess.

7 **Q. Okay. Have you done it?**

8 A. No.

9 **Q. Okay. Do you -- is it substandard care to**
10 **do it?**

11 A. No.

12 **Q. Okay. Would you agree with me that the**
13 **bikini incision would be even more medial than**
14 **Dr. Johnson's -- I'm sorry -- Dr. Armstrong in the**
15 **Johnson case?**

16 A. One limb of it goes more medial, but the
17 incision itself starts lateral.

18 **Q. Okay. And any of your colleagues at the**
19 **university perform a bikini incision?**

20 A. No.

21 **Q. Is there a reason why you didn't do it?**

22 A. Yes. Higher incidence of thigh numbness
23 and a more difficult exposure.

24 **Q. Okay. Was there a higher incidence of**
25 **femoral neuropathies arising out of bikini**

1 **incisions?**

2 A. I'm not aware of literature to that
3 effect.

4 Q. Yeah, I -- the literature that I looked at
5 said that there was no increased risk of femoral
6 neuropathy with the bikini incision. Would you have
7 any reason to disagree with that?

8 A. No.

9 Q. Okay. So the reason to perform a bikini
10 incision is -- would that be more on a thinner
11 patient, presumably, a female?

12 A. Yes.

13 Q. Okay. The -- if we look at the operative
14 note of Dr. Armstrong -- so Dr. Armstrong made an
15 initial -- I'm going to call it a skin incision. Do
16 you see that?

17 A. Yes.

18 Q. Okay. I've highlighted it there.

19 A. Yeah.

20 Q. So you're looking at page 2 of his
21 operative note, and he talks about the -- using a
22 No. 20 blade. Do you see that?

23 A. Right.

24 Q. That's a blade that is typically used to
25 make a skin incision; is that right?

1 A. That's right.

2 Q. Do you use a 20 -- have you used a 20
3 blade?

4 A. Yes.

5 Q. Okay. And would you agree with me that
6 the femoral nerve is much deeper than the depth, if
7 you will, of the initial skin incision?

8 A. Yes.

9 Q. Okay. In other words, the branches that
10 we've been talking about of the femoral nerve and
11 the femoral nerve itself are well below the fascia;
12 true?

13 A. True.

14 Q. Okay. And these branches are also distal
15 from the location of the incision; true?

16 A. True.

17 (Deposition Exhibit No. 9 was marked for
18 identification.)

19 Q. (By Mr. Brandt) Okay. So if you look at
20 Dr. Armstrong's operative note at the location that
21 I just pointed you to -- and I'm looking at now an
22 article that you wrote, and I'll mark it -- it's
23 entitled -- we'll mark this as Exhibit No. 9. It's
24 entitled "Total Hip Replacement With Use of
25 Direct Anterior Approach." You wrote this with

1 Dr. Crist, C-r-i-s-t, and Dr. Ivie, I-v-i-e.

2 A. Okay.

3 Q. You're familiar with this, I'm sure. Is
4 that right?

5 A. I'll have to look at it.

6 Q. Okay.

7 (Deposition Exhibit No. 9 was marked for
8 identification.)

9 A. Okay.

10 Q. (By Mr. Brandt) Okay. Do you remember
11 this article?

12 A. Yes.

13 Q. I realize it was 2014, is that right --

14 A. Right.

15 Q. -- that you wrote it?

16 A. Right.

17 Q. And so this would have been published at
18 the time of this surgery, which took place in 2016;
19 true?

20 A. True.

21 Q. All right. If you look at the second
22 page, the middle column -- and I'll just read it
23 into the record so Jim and I know where this is
24 later. It says -- and Troy -- sorry, Troy. It says
25 this -- and you're talking about, actually

1 performing this procedure within an anterior
2 approach; right?

3 A. Right.

4 Q. And it says this is, or you wrote this:

5 "The skin is incised 2 to 3 centimeters
6 posterior and 1 centimeter distal to the anterior
7 superior iliac spine over the tensor fasciae muscle
8 belt."

9 I'm going to stop right there. Okay?

10 A. Okay.

11 Q. If you look at Dr. Armstrong's operative
12 note, he says this on page 2:

13 "The fascia incision was made with a
14 No. 10 blade scalpel over the belly of the tensor
15 fasciae."

16 So he made his incision that he -- that
17 you are referred -- or that he refers to in the
18 exact location that you said it should be in this
19 article; true?

20 A. Well, semantics-wise, yes, but if you look
21 the illustration, he made it more medial. The
22 tensor muscle goes lateral, and that's why the
23 incision on the right hip is appropriate, because
24 that follows a tensor valley.

25 He made the incision medial, but the

1 incision is mobile so he can identify the tensor
2 muscle belly through it. My point is the incision
3 is medial and puts the femoral nerve at risk.

4 Q. But the incision that you described in
5 your article is essentially the same incision that
6 he describes in his operative note; true?

7 A. The description is the same, yes.

8 Q. Okay. All right. And I assume the way in
9 which you described it in your article is standard
10 of care; true?

11 A. Correct.

12 Q. Okay. Have you performed total hip
13 arthroplasty and made an incision like the one that
14 Dr. Armstrong made? Have you done that?

15 A. Not that I recall, no.

16 Q. You may have, you just don't recall; is
17 that right?

18 MR. GINZKEY: I think that
19 mischaracterizes the witness's testimony.

20 A. No, I don't -- I don't -- no, I haven't
21 made incisions like that.

22 Q. (By Mr. Brandt) Do you have any opinions
23 about the patient's current condition? I mean, in
24 fairness to you, I don't think -- and Jim will
25 correct me if I'm wrong, but I don't think he's had

1 treatment for the femoral neuropathy since 2018, but
2 if that's the case, do you have any opinions about
3 his current condition?

4 A. No. I haven't examined him as yet, and
5 the last entry in the records I saw was, I believe,
6 September 2019, when he had an EMG.

7 Q. Okay. I apologize.

8 Do you plan on examining him? If asked, I
9 assume you would?

10 A. If asked, I will.

11 Q. Has he had any falls, from your
12 understanding of the record --

13 A. Yes.

14 Q. I'm sorry. Let me just finish.

15 Has he had any falls, from your review of
16 the record, since 2018?

17 A. I don't know.

18 Q. Okay. He had, prior to surgery, hip
19 dysplasia?

20 A. Yes.

21 Q. Okay. What is hip dysplasia?

22 A. It's an anatomic abnormality of the hip
23 joint.

24 Q. Okay.

25 A. In various grades of severity.

1 Q. Does that put a patient at greater risk
2 for femoral neuropathy?

3 A. It can -- potentially can, yes.

4 Q. Okay. All right. I read some literature
5 that it can increase the risk of femoral neuropathy
6 sevenfold. Would that be something you would agree
7 with or disagree with?

8 A. Depending on the X-ray, depending on the
9 severity of it, yes, I would agree with it.

10 Q. Did you have an understanding of the
11 severity of Mr. Johnson's hip dysplasia?

12 A. No.

13 Q. Okay. He had some back and spine issues?

14 A. Correct.

15 Q. Would you agree with me that that also
16 places patients at a higher risk for femoral
17 neuropathy?

18 A. As a general proposition, yes, but in a
19 specific case, you'd have to look at the MRI of the
20 lumbar spine. You'd have to look at a number of
21 factors.

22 Q. The things that -- I understand that, but
23 as a general proposition, spine issues can cause a
24 problem with knee strength, tingling in the thigh,
25 numbness, a problem with the iliotibial band; true?

1 A. True.

2 Q. Just having surgery -- this type of
3 surgery, the THA, can also cause numbness related to
4 the iliotibial band; true?

5 A. Numbness related -- numbness localized
6 around the iliotibial band, yes.

7 Q. Right. You've had patients that have had
8 postoperatively complained about that, I assume, is
9 that right?

10 A. Yes. Yeah.

11 Q. Pretty - I won't say it's a common
12 complaint, but it's a complaint that you see; right?

13 A. Yes.

14 Q. And does that manifest itself in numbness
15 in the thigh?

16 A. Numbness over a patch of skin just lateral
17 to the thigh.

18 Q. Okay. Do you -- in those patients, have
19 you performed an iliotibial band release --

20 A. No.

21 Q. -- as a subsequent surgery?

22 A. No, I have not.

23 Q. Okay. How do you treat that?

24 A. The lateral thigh numbness is transient.
25 You just wait it out, and it disappears.

1 Q. Okay. At least in all of your patients,
2 huh?

3 A. Yes.

4 Q. Okay. He had, preop, both -- "he," being
5 Mr. Johnson, had both left groin and buttock pain;
6 is that right?

7 A. Yes.

8 Q. He also had an antalgic gait?

9 A. Yeah.

10 Q. Okay. What is an antalgic gait?

11 A. An antalgic gait is a gait against pain.
12 So the patient lurches and walks against the pain.

13 Q. Okay. Did he have that postoperatively,
14 do you know?

15 A. No. I think his hip pain disappeared.

16 Q. Okay. You read his deposition, and he
17 continues to play golf?

18 A. Yes.

19 Q. Okay. No reason he can't do that?

20 A. Correct.

21 Q. And I just want to make sure that I leave
22 here and understand. You don't have any opinions
23 about any restrictions he has; true? I mean today
24 -- his restrictions today.

25 A. No, not -- I haven't examined him, so I

1 don't know about restrictions today.

2 Q. Okay. Same answer -- or same question,
3 I'm sorry, with respect to ADLs. You don't have any
4 opinions about any deficits he may have with his
5 ADLs?

6 A. Correct.

7 Q. He's not taking any medication, I don't
8 think, at least as of the last chart that I looked
9 at. Is that your understanding?

10 A. Yes.

11 Q. And he hasn't had any -- well, let me ask
12 you: Do you have any opinions about whether he'll
13 need any injections in the future?

14 A. In which location?

15 Q. Relative to these two branches of the
16 femoral nerve.

17 A. No.

18 Q. Okay. In terms of his current functional
19 abilities, you don't have any understanding to form
20 an opinion. Would that be true?

21 A. Well, he's got permanent injury and
22 atrophy of his muscles, so I do have an opinion, in
23 terms of his quadriceps weakness and his flat-footed
24 gait, which is in the record. Those are
25 deficiencies that he has to live with.

1 Q. Okay. But to the extent that he may or
2 may not have compensated for those, do you have any
3 opinions?

4 A. No.

5 Q. Okay. And so my question is really his
6 functional abilities. You don't really have any
7 opinions about that; true?

8 A. Well, I do have an opinion, because based
9 on the literature and my understanding of a femoral
10 nerve palsy after a hip replacement, the dysfunction
11 and limitations of the patient are permanent and
12 they are significant.

13 Q. Okay. I get that. My question, though,
14 really, is focused on Mr. Johnson. Okay?

15 A. Correct.

16 Q. And your understanding of his current
17 abilities or disabilities. You really don't have an
18 opinion about him personally, do you?

19 A. No. I would have to examine him.

20 Q. And whether he's going to need -- what
21 future care he might need, I assume you don't have
22 any opinion about that?

23 A. No, I do have an opinion about that. With
24 quadriceps weakness, altered gait, and given his
25 young age, his knee will get arthritic, particularly

1 of a flat-footed gait and the need to lock the knee
2 in extension. That's the only way people with a
3 quadriceps deficiency can walk, and that puts
4 excessive stress on the knee, leading it to
5 arthritis and treatments for that.

6 **Q. Okay.**

7 A. And people with an altered gait, like
8 Mr. Johnson, will also stress their back, and so he
9 can expect back pain and knee pain on the same side
10 as the femoral palsy.

11 **Q. And, again, you're basing this on a**
12 **general proposition of patients with femoral**
13 **neuropathy, but whether Mr. Johnson has**
14 **manifestations of knee arthritis or the back issues**
15 **that you talked about, you really don't know, do**
16 **you?**

17 A. Not without examining him and questioning
18 him specifically.

19 **Q. Okay. And whether or not he's going to**
20 **need a nerve block or an EMG, NCV, or even surgery**
21 **in the future, you can't say without examining him,**
22 **can you?**

23 A. That is correct.

24 **Q. Okay. This is an article that was**
25 **referenced in a deposition that you gave involving a**

1 femoral neuropathy, and I think this was the Cohen
2 case, and this marked as Bal Exhibit No. 2. I'm
3 going to mark it in this deposition as Bal
4 Exhibit 10. I'm going to put that right next to the
5 previous sticker.

6 (Deposition Exhibit No. 10 was marked for
7 identification.)

8 Q. (By Mr. Brandt) And so in the Cohen case,
9 in that deposition, you offered -- you came to the
10 deposition with this article, and you answered some
11 questions about it. I want to ask you some
12 questions about it.

13 This article deals with research by
14 18 fellowship-trained arthroplasty surgeons -- hip
15 surgeons; right?

16 Take your time. I'm sorry.

17 A. Yeah, that's what it says.

18 Q. And they assessed post-op patients with
19 femoral neuropathies or neuritis; true?

20 A. Correct.

21 Q. They included the anterior approach that
22 we've been talking about here today; true?

23 A. Right.

24 Q. And they concluded that -- if you look at
25 the first paragraph, it says this -- I'll read it

1 into the record.

2 "The etiology is often unknown, with
3 causes including compression from retractor
4 placement or hematoma formation, traction
5 laceration, ischemia, or thermal damage."

6 Did I read that correctly?

7 A. Yes.

8 Q. Okay. And so the statement about the
9 etiology is often unknown is a true statement;
10 correct?

11 A. True.

12 Q. Okay. If you look under the "Discussion"
13 section, which is page 1197 --

14 A. Okay.

15 Q. -- they talk about -- at the bottom of the
16 page, the sentence begins -- I'll read it into the
17 record.

18 "Based on our study, it appears that FNP,
19 femoral nerve palsy, has a better prognosis for
20 recovery than other major nerve palsies around the
21 hip, with the majority of patients regaining motor
22 function in the quadriceps muscle."

23 Did I read that correctly?

24 A. Yes.

25 Q. Okay. And then in the next paragraph a

1 little bit lower, it says this:

2 "Based on the results of this study" --
3 their study -- "motor weakness had resolved in
4 75 percent of the patients at a mean of 33.3 months.
5 Those remaining patients had only mild residual
6 weakness that typically did not require the use of a
7 cane or a knee brace. No patient suffered major
8 persistent motor deficits."

9 Did I read that correctly?

10 A. Yes.

11 Q. You know from reading Mr. Johnson's
12 deposition that he has eschewed the use of a brace
13 or any appliances like a walker or a cane; true?

14 A. True.

15 Q. And would you agree with me that his
16 femoral neuropathy has basically presented in the
17 same fashion, that he has a mild residual weakness?

18 MR. GINZKEY: I'm going to object that
19 that mischaracterizes the medical chart, but the
20 witness may answer.

21 A. No, I've never seen mild residual
22 weakness. He's got a permanent palsy of the EMG.
23 He's got clear evidence of muscle atrophy. That's
24 what the records from Dr. Tung also document, so
25 this description of a femoral palsy is very

1 different than what the plaintiff in this case has.

2 Q. (By Mr. Brandt) Okay. The -- I think I
3 asked this earlier, but this is a little broader
4 question.

5 From your review of the records, including
6 those people who have performed EMGs, NCV studies,
7 no one who has provided care to this patient has
8 indicated in a medical record or deposition
9 testimony the exact etiology of his femoral nerve
10 palsy. Is that a true statement?

11 MR. GINZKEY: Again, I'm going to object
12 about mischaracterization, specifically with respect
13 to the MARS MRI, but I'm not instructing the witness
14 not to the answer.

15 A. Say that again, the question, please.

16 Q. (By Mr. Brandt) No one who has provided
17 care to this patient, including everybody, has
18 indicated in a medical record or deposition
19 testimony the exact etiology of the femoral nerve
20 palsy; true?

21 A. Correct.

22 Q. All right. You've testified before that a
23 femoral nerve injury can occur in the absence of
24 negligence in a THA; true?

25 A. True.

1 Q. Okay. Nothing in this article that we've
2 marked as Exhibit No. 10 but was No. 2 to the Cohen
3 deposition indicate that the occurrence of a femoral
4 neuropathy as an outcome of surgery equals breach in
5 the standard of care; true?

6 A. Correct.

7 Q. You've indicated that you believe a
8 retractor may have caused the injury in this case,
9 but you'd agree with me that, in part, that's based
10 on speculation, simply because the patient had an
11 outcome that included a femoral neuropathy; true?

12 A. I didn't understand the question. Sorry.

13 Q. Okay. So I think you indicated earlier in
14 the deposition that you believe -- it's your opinion
15 that a retractor caused the femoral nerve injury in
16 this case?

17 A. Yes.

18 Q. But you'd agree with me that based upon
19 your review of the case, there's really no evidence
20 that a retractor actually caused injury to the
21 femoral nerve; true? Outside of the fact that the
22 patient came out of surgery with a femoral
23 neuropathy, there's no evidence that a retractor
24 came in contact with his femoral nerve; true?

25 A. No. That's not quite true. The medial

1 placement of the incision; the fact the retractor
2 was moved during surgery; the fact that the two
3 branches that suffered complete injury are to the
4 vastus lateralis and the intermedius, and those
5 would be closer to the retractor than the branch to
6 the medialis, which is further medial; and the fact
7 that the article -- or Exhibit 2 that's in my hand
8 from another case clearly states a retractor tip is
9 strikingly close to the femoral nerve when placed
10 near the anterior rim of acetabulum, and one study
11 demonstrated alarmingly high pressures around the
12 nerve during retractor placement.

13 **Q. But you'd agree with me, Dr. Bal, that**
14 **what you're talking about there is the increased**
15 **risk of injury to the femoral nerve; right?**

16 A. True.

17 **Q. All right. And that's really the basis of**
18 **your opinion that the retractor placement in this**
19 **case was -- put the patient at increased risk of**
20 **femoral nerve injury; true?**

21 A. True.

22 **Q. But whether, in fact, that's the cause,**
23 **you don't have an opinion, because there's no**
24 **evidence as to actually what caused any femoral**
25 **neuropathy in this case; true? Because we can't say**

1 **that the retractor caused it. There's no evidence**
2 **of that in any of the things that you've looked at;**
3 **true?**

4 A. The EMGs strongly suggest it because of
5 the proximity of the branches that were injured to
6 the retractor and the relative lack of proximity to
7 the retractor of the one branch that was spared.

8 Q. But there -- aside from the EMG findings
9 that were -- how many months later? Months later?

10 A. About three months later.

11 Q. All right. There's no other evidence that
12 you can point to that the retractor caused the
13 femoral neuropathy or the problems that the patient
14 discussed after he got out of surgery -- actually,
15 the day after surgery; true?

16 A. I'm sorry. What was that about the day
17 after surgery?

18 Q. I'm sorry. It's my fault.

19 So aside from the EMG that you just
20 referenced, there's no other evidence that you're
21 pointing to that supports the proposition that a
22 retractor caused the injury to the femoral nerve in
23 this case; true?

24 MR. GINZKEY: Let me just interpose an
25 objection about the EMG. There are two EMGs that

1 are consistent -- the findings are consistent with
2 each other; there's a MARS MRI. The question
3 completely excludes that evidence.

4 MR. BRANDT: Okay. Well --

5 MR. GINZKEY: The witness can certainly
6 answer the question as posed.

7 Q. (By Mr. Brandt) We can include that
8 evidence in your answer, but that's -- what we've
9 just described, the imaging and the two EMG studies,
10 that's the basis of your opinion in this case that a
11 retractor caused injury to the patient?

12 A. And the immediate onset of the nerve
13 injury right after surgery.

14 Q. And we know that any femoral neuropathy --
15 well, we know -- I think you've agreed with me that
16 femoral neuropathies can occur without negligence;
17 true?

18 A. True.

19 Q. And so it's important --

20 A. Let me backtrack on that answer a little
21 bit, because I think I'm not giving a complete
22 answer.

23 There are two distinct types of femoral
24 neuropathies, and I want to make sure we're clear on
25 the distinction.

1 Transient femoral neuropathy injury,
2 neuropraxia palsy, as referenced in this paper by
3 Andrew Fleshman that I have in my hand --

4 A. Right.

5 Q. -- occurs in the absence of negligence.
6 It is transient; it has a good prognosis; strength
7 returns, and the patient goes on with a temporary
8 time period during which there is a deficit that
9 improves rapidly, and those are what I've
10 encountered in my practice. That palsy can occur
11 and does occur in the absence of negligence from a
12 variety of factors.

13 My testimony here is a complete injury to
14 the femoral nerve, as occurred here, verified by
15 repeat EMG and by subsequent treatment by a nerve
16 specialist like Dr. Tung, does not occur absent
17 negligence.

18 Q. Well, there's nothing in the article that
19 we've been talking about, which is No. 10 to your
20 deposition, that distinguishes between temporary
21 nerve palsy and permanent femoral neuropathy; true?

22 MR. GINZKEY: But that doesn't have
23 anything to do with his opinion. Again, I'm not
24 instructing the witness not to answer.

25 A. Well, if you go to the abstract and read

1 it, it'll say "femoral nerve palsy" under
2 "Conclusion," page 1. "After hip surgery remains
3 relatively uncommon but may increase with a growing
4 interest in anterior total hip arthroplasty
5 exposures."

6 All they saw in their series was a subset
7 of femoral neuropathy that can occur and does occur,
8 absent negligence, such that -- and they write "a
9 near complete recovery, with only mild motor
10 deficits can be expected."

11 Q. (By Mr. Brandt) So I just want to make
12 sure that we're talking about the same thing.

13 A. Yeah.

14 Q. So there are femoral neuropathies that can
15 occur without negligence?

16 A. Yes.

17 Q. With a THA?

18 A. Correct.

19 Q. That don't resolve completely, that aren't
20 temporary in nature; true?

21 A. No, that's not true.

22 Q. It's certainly what the article talks
23 about; right?

24 MR. GINZKEY: Well, now, wait a minute.

25 MR. BRANDT: Hang on.

1 MR. GINZKEY: The article speaks for
2 itself. We're not going to get into a semantic
3 argument over the article. The article speaks for
4 itself.

5 A. I --

6 **Q. (By Mr. Brandt) Go ahead.**

7 A. I disagree. The article speaks of
8 complete recovery within two years with no deficits,
9 and those deficits were sensory phenomena, even in
10 the subset -- the last sentence of the article is:

11 "Patients must be counseled of the
12 significant challenges of recovering from femoral
13 nerve palsy."

14 But the article found, in a retrospective
15 review, a small incidence of femoral nerve palsy
16 that spontaneously recovered. It never makes a
17 distinction between permanent motor nerve palsy.

18 **Q. Right. And I think that's my point. I'm**
19 **not trying to fence with you, okay?**

20 A. Sure.

21 **Q. So in the part I read, it said -- on**
22 **page 197 -- "Those remaining patients had only mild**
23 **residual weakness that typically did not require the**
24 **use of a cane or a brace" -- I'm sorry -- "cane or**
25 **knee brace."**

1 And so my point is only that it appears
2 from the study that some patients didn't have a
3 complete resolution of signs and symptoms; true?
4 Based upon that statement.

5 MR. GINZKEY: Again, that's your
6 interpretation of what's written down.

7 MR. BRANDT: Well, I'm just asking him,
8 Jim. He can agree or disagree.

9 A. No, I disagree, and I will tell you why.
10 Because the article in the last -- second-to-last
11 paragraph acknowledges that they just don't know.
12 In other words, it is possible that some patients
13 not returning for objective testing may have had
14 more severe residual deficits. The articles -- we
15 just don't know. These patients may have gone on
16 and had permanent palsies, but we don't know that.

17 Q. (By Mr. Brandt) Okay.

18 A. The ones they saw all recovered.

19 Q. It's not part of the allegations, but I
20 want to just cover it, just so I can leave here and
21 know I've done it.

22 No issue with respect to leg length
23 discrepancy in this case?

24 A. No.

25 Q. Is that true?

1 A. While the patient has a leg length
2 discrepancy, I'm not criticizing that.

3 Q. Okay. It's true in the operative note of
4 Dr. Armstrong that there's no evidence of excessive
5 traction; true?

6 A. True.

7 Q. There's no evidence of difficulty with
8 retraction; true?

9 A. That is true.

10 Q. Okay. There's no evidence in his
11 operative note or in his deposition that he operated
12 in an inappropriate muscular plane; true?

13 A. No evidence.

14 Q. Okay. There's no evidence in
15 Dr. Armstrong's operative note or his deposition
16 that he didn't make sure sufficient releases were
17 done; true?

18 A. True.

19 Q. And there's no evidence in Dr. Armstrong's
20 note that he was unaware of the location of the
21 nerves; true?

22 A. That is true.

23 Q. Okay. Is there an obligation to directly
24 visualize the femoral nerve?

25 A. No.

1 Q. Okay. And I mean that during the
2 procedure.

3 A. Correct. There's no reason to visualize
4 it.

5 Q. Okay. So Dr. Armstrong diagnosed the
6 patient as having a femoral neuropathy, I think,
7 either on the day of or the day after surgery; is
8 that right?

9 A. Right.

10 Q. One of the problems with a femoral
11 neuropathy diagnosis is that it's sometimes a
12 delayed diagnosis; true? You've testified in a
13 delayed diagnosis case; correct?

14 A. Not that I recall. I may have.

15 Q. Okay. But in this case, there's no issue
16 with respect to any delay in diagnosing of the
17 problem; true?

18 A. No. No.

19 Q. Is that right?

20 A. That is right.

21 Q. Okay. The hardware, if you will, in this
22 case, is DePuy --

23 A. Yes.

24 Q. -- is the manufacturer. Did you use
25 DePuy?

1 A. Yes.

2 Q. Okay. Any criticism of the use of
3 DePuy -- the exact hardware in this case?

4 A. No.

5 Q. I don't know if you saw this -- you may
6 have; if you didn't, that's fine. There's a
7 discussion about a nerve transfer at St. Louis.

8 A. Yes.

9 Q. Is that a procedure you've performed?

10 A. No. I've assisted, but not directly
11 performed it.

12 Q. Okay. Would there be a benefit to a
13 patient like Johnson with that procedure -- if you
14 have an opinion? If you don't, that's fine.

15 A. At this point, no.

16 Q. Okay. All right. So he also -- you read
17 Dr. Tung's deposition and his records?

18 A. Yes.

19 Q. He also talked about a muscle transfer;
20 right?

21 A. Correct.

22 Q. Is that something you've performed?

23 A. Yes, I have.

24 Q. Okay. And would that assist the patient?

25 A. It can. It's a -- there's no guarantees

1 that it would help, as Dr. Tung testified.

2 Q. Okay. What's your experience? I mean, is
3 it like --

4 A. It's a long rehabilitation. The patient's
5 muscles have to be reeducated, and there's some
6 partial return of function with it.

7 Q. Okay. So from your perspective, not a
8 great procedure?

9 A. No.

10 Q. In other words, the success rate of that
11 procedure is not high?

12 A. Correct.

13 Q. Okay. I just want to make sure I
14 understand this.

15 There's no evidence in this case that the
16 rectus femoris or the vastus lateralis branches of
17 the femoral nerve were transected by a scalpel or
18 damaged by electrocautery; true?

19 A. True.

20 Q. Okay. And Dr. Armstrong's operative note
21 describes -- well, strike that. I think we've
22 already covered that.

23 Is there an obligation on the part of the
24 surgeon to draw on the skin of the patient on the
25 lower extremity before doing that procedure?

1 A. No.

2 Q. Okay. He did not -- Dr. Armstrong didn't
3 obtain the records of Dr. Dangles, who was your
4 orthopedic surgeon who performed the total hip on
5 the right. Okay?

6 A. Right.

7 Q. Does he have an obligation under the
8 standard of care -- "he" being Dr. Armstrong -- to
9 obtain those records?

10 A. No.

11 MR. BRANDT: Okay. If we can take a few
12 minutes, I'm going to go through my notes.

13 THE WITNESS: Okay.

14 MR. BRANDT: And we'll be pretty close to
15 done.

16 THE WITNESS: Okay.

17 MR. BRANDT: Thank you.

18 (A recess was taken.)

19 Q. (By Mr. Brandt) Doctor, thanks. You've
20 been kind to give me your time here today. I just
21 have a couple other questions that I want to ask
22 you.

23 One is -- this patient was a tobacco user?

24 A. Right.

25 Q. Does that increase his risk of femoral

1 **neuropathy?**

2 A. As a general proposition, it does.

3 Q. What is it about the smoking that
4 **causes -- is it just ischemia?**

5 A. Ischemia.

6 Q. Okay. And the last area I want to ask you
7 **about is, we -- I read to you a portion of**
8 **Dr. Armstrong's operative note about -- and I'll**
9 **share it with you again, if you want. Just to put**
10 **it in context, I guess I should.**

11 So if we put aside, just for the sake of
12 **this question, the medial aspect of the skin**
13 **incision, it appeared to me that when he describes**
14 **"the fascial incision was made with a No. 10 blade**
15 **scalpel over the belly of the tensor fasciae," that**
16 **that is exactly how you described it in this**
17 **article, No. 9. Is that right?**

18 A. Right.

19 Q. Okay.

20 MR. BRANDT: Okay. I don't have any other
21 **questions. Jim might; I don't know if Troy does.**

22 MR. GINZKEY: Go ahead, Troy.

23 MR. LUNDQUIST: Thank you, Jim.

24

25

1 CROSS-EXAMINATION

2 BY MR. LUNDQUIST:

3 Q. Good morning, Doctor. My name is
4 Troy Lundquist, and I apologize I'm only here by
5 phone, but can you hear me okay?

6 A. Yes.

7 Q. Okay. I don't have many questions. I
8 might jump around just a bit, but if you have handy
9 Exhibit 3, which were your opinions in the case.

10 A. Yes.

11 Q. Can I have you pull that -- all right.

12 Let me first ask, taking into account
13 Exhibit 3, which were the opinions disclosed to us,
14 and then, obviously, including the discussion that
15 has been had this morning, does that encompass all
16 of your opinions in this case -- those two things
17 collectively, our discussion and the disclosure in
18 Exhibit 3?

19 A. No. I have additional opinions.

20 Q. Okay. What I want to work off of here is
21 just what's been disclosed to us. So as I look at
22 Exhibit 3, I see on page 2 there is --
23 subparagraph B, do you see that, where it talks
24 about -- it makes reference to a nurse Sarah Harden?

25 A. Okay. Yes.

1 Q. Okay. Doctor, I represent the hospital
2 and the nurses in this case, so my interest is
3 understanding any and all opinions that you may have
4 that in any way relate to them.

5 So as I read Exhibit 3, the only place I
6 see any reference to any of the nursing staff is
7 Sarah Harden there in subparagraph B. Am I correct?

8 A. Correct.

9 Q. Okay. Now, you made some discussion
10 earlier about the incision that was made in this
11 case. The incision was made by Dr. Armstrong;
12 correct?

13 A. Correct.

14 Q. Nurse Harden, nor any other nurse had any
15 involvement whatsoever in the incision. True
16 statement?

17 A. True.

18 Q. Now, there was also some discussion about
19 the use of retractors. In general, for a total hip,
20 what is the purpose of using retractors in this
21 surgery?

22 A. To push tissues away so the surgeon can
23 see.

24 Q. Okay. So retractors are a necessary part
25 of a total hip replacement surgery like Mr. Johnson

1 had; correct?

2 A. Right.

3 Q. They're utilized to provide visualization
4 and access, as well as for to minimize risk to
5 injury to adjacent structures; correct?

6 A. Correct.

7 Q. Now, based on the depositions we've taken,
8 it's my understanding that the retractors in the
9 case -- in this case, with Mr. Johnson's surgery,
10 that the retractors were initially placed by
11 Dr. Armstrong where he wanted them, and then as
12 needed, they would be held in that particular
13 location by Nurse Harden. Is that your
14 understanding of what occurred, based on your read
15 of everything?

16 A. Yes.

17 Q. And am I correct that that is the typical
18 approach, that the surgeon is the one who makes the
19 independent judgment of where the retractors will be
20 placed; he or she places them in that location where
21 they want; and then they, as needed, will ask a
22 nurse or scrub tech to hold them there in that
23 location. Is that the normal procedure?

24 A. Yes.

25 Q. And that's -- based on your read of

1 everything in this case, that's what occurred here
2 with Mr. Johnson's surgery?

3 A. Yes.

4 Q. Doctor, from your review of anything in
5 this case, all the depositions and the records, did
6 you find any indication that Nurse Harden did
7 anything other than exactly what Dr. Armstrong
8 wanted her to do?

9 A. No.

10 Q. So to place that -- to put that another
11 way, Nurse Harden, from your review of the
12 records -- or scrub tech Harden, I guess,
13 actually -- from your review of the records, there's
14 no indication that she exercised any independent
15 judgment or did anything surprising or unexpected or
16 anything along those lines, is there?

17 A. No, there's no indication.

18 Q. The -- hold on one second.

19 Now -- and this is going to sound like a
20 dumb question, but, Doctor, have you ever practiced
21 as a nurse or a surgical technician?

22 A. No.

23 Q. Technologist?

24 A. No.

25 Q. Okay. You're not intending to offer

1 standard of care for nursing practice, are you?

2 A. No.

3 Q. Now, as the surgeon, understanding that
4 you cannot testify to the standard of care of a
5 nurse, you do have certain expectations as a
6 physician of the nurses that are in the surgical
7 suite with you; true?

8 A. True.

9 Q. And among those expectations would be that
10 the scrub nurse or surgical tech does exactly what
11 you want them to do as the surgeon; correct?

12 A. Correct.

13 Q. Based on your review of all of the
14 materials in this case, the depositions,
15 Dr. Armstrong's deposition, the other people
16 involved in the surgery, is it your understanding
17 that Nurse Harden, and any other of the nursing
18 staff, did exactly what Dr. Armstrong wanted them to
19 do?

20 A. Yeah. That's what I gathered from the
21 depositions.

22 Q. And in that sense, Nurse Harden and the
23 others would have met the expectations from the
24 standard of the surgeon, meaning they did exactly
25 what the surgeon wanted them to do and nothing else;

1 **true?**

2 A. True.

3 MR. LUNDQUIST: Okay, Doctor. Thank you,
4 sir. That's all of the questions I have.

5 THE WITNESS: Thank you.

6 MR. GINZKEY: Doctor, I do have questions.

7 CROSS-EXAMINATION

8 BY MR. GINZKEY:

9 **Q. One of the items of evidence in this case**
10 **is a MARS MRI of the patient in question from**
11 **September of 2019, so September of last year. One**
12 **of the findings is an interstitial tear of the left**
13 **vastus intermedius/lateralis myotendinous junction.**
14 **What's the significance of that, or what does that**
15 **suggest to you?**

16 A. It could be a number of things. It
17 definitely tells you that the muscle is atrophied
18 and injured at the location where the muscle becomes
19 a tendon and inserts into the bone, and it's
20 consistent with the abnormal gait and abnormal
21 loading that I referred to earlier.

22 **Q. That same MARS MRI finding goes on to**
23 **describe an asymmetrical muscle atrophy and edema**
24 **within the left rectus femoris and vastus**
25 **intermedius/lateralis muscles. What does that mean**

1 **and what does it suggest?**

2 A. Well, it's suggests and it means that
3 three out of the four quadriceps muscles, the
4 lateralis, the intermedius, the rectus femoris are
5 out. And this far out, 2019, when the surgery was
6 2016, there is clear-cut evidence on an MRI scan
7 that those muscles are damaged permanently.

8 **Q. There was also discussion about the fact**
9 **that with respect to this patient's left hip**
10 **preoperatively, Dr. Armstrong diagnosed him with**
11 **dysplasia, and you've identified what that is, but**
12 **you also went on to describe the fact that there are**
13 **degrees of severity of the dysplasia; correct?**

14 A. Correct.

15 **Q. The more severe the dysplasia is, the**
16 **greater the risk of a femoral nerve injury with**
17 **respect to a THA with an anterior approach?**

18 A. Correct.

19 **Q. Now, did you see anywhere in the records**
20 **that preoperatively, Dr. Armstrong did any imaging**
21 **in an attempt to quantify the severity of this**
22 **patient's hip dysplasia?**

23 A. No.

24 **Q. Wouldn't a reasonably careful orthopedic**
25 **surgeon do that in order to come to a decision as to**

1 **the degree of severity?**

2 MR. BRANDT: Let me just object. This is
3 an opinion that was never disclosed, and I'm not
4 prepared to address it at this point, so ...

5 MR. GINZKEY: The question stands as
6 posed.

7 A. If the surgeon recognized hip dysplasia
8 and was concerned about it being a factor in the
9 patient's risk of a femoral nerve palsy, then, yes,
10 additional studies, such as a CAT scan, such as
11 specialized X-ray views were available options.

12 **Q. (By Mr. Ginzkey) And that would comply**
13 **with the standard of care; correct?**

14 A. Yes, that would comply with the standard
15 of care.

16 **Q. And there were a lot of questions about**
17 **whether this patient's motor function was transient**
18 **or permanent. What's your opinion on that?**

19 A. Oh, it's definitely permanent, based on
20 two EMGs. Even the very first one shows,
21 essentially, that the lights were out, as far as the
22 muscle innervation was concerned, and that was an
23 EMG done only at three months from the surgery.

24 **Q. Now, if I understand your testimony**
25 **correctly, you're saying that the first EMG of**

1 **January 11th, 2017 -- so approximately three months**
2 **post-op -- showed relatively significant motor**
3 **dysfunction; correct?**

4 A. Correct.

5 **Q. Does a reasonably careful orthopedic**
6 **surgeon with that finding refer the patient to a**
7 **neurosurgeon at that time?**

8 MR. BRANDT: Same objection.

9 A. Yes. And here is why: The patient had an
10 immediate femoral nerve palsy. While the etiology
11 of that in this case cannot be determined
12 definitively, I have talked about the medial
13 placement of the incision, the fact that the patient
14 had hip dysplasia, such that retractor placement,
15 more likely than not, was a causative factor in the
16 injury, particularly in light of which branches got
17 injured.

18 Now, in the postoperative period, when
19 this patient was seen as early as five days after
20 the surgery and then subsequent intervals, what's
21 interesting is -- or noteworthy is that the
22 progression of the injury is more consistent with
23 that article from -- that counsel showed me. It
24 appears to be transient. In fact, the doctor
25 comments that the patient is improving. He can feel

1 muscle contractions, and the palsy is getting better
2 every visit. Then he gets his EMG -- let me back
3 up.

4 The assessment by Dr. Carmichael is
5 contrary. He says this is a severe palsy, a severe
6 weakness, and let's get the EMG, and that's a
7 December note of 2016. In January, they get the
8 EMG, which calls out a severe left femoral
9 neuropathy. The lesion appears complete with no
10 evidence of voluntary motor unit potential
11 activation.

12 My concern is that this EMG and objective
13 finding does not square with what the doctor has
14 been documenting all along, which is that of an
15 improving quadriceps policy. And to reconcile that
16 discrepancy, yes, timely referral to a neurosurgeon
17 or a nerve repair surgeon was required by the
18 standard of care, because a nerve could have been
19 repaired or transplanted, and the situation would
20 have been salvaged.

21 MR. BRANDT: No other questions.

22 REDIRECT EXAMINATION

23 BY MR. BRANDT:

24 Q. So let me just ask you -- you prepared --
25 or Mr. Ginzkey prepared this exhibit that contained

1 your opinions that we've marked as -- I don't know
2 which exhibit it is -- Exhibit 3; right?

3 A. Right.

4 Q. He did that in consultation with you, I
5 take it; is that right?

6 A. Right.

7 Q. And there's nothing in there regarding a
8 referral to a neurosurgeon that that document; true?

9 A. That's true.

10 Q. Okay. And you'd agree with me that
11 there's nothing in there -- in that document that
12 makes any reference to the proposition that
13 additional studies were an option for the patient
14 preoperatively; true?

15 A. Correct.

16 Q. All right. And let me just take care of
17 these one at a time. The standard of care didn't
18 require, in this case, preoperative imaging, did it?
19 You said it was an option, but the standard of care
20 didn't really require it, did it?

21 MR. GINZKEY: I think that misstates the
22 doctor's testimony.

23 A. If the hip dysplasia seen by Dr. Armstrong
24 in the preoperative X-rays was concerning, then the
25 standard of care required further workup and

1 imaging.

2 Q. (By Mr. Brandt) If the hip dysplasia did
3 not appear to Dr. Armstrong to be concerning, then
4 the standard of care would not require preop
5 imaging; true?

6 A. True.

7 Q. (By Mr. Brandt) And I think you've
8 indicated to us today that you're not really sure
9 how much hip dysplasia the patient had; true?

10 A. Correct.

11 Q. All right. With respect to the
12 neurosurgery referral, let me just say one thing.
13 Dr. Carmichael didn't refer the patient to a
14 neurosurgeon; true?

15 A. True.

16 Q. You don't know what the window of time
17 period is for any reoperation on the nerve; true?

18 A. Yes. The earlier, the better. And the --
19 we know that by July of 2018, according to
20 Dr. Thomas Tung, it was way too late. The window
21 had long since closed. The three-month interval is
22 still sufficiently within the window in which a
23 nerve repair can be attempted, and if the nerve ends
24 have retracted, a nerve transplant can be done.

25 Q. Okay. We don't know if the nerve ends

1 **retracted at that point in time; true?**

2 A. No. He never got the benefit of
3 exploration of the injury.

4 **Q. Right. And Dr. Carmichael saw the patient**
5 **within that time window; true?**

6 A. Correct.

7 **Q. Dr. Carmichael's specialty or his area of**
8 **expertise has to do with EMG and NCV studies; true?**

9 A. True.

10 **Q. That's what he did for McLean County**
11 **Orthopedics; true?**

12 A. Right.

13 **Q. And he didn't find that there was a reason**
14 **to send the patient to a neurosurgery -- for a**
15 **neurosurgery consult; true?**

16 MR. GINZKEY: Well, that depends on
17 whether or not Dr. Carmichael --

18 MR. BRANDT: Hang on.

19 MR. GINZKEY: -- was in the position to
20 make that and whether it was his obligation.

21 MR. BRANDT: Okay. I'm going to object to
22 the speaking objection.

23 **Q. (By Mr. Brandt) And my question is factual**
24 **in nature, Doctor.**

25 **Dr. Carmichael didn't make a referral to**

1 neurosurgery for this patient within the time window
2 that you've talked about; true?

3 A. That is true.

4 Q. And Dr. Carmichael is seeing the patient
5 for a nerve injury; true? I mean, that's the
6 purpose for which he's seeing the patient; true?

7 A. Yes.

8 Q. Okay. And he didn't make a referral -- he
9 didn't make a statement to Dr. Armstrong that
10 Dr. Armstrong should consider sending the patient to
11 neurosurgery for consult?

12 MR. GINZKEY: I'm sorry. I have to
13 completely object. That misstates the record. If
14 you look at Dr. Carmichael's concluding statement,
15 he states, "Consideration might be given for
16 consultation at a tertiary care center, such as at
17 Susan McKenna and at Barnes."

18 Do you see that, Doctor?

19 THE WITNESS: Yeah, I remember seeing it.

20 Q. (By Mr. Brandt) All right. And so the
21 window of opportunity for -- well, first off -- let
22 me back up here.

23 The time period for which a nerve repair
24 can take place is what? What's that window?

25 MR. GINZKEY: Objection. Ambiguous,

1 vague.

2 MR. BRANDT: He made reference to it, Jim.

3 A. Three to six months following --
4 immediately following the injury is best.

5 Q. (By Mr. Brandt) Okay.

6 A. But --

7 Q. Up to a year, usually, is what the
8 literature talks about?

9 A. Usually, yes.

10 Q. And in this case, we have no evidence that
11 the two branches of the nerve affected were actually
12 transected; true?

13 A. Correct.

14 Q. And so a neurosurgeon could easily, like
15 Dr. McKenna, examine the patient and determine that
16 there is no surgical treatment; true? Within that
17 one-year window.

18 A. No. That's not true. With a nerve
19 injury, the nerve transplants are well established
20 as a treatment. So whether there's a crush injury
21 in a neuroma or whether it's a frank laceration,
22 there are conduit nerve graphs that can be done.

23 Q. One of the treatments that Dr. McKenna
24 might suggest or recommend for the patient is
25 nonoperative care; true?

1 A. It's an option, yes.

2 **Q. All right.**

3 MR. BRANDT: Okay. I mean, for the
4 record, I'm going to preserve my right to come back,
5 to the extent that I need to, because you've offered
6 up opinions here that were never disclosed, so I'm
7 going put that on the record.

8 I don't have anything else at this point
9 in time, but I reserve the right to ask more
10 questions about it. Okay?

11 MR. GINZKEY: That's understood.

12 RE CROSS-EXAMINATION

13 BY MR. GINZKEY:

14 **Q. Doctor, do you have any other opinions you**
15 **want to express here today while we've got this**
16 **opportunity.**

17 MR. BRANDT: Same objection.

18 A. No. But as I testified, the patient
19 doesn't live that far away, and if you want me to
20 examine him, I'd be happy to do it and give you any
21 supplementary opinions, prior to trial.

22 MR. GINZKEY: In all likelihood, we'll
23 have that done prior to trial.

24 MR. BRANDT: Okay.

25 MR. GINZKEY: We'd like to do that

1 probably in time for you to take a supplemental
2 deposition.

3 MR. BRANDT: Yeah. We'll need that.
4 Okay.

5 Thank you, sir.

6 THE WITNESS: Thanks, guys.

7 MR. BRANDT: What do you want to do about
8 signature?

9 MR. GINZKEY: Do you want to read and make
10 corrections?

11 THE WITNESS: Whatever you recommend.

12 MR. GINZKEY: Let's go ahead and read it.

13 (The deposition concluded at 11:02 a.m.)
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1 CERTIFICATE OF REPORTER

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I, Lisa Ballalatak, a Certified Court Reporter for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

Lisa Ballalatak
Missouri Supreme Court
Certified Court Reporter

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3

4 July 13th, 2020

5 MR. JAMES GINZKEY
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6 221 East Washington Street
 Bloomington, Illinois 61701
7

 WILLIAM "WES" JOHNSON v. LUCAS ARMSTRONG, McLEAN
8 COUNTY ORTHOPEDICS, LTD, SARAH HARDEN, PAMELA ROLF,
 AND ADVOCATE HEALTH AND HOSPITALS CORPORATION d/b/a
9 ADVOCATE BROMENN MEDICAL CENTER

10 Dear Mr. Ginzkey:

11 Please find enclosed your copy of the deposition of
 Sonny Bal, MD, MBA, JD, PhD, taken on June 29th, 2020,
12 in the above-referenced case. Also enclosed is the
 original signature page and errata sheet.
13

 Please have the witness read your copy of the
14 transcript, indicate any changes and/or corrections
 desired on the errata sheet, and sign the signature
15 page before a notary public.

16 Please return the executed signature page and errata
 sheet to the Alaris Litigation production department
17 within 30 days after receiving the transcript.

18 Thank you for your attention to this matter.

19
20 Sincerely,

21 Lisa Ballalatak

22 cc: Mr. Brandt
23
24
25

1 ERRATA SHEET

2 Witness: Sonny Bal, MD, MBA, JD, PhD

3 WILLIAM "WES" JOHNSON v. LUCAS ARMSTRONG, McLEAN
4 COUNTY ORTHOPEDICS, LTD, et al.
5 Date Taken: June 29th, 2020

6 Page #____ Line #____

7 Should read: _____

8 Reason for change: _____

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14 Page #____ Line #____

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18 Page #____ Line #____

19 Should read: _____

20 Reason for change: _____

21

22 Page #____ Line #____

23 Should read: _____

24 Reason for change: _____

25

Witness Signature: _____

1 STATE OF)
)
2 COUNTY OF)

3 I, Sonny Bal, MD, MBA, JD, PhD, do hereby certify:

4 That I have read the foregoing deposition;
5 That I have made such changes in form and/or
6 substance to the within deposition as might
7 be necessary to render the same true and
8 correct;

9 That having made such changes thereon, I
10 hereby subscribe my name to the deposition.
11 I declare, under penalty of perjury, that
12 the foregoing is true and correct.

13 Executed this ____ day of _____,
14 20____, at _____.

15
16 _____
 Notary Public

17
18 My commission expires: _____

19
20 _____
 Sonny Bal, MD, MBA, JD, PhD

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22
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**IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT
MCLEAN COUNTY, ILLINOIS**

WILLIAM "WES" JOHNSON,

Plaintiff,

vs.

LUCAS ARMSTRONG, McLEAN COUNTY
ORTHOPEDICS, LTD., SARAH HARDEN, and
ADVOCATE HEALTH AND HOSPITALS
CORPORATION d/b/a ADVOCATE
BROMENN MEDICAL CENTER,

Defendants.

FILED
12/22/2020 10:50 AM
DONALD R. EVERHART, JR.
CLERK OF THE CIRCUIT COURT
MCLEAN COUNTY, ILLINOIS

2018 L 0000126

ORDER

It having come on for hearing upon the oral motion of defendant Lucas Armstrong, and over objection of plaintiff, ~~the Court finds that the retractors in question can no longer be demonstrated to be within the exclusive control of defendant, Lucas Armstrong;~~ rsf 12-22-20

It is hereby ordered, adjudged, and decreed that:

1. Defendant, Lucas Armstrong's, motion for summary judgment on Count III (*res ipsa loquitur*) is hereby granted and judgment is entered in favor of defendant, Lucas Armstrong, and against plaintiff, William "Wes" Johnson;
2. This Court further finds that there is no just reason for delaying enforcement or appeal of this judgment order pursuant to Illinois Supreme Court Rule 304a;
3. All remaining litigation between plaintiff and defendants, Lucas Armstrong and McLean County Orthopedics, Ltd., is hereby stayed pending resolution of the issues going up on

appeal.

Entered this 22nd day of December, 2020.


Judge Presiding

James P. Ginzkey
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IN THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT OF ILLINOS
MCLEAN COUNTY

William "Wes" Johnson,)
Plaintiff,)
v.)
Lucas Armstrong, McLean County Orthopedics,)
Ltd., Sarah Harden, and Advocate Health and)
Hospitals Corporation, d/b/a Advocate)
BroMenn Medical Center,)
Defendants.)

FILED
1/5/2021 11:55 AM
DONALD R. EVERHART, JR.
CLERK OF THE CIRCUIT COURT
MCLEAN COUNTY, ILLINOIS

Case No. 2018 L 126

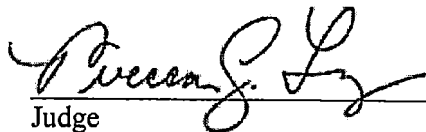
ORDER

This matter having come to be heard on Defendants, SARAH HARDEN and ADVOCATE HEALTH AND HOSPITALS CORPORATION d/b/a ADVOCATE BROMENN MEDICAL CENTER, Motion for Summary Judgment, the issues being fully briefed herein, evidence presented, and arguments of counsel having been heard, due notice having been given, and with the Court being fully advised:

IT IS HEREBY ORDERED:

- 1) Defendants Motion for Summary Judgment is GRANTED, and judgment is hereby entered in favor of SARAH HARDEN and ADVOCATE HEALTH AND HOSPITALS CORPORATION d/b/a ADVOCATE BROMENN MEDICAL CENTER and against Plaintiff, WILLIAM "WES" JOHNSON.
- 2) The Court further specifically finds that there is no just reason for delaying enforcement or appeal of this judgment order pursuant to Illinois Supreme Court Rule 304.

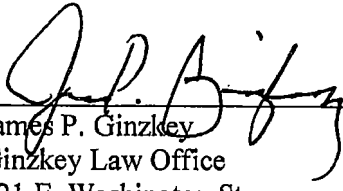
ENTERED: .


Judge

1/5/2021

Date

AGREED AS TO FORM BY:


James P. Ginzkey
Ginzkey Law Office
221 E. Washington St.
Bloomington, IL 61701

/s/ Scott Schoen
Scott Schoen
Langhenry, Gillen, Lundquist &
Johnson, LLC
605 S. Main St.
Princeton, IL 61356

APPEAL TO THE APPELLATE COURT OF ILLINOIS
 FOURTH JUDICIAL DISTRICT
 FROM THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT
 MCLEAN COUNTY, ILLINOIS

WILLIAM "WES" JOHNSON

Plaintiff/Petitioner

Reviewing Court No: 4-21-0014

Circuit Court/Agency No: 2018L000126

Trial Judge/Hearing Officer: REBECCA FOLEY

v.

LUCAS ARMSTRONG, ET AL.

Defendant/Respondent

REPORT OF PROCEEDINGS - TABLE OF CONTENTS

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Proceeding

Title/Description

Page No.

10/30/2020

HEARING ON PLAINTIFF'S MOTION TO

R 2-R 20

COMPEL, HEARING ON DEFENDANT

ADVOCATE'S MOTION FOR SUMMARY

JUDGMENT, HEARING ON DEFENDANTS'

MOTION FOR LEAVE TO FILE AFFIRMATIVE

DEFENSES

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IN THE CIRCUIT COURT

FOR THE ELEVENTH JUDICIAL CIRCUIT

McLEAN COUNTY, BLOOMINGTON, ILLINOIS

WILLIAM JOHNSON,)
)
Plaintiff,)
)
vs.) No. 18 L 126
)
LUCAS ARMSTRONG, et al.,)
)
Defendants.)

HEARING ON PLAINTIFF'S MOTION TO COMPEL, HEARING ON DEFENDANT
ADVOCATE'S MOTION FOR SUMMARY JUDGMENT, HEARING ON
DEFENDANTS' MOTION FOR LEAVE TO FILE AFFIRMATIVE DEFENSES

TRANSCRIPT OF VIDEO CONFERENCE PROCEEDINGS

BE IT REMEMBERED and CERTIFIED that on, to wit:

the 30th day of October, 2020, the following proceedings were

held in the aforesaid cause before The Honorable

REBECCA S. FOLEY, Circuit Judge.

APPEARANCES (via ZOOM):

MR. JAMES P. GINZKEY MR. SCOTT A. SCHOEN
Attorney at Law Attorney at Law
On behalf of the Plaintiff On behalf of Sarah Harden and
Advocate Health & Hospitals

MR. PETER W. BRANDT
Attorney at Law
On behalf of Lucas Armstrong
and McLean County Orthopedics

Amy J. Jennings, RPR, CRR
Official Court Reporter
Bloomington, IL 61701
IL CSR No. 084-004135

1 THE COURT: This is 18 L 126, *Johnson versus*
2 *Armstrong, et. al.*

3 The plaintiff appearing by counsel, Jim Ginzkey;
4 the defendants, Armstrong and McLean County Orthopedics,
5 appearing by counsel, Peter Brandt; the defendants, Harden,
6 H-a-r-d-e-n, and Advocate Health and Hospitals, appearing by
7 counsel, Scott Schoen.

8 Counsel, we've got, I think, three motions set
9 this afternoon, and I think you each have a motion up.
10 Plaintiff has a Motion to Compel; Advocate has a Motion for
11 Summary Judgment; and Mr. Brandt has a Motion for Leave to
12 File Affirmative Defenses.

13 Is that correct?

14 MR. GINZKEY: Yes, Judge.

15 MR. BRANDT: I think that's right, your Honor.

16 MR. SCHOEN: Yes. And we also filed a similar
17 Motion for Leave to File Affirmative Defenses.

18 THE COURT: Okay. I didn't catch that. I'm
19 sorry. Do we want to address those first?

20 MR. GINZKEY: Plaintiff has no objection to the
21 Motions to File Affirmative Defenses by either defendant.

22 THE COURT: Okay. Then I'll show the Motions for
23 Leave to File Affirmative Defenses granted. They'll have to
24 be independently filed so they can become part of the record

1 with their own file stamp.

2 Seven or 14 days sufficient?

3 MR. BRANDT: Yes.

4 MR. SCHOEN: Yes, ma'am.

5 THE COURT: I'll just show 14 days just to be on
6 the safe side.

7 All right. I have no preference as to what we
8 tackle next.

9 MR. GINZKEY: Your Honor, with respect to
10 Plaintiff's Motion to Compel, I didn't get Mr. Brandt's
11 response until Wednesday afternoon, so I haven't had a
12 chance to prepare a written reply. I'd like to be able to
13 do that. I can do it within the same 14 days.

14 THE COURT: Okay. Any objection, Mr. Brandt?

15 MR. BRANDT: No, your Honor. That's fine.

16 THE COURT: Okay. All right, then we'll pick a
17 date for that here at the conclusion of the hearing.

18 Then that leaves us with Mr. Schoen's Motion for
19 Summary Judgment. And I have had an opportunity to review
20 the motion, response and reply along with the exhibits.

21 So, Mr. Schoen, keeping that voice up, I'll turn
22 it over to you whenever you're ready.

23 MR. SCHOEN: I'll try to, your Honor, and I'll
24 also try and be as brief as possible. I know that you

1 always give due consideration to all the motions and briefs,
2 so I'll just try to reiterate a few of the high points.

3 This is a case involving an alleged negligence
4 during a surgery that was not conducted by Nurse Harden or
5 an Advocate employee. And all the evidence in the case
6 indicates that Nurse Harden had no control over the tools or
7 placement of the retractors that were allegedly the cause of
8 Plaintiff's nerve injury. To date, plaintiff has -- or I
9 guess a deadline for plaintiff to file or disclose expert
10 witnesses has passed. The only expert disclosed was Dr.
11 Sonny Bal, who is an orthopedic surgeon. Plaintiff filed or
12 disclosed no experts with regard to Nurse Harden or nursing
13 standard of care; therefore, hasn't made a prima facie case
14 against Nurse Harden.

15 Interestingly, the requirement for expert
16 testimony is equally applicable in a basic negligence case
17 as well as one where res ipsa loquitur is invoked. The
18 plaintiffs still have to provide or present some expert
19 evidence for each defendant establishing a standard of care
20 they are alleged to have breached. Because Dr. Bal is an
21 orthopedic surgeon, has never practiced as a nurse, he can't
22 offer opinions as to Nurse Harden, and he admitted that in
23 his deposition.

24 So, without any expert testimony with regard to

1 the standard of care applicable to Nurse Harden, Plaintiff,
2 again, has failed to establish a prima facie case.

3 The second issue -- or second primary issue here
4 is plaintiff is asserting res ipsa as a basis for their
5 claim. Res ipsa -- determination of whether res ipsa
6 applies is appropriate at a pretrial stage, and the burden
7 is on the plaintiff to establish that res ipsa applies. The
8 Court can make the determination here where res ipsa applies
9 to Nurse Harden and Advocate without reaching whether that
10 might be applicable to other defendants or present a
11 question of fact for a jury down the road. The application
12 here is pretty straightforward.

13 In essence, if you're on an airplane and the
14 airplane crashes, you don't bring a res ipsa claim against
15 the flight attendant. She wasn't the pilot, she wasn't in
16 control of the airplane, which is essentially what plaintiff
17 has done here. They've asserted a res ipsa claim against a
18 nurse who had no control over the placement of any of the
19 allegedly injurious instruments and made no decisions with
20 regard to those instruments and no decisions with regard to
21 how the procedure of the surgery would go forward and
22 proceed. Without that, there's no basis for Plaintiff to
23 meet the burden of establishing res ipsa would apply.

24 So, with that, I think it's fairly well briefed

1 and understood by the Court. If you have any questions, I
2 would turn it over to the Court for questions with regard to
3 the brief and the application.

4 THE COURT: All right, thank you. I have no
5 questions. And, for my reporter, Bal is B-a-l.

6 Mr. Ginzkey, a response.

7 MR. GINZKEY: Yes, your Honor.

8 You may recall that -- I think it's been a couple
9 of years ago at least -- I tried a res ipsa medical
10 malpractice case in front of you. My client was Kristen
11 Nesvacil who developed a rather serious spinal abscess
12 following an epidural injection during the course of labor
13 at Advocate Bromenn Hospital. Mike Kehart was defending the
14 anesthesiologist. Mike Kehart out of Decatur. And, in that
15 particular case, there was the doctor giving the injection
16 and then the nurse assisting him. We didn't feel the nurse
17 was part of the action, but your ruling was well, no, she
18 was part of the procedure in which you alleged the damage
19 occurred, and, by letting her out, you've essentially gotten
20 rid of your res ipsa loquitur count. So you granted summary
21 judgment on that basis with respect to the res ipsa count in
22 that case.

23 So, we're frankly following the ruling that you
24 made in the *Nesvacil* case, that because the nurse was

1 involved in the procedure, that if res ipsa was going to go
2 forward, then as a player she had to be included in that
3 count. So, we're just trying to be consistent with prior
4 rulings of this Court on that issue.

5 With reference to the fact that we don't have a
6 nursing expert, that's absolutely correct, but that's
7 because a nursing expert cannot render an opinion on what is
8 or is not appropriate with respect to an orthopedic surgical
9 procedure. There is no nurse that's qualified to come in
10 and say this part of the procedure was correct or this part
11 of the procedure was wrong. That cannot be nursing
12 testimony. As a matter of law, it has to be testimony from
13 an orthopedic surgeon, and we have that here. Dr. Bal has
14 stated unequivocally that, in his opinion, the damage do
15 this femoral nerve was the result of the retractors. Nurse
16 Harden was the one holding the retractors.

17 I think the evidence at trial will be that she
18 held the retractors only after they were placed or moved by
19 Dr. Armstrong, but that doesn't affect the fact that she's
20 the one holding the retractors and that's when the damage
21 occurred.

22 Based upon the testimony of Dr. Bal, when asked
23 are the disclosures -- your 213 written disclosures, are
24 those your opinions, he said unequivocally under oath, yes,

1 and those disclosed opinions specifically state the surgical
2 instruments injuring the patients femoral nerve were under
3 the control of Lucas Armstrong and Scrub Nurse Sarah Harden
4 who was acting at his direction.

5 Secondly, in the normal course of a total hip
6 arthroplasty, complete denervation of two of a patient's
7 four quadriceps muscle does not happen in the absence of
8 negligence. And he confirmed that opinion under oath at his
9 deposition.

10 So, I think that under the IPI Instruction 22.01,
11 for res ipsa loquitur, Plaintiff has evidence establishing a
12 prima facie case and a Motion for Summary Judgment should be
13 denied.

14 THE COURT: Thank you. Any reply, Mr. Schoen?

15 MR. SCHOEN: Yes, your Honor.

16 I'd first, Plaintiff's note to previous cases
17 decided by the Court has no presidential -- or precedential
18 value here. It's completely different factual
19 circumstances, or may be, because I have no idea what case
20 is. So the fact that the Court may have ruled one way in
21 another case has no bearing here.

22 Second, with respect to Dr. Bal's opinion, it
23 doesn't apply to Nurse Harden, and the fact that she was
24 holding the retractors does not indicate that there was some

1 negligent act by her. Regardless of whether there was or
2 was not negligence in the case, there has to be some
3 evidence of a negligent act by the defendant that you're
4 seeking to assert res ipsa against. Simply standing there
5 and holding retractors where they were placed by the surgeon
6 who was controlling the procedure isn't a negligent act.
7 Even Plaintiff's own expert says she acted exactly how he
8 would have expected a surgical nurse to act.

9 Doctor Armstrong, same testimony. She acted as
10 expected and followed his directions. All the testimony
11 says that she did exactly what was expected. So, to hold
12 somebody negli -- or liable for the negative outcome of the
13 procedure simply because they were there and acted as
14 appropriate doesn't warrant -- isn't warranted, especially
15 if they were following all the instructions and there's no
16 evidence they had any part or conducted -- strike that --
17 that they performed any negligent act. So res ipsa isn't
18 applicable. And, again, the Court is able to determine
19 whether res ipsa is applicable to one party without
20 determining if it's applicable to all parties. So, the
21 Court can determine Plaintiff hasn't met its burden with
22 regard to res ipsa as it applies to Nurse Harden and
23 Advocate without reaching the -- without broaching the issue
24 whether it later applies to Dr. Armstrong or some other

1 party. So, with that, I think the Court is in a position to
2 make a ruling on whether res ipsa applies in the case.
3 Clearly, it doesn't.

4 THE COURT: All right, thank you.

5 As I noted at the outset, I have considered the
6 motion, the response, the reply, the exhibits that were
7 attached thereto as well as the argument presented here
8 today.

9 Defendants Advocate and Harden seek summary
10 judgment as to counts three and four, which allege the
11 theory of res ipsa loquitur. In order to take advantage of
12 the theory of res ipsa loquitur, a plaintiff must establish
13 he was injured; one, in an occurrence which would not
14 ordinarily occur absent some negligence; two, by an
15 instrumentality within the management or control of the
16 defendants; three, under circumstances indicating the injury
17 was not due to any voluntary act on the part of a plaintiff.
18 The Court will cite the case of *Lynch versus Precision*
19 *Machine Shop*, 93 Illinois 2d 266. And no one here has
20 raised the issue of the third element. No one here is
21 arguing or alleging that the injury was due to any voluntary
22 act on the part of the plaintiff, so I'm not going to
23 address that factor.

24 Prior to analyzing these elements, however, the

1 Court must determine if the doctrine applies as a matter of
2 law. Pleading counts under a theory of res ipsa loquitur
3 does not excuse establishing both duty of care, both by a
4 defendant to plaintiff, and breach of that duty by failure
5 to meet the applicable standard, citing the case of *Taylor*
6 *v. City of Beardstown*, 142 Ill. App. 3d at 584. Plaintiffs
7 must establish duty and breach of duty by a qualified
8 competent witness. The injury alleged here is too complex
9 to excuse the need for expert testimony. In other words, it
10 is beyond the kin of an average juror.

11 Here, Plaintiff has disclosed only one expert, Dr.
12 Sonny Bal. Dr. Bal acknowledged in his deposition testimony
13 that he is not offering any opinions relative to the nursing
14 standard of care. Even if he were, he is not qualified to
15 do so, as, even though he possesses four degrees, he does
16 not practice within the same school of medicine as Nurse
17 Harden, namely nursing.

18 Furthermore, based upon the materials provided,
19 there is no evidence in this record of any negligent act or
20 omission on the part of Nurse Harden.

21 Plaintiff argues that case law supports the theory
22 that a theory of res ipsa may apply to more than one
23 defendant while there's -- where there is evidence that
24 defendants exercise concurrent or consecutive management or

1 control over the instrumentality that caused the injury.
2 Plaintiff further references the testimony of Dr. Bal that
3 the injury was caused by a retractor, noting that both Dr.
4 Armstrong and Nurse Harden handled that retractor.

5 While the proposition of law is correct, it is not
6 applicable in this case. All witnesses testified that
7 Defendant Armstrong, as the surgeon, placed the retractor.
8 While Defendant Harden may have physically held the
9 retractor upon placement, it was only at the direction of
10 Defendant Armstrong. She did not exercise any independent
11 control over any surgical tools, according to the testimony.

12 Furthermore, the witnesses agree she only acted as
13 directed, and she did not take any actions other than those
14 directed by Dr. Armstrong. Accordingly, the retractor was
15 never under the exclusive control of Nurse Harden.

16 For all these reasons, the Motion for Summary
17 Judgment as to count three against Nurse Harden is granted.
18 Summary judgment will also be granted in Advocate's favor as
19 to count four. Although count four is styled as a *res ipsa*
20 *loquitur* count, it really alleges *respondeat superior*. With
21 no liability running from Nurse Harden to Plaintiff, there
22 can likewise be no liability running from Nurse Harden's
23 employer, Advocate, to Plaintiff.

24 I have some -- I have a recollection, generally,

1 of the case referenced by Mr. Ginzkey. I have no
2 independent recollection of the facts of my ruling or the
3 res ipsa count. Whether or not if they are the same or
4 distinguishable, I really can't say.

5 The basis of the Court's ruling today is upon the
6 record in front of me, the arguments made by counsel
7 appearing in this case. And so, for those reasons, the
8 motion will be granted.

9 MR. GINZKEY: Judge, Plaintiff would ask for
10 304(a) language.

11 THE COURT: I think that was requested in
12 Advocate's.

13 MR. SCHOEN: We would. And I guess, just for the
14 record, that language would include a finding that there's
15 no just reason for delaying the enforcement of appeal of the
16 Court's ruling today. And we would request that we be able
17 to submit a written order to the Court reflecting your
18 ruling today.

19 MR. GINZKEY: I didn't quite hear that, Scott.
20 You say you do want to submit a ruling? An order?

21 THE COURT: He does.

22 MR. SCHOEN: Yes.

23 MR. GINZKEY: That's fine. No objection.

24 THE COURT: Okay. Then I'll let you do that,

1 Mr. Schoen. I'll put you in charge of that, if you could
2 get -- run that by Mr. Ginzkey for his approval as to form
3 before you submit it to me.

4 And then anything else we need to put on the
5 record before we look for a date on the Motion to Compel?

6 MR. GINZKEY: Yes, Judge. Mr. Brandt filed a
7 Motion to Continue the trial. I think we need to address
8 that.

9 THE COURT: Okay. Is there an objection?

10 MR. GINZKEY: Well, let me ask.

11 THE COURT: Well, let me ask you, are you going to
12 take this ruling up on appeal? Because, if you do, we're
13 not having a trial in January.

14 MR. GINZKEY: Well, but that would only be the
15 appeal on the res ipsa loquitur with respect to the
16 hospital. That wouldn't affect the causes of action against
17 Dr. Armstrong and MCO.

18 THE COURT: True. Judicial economy would say they
19 should all be tried together, but we're not talking about
20 that right now.

21 Go ahead and ask your question.

22 MR. GINZKEY: Earlier, the disclosure date for the
23 defense experts, the 213(f)(3) experts, was extended from
24 July 15 to August 28. Those disclosures were made in

1 writing on September 1. Plaintiff had asked for deposition
2 dates of those three experts; one on behalf of the hospital,
3 two on behalf of Dr. Armstrong. The most critical of those
4 witnesses is Dr. Armstrong's 213(f)(3) orthopedic expert
5 physician by the name of Doctor -- I'm going to mispronounce
6 it -- Domb, D-o-m-b. We haven't been given a date. So
7 we've been asking for dates since September 1. We've got a
8 tentative date of November 20, but the doctor is saying
9 there's nobody allowed in the hospital or his clinical
10 practice. Plaintiff must depose him live, because he's such
11 a critical witness, and you can't get a sense for how the
12 deponent is reacting through Zoom. So, we've offered to
13 find a conference room or law firm up there or go to a
14 conference room at the court reporter's office, but that
15 hasn't been accommodated. And the problem that we are
16 running into is we're now essentially into November.
17 Plaintiff's disclosure date for rebuttals is December 7th,
18 Pearl Harbor Day. So we are running into all kinds of
19 problems.

20 I'm taking too long to ask. Is there any chance
21 that the week of April 12, 2021, which had been scheduled
22 for the *Lorch* trial, which just settled, any chance that
23 that is still an open week?

24 THE COURT: Yes. And I don't know if you have all

1 noticed, when we publish the 2021 jury calendar, we have
2 made a change or a deviation from what we've done in year's
3 past. In prior years, we've had two week jury calendars,
4 and the criminal division and the civil division were
5 simultaneously conducted trials during those two weeks. Due
6 to COVID and the fact that right now we only have two
7 available courtrooms at any given time, what we've done is
8 split those up so the criminal division is guaranteed a week
9 in those two courtrooms and then the civil division is
10 guaranteed, in theory, a week in -- for those COVID jury
11 courtrooms. And so most of my trials scheduled for 2021, by
12 chance, have fallen within the weeks allotted to me, so
13 that's good news. But April 12 is a civil week under the
14 2021 calendar, so from both of those perspectives, that
15 would be a positive thing if you're asking to move the trial
16 to that date.

17 MR. GINZKEY: If we can move it to April 12, the
18 week of April 12, then plaintiff does not object to
19 Mr. Brandt's Motion to Continue.

20 MR. BRANDT: Judge, this is Pete Brandt. Can you
21 hear me?

22 THE COURT: I can.

23 MR. BRANDT: Okay. That's fine. Obviously, I
24 filed a motion. The only thing -- the only caveat -- or I

1 guess have one question. That April 12 date, is that one
2 you have to share with, like, Judge Lawrence or the other
3 judges handling civil cases? Or is that your week?

4 THE COURT: It would be -- we have two courtrooms,
5 and it would be he and I.

6 MR. BRANDT: Okay.

7 THE COURT: So the likelihood of the two of us
8 trying a case in any given month is super slim. I mean,
9 very rarely do we have two civil cases going at once. I
10 suppose one of us could get bumped for a criminal case with
11 a speedy trial issue or something if we are still down to
12 two courtrooms, but the fact that the two of us rarely try
13 things together gives me some encouragement that we'd be
14 okay.

15 MR. BRANDT: The only -- April 12 is fine for my
16 calendar, and I'm going to put it on there. The only caveat
17 would be if I run into a problem with getting an expert
18 there. Or, obviously, if Mr. Ginzkey has the same problem,
19 that would be the only caveat. That far out, I don't
20 anticipate that being a problem.

21 THE COURT: Okay. Then, I will show the Motion to
22 Continue Trial granted without objection, and we will move
23 it to April 12. And I will vacate January 11.

24 MR. GINZKEY: I think that takes care of

1 everything today other than rescheduling another CMC.

2 THE COURT: Okay.

3 MR. BRANDT: And a hearing on the pending Motion
4 to Compel.

5 MR. GINZKEY: That's true.

6 THE COURT: Okay. Anything else you want to put
7 on the record? Or can I excuse Amy?

8 MR. GINZKEY: Excuse Amy.

9 THE COURT: Okay.

10 MR. BRANDT: Yeah. Nothing from me, your Honor.

11 Thank you.

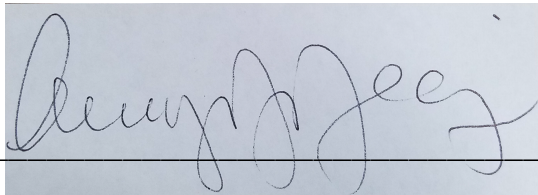
12 THE COURT: Okay.

13 WHICH WERE ALL THE PROCEEDINGS
14 MADE OF RECORD IN THIS CAUSE ON SAID DATE
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CERTIFICATE

I, Amy J. Jennings, Official Court Reporter in and for the
County of McLean and State of Illinois, Eleventh Judicial
Circuit, do hereby certify the foregoing to be a true and
accurate transcript of the video conference proceedings had in
the before-entitled cause on said date.

Dated this 19th day of February, 2021.

A handwritten signature in cursive script, appearing to read "Amy J. Jennings", is written over a light blue rectangular background. A horizontal line is drawn across the signature.

AMY J. JENNINGS, RPR, CRR
Official Court Reporter
IL CSR No. 084-004135

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POINTS & AUTHORITIES

I. *Res Ipsa Loquitur* should go to the jury in every medical malpractice case where it is shown that the injury ordinarily would not have happened had proper care been used.

735 ILCS 5/2-1113	7
<i>Walker v. Rumer</i> , 72 Ill.2d 495 (1978)	7
<i>Poole v. University of Chicago</i> , 186 Ill.App.3d 554 (1 st Dist., 1989).....	7, 9
Illinois Pattern Jury Instruction (Civil) 22.01	8, 13
<i>Dyback v. Weber</i> , 114 Ill.2d 232 (1986).....	9
<i>Adams v. Family Planning Associates Medical Group, Inc.</i> , 315 Ill.App.3d 533 (1st Dist, 2000)	10, 11
<i>Spidle v. Steward</i> , 79 Ill.2d 1 (1980).....	10
<i>Samansky v. Rush-Presbyterian-St. Luke's Medical Center</i> , 208 Ill.App.3d 377 (1st) Dist, 1990).....	11
<i>Gatlin v. Ruder</i> , 137 Ill.2d 284 (1990)	11
<i>Willis v. Morales</i> , 2020 IL App (1st) 180718	11, 13

II. Nurse/Technician cannot testify to proper surgical technique.

735 ILCS 5/8-2501	16
<i>Purtill v. Hess</i> , 111 Ill.2d 229 (1986)	16
<i>Sullivan v. Edward Hospital</i> , 209 Ill.2d.100 (2004)	16
225 ILCS 65/50-10	16
225 ILCS 130/55.....	16
68 Adm.Code § 1485.40 (b)	16
<i>Iaccino v. Anderson</i> , 406 Ill.App.3d 397 (1 st Dist. 2010).....	16

III. Physician may testify to standard of care for nurse on surgical team.

Wingo v. Rockford Memorial Hospital, 292 Ill.App.3d 896 (2nd Dist. 1997) 17

Petryshyn v. Slotky, 387 Ill.App.3d 1112 (4th Dist. 2008) 18

IV. A failure to name all persons who, more probably than not, contributed to plaintiff's injuries is fatal to a *res ipsa loquitur* count.

Smith v. Eli Lilly & Co., 137 Ill.2d 222, 257 (1990). 19

Raleigh v. Alcon Laboratories, Inc., 403 Ill.App.3d 863, 869 (1st Dist. 2010). 19-20

Heastie v. Roberts, 226 Ill.2d 515 (2007). 20

NATURE OF THE ACTION

This action was brought to recover damages occasioned by the alleged negligence of the defendants in performing a left total hip arthroplasty using a direct anterior approach. The trial court granted summary judgment to all defendants on plaintiff's *res ipsa loquitur* counts, from which this appeal is taken. No questions are raised on the pleadings.

ISSUES PRESENTED FOR REVIEW

- I. Whether *res ipsa loquitur* should go to the jury in every medical malpractice case where it is shown that the injury ordinarily would not have happened had proper care been used?
- II. Whether nurse/technician can testify to proper surgical technique?
- III. Whether a physician may testify to standard of care for nurse on surgical team?
- IV. Whether a failure to name all persons who, more probably than not, contributed to plaintiff's injuries is fatal to *res ipsa loquitur* count?

STANDARD OF REVIEW

Summary judgment should only be granted if the movant's right to judgment is clear and free from doubt. *Outboard Marine Corp. v. Liberty Mutual Insurance Co.*, 154 Ill.2d 90, 102 (1992). In determining whether the moving party is entitled to summary judgment, the court must construe the pleadings and evidentiary material strictly against the moving party. *Happel v. Wal-Mart Stores, Inc.*, 199 Ill.2d 179, 186 (2002).

This court reviews the trial court's decision to grant summary judgment *de novo*. *Palm v. 2800 Lake Shore Drive Condominium Ass'n*, 2013 IL 110505. Whether the doctrine

of *res ipsa loquitur* should apply, which is a question of law, is reviewed *de novo*. *Heastie v. Roberts*, 226 Ill.2d 515 (2007).

JURISDICTION

Summary judgment on the issue of *res ipsa loquitur* was entered in favor of defendant Armstrong and his employer on December 22, 2020. Summary judgement on the issue of *res ipsa loquitur* was entered in favor of defendant Harden and her employer and against plaintiff on January 5, 2021. Plaintiff filed his notice of appeal on January 6, 2021 appealing both rulings. Each ruling contained language whereby the trial court, “finds that there is no just reason for delaying enforcement or appeal of this judgment order pursuant to Ill. Sup. Ct. Rule 304.”

STATEMENT OF FACTS

In his complaint, Plaintiff alleged:

1. At all times alleged herein defendant, LUCAS ARMSTRONG, M.D., (hereinafter, "ARMSTRONG") was a physician licensed in the State of Illinois and practicing in the field of orthopedic surgery in McLean County, Illinois.
2. On or prior to October 6, 2016 ARMSTRONG diagnosed WES JOHNSON with left hip osteoarthritis due to developmental dysplasia of the hip.
3. On October 6, 2016 ARMSTRONG performed a left total hip arthroplasty on WES JOHNSON using a direct anterior approach.
4. Following ARMSTRONG's surgery WES JOHNSON was discharged from the hospital with postoperative femoral nerve palsy.
5. At all times alleged herein ARMSTRONG had a duty to act as a reasonably careful orthopedic surgeon under the circumstances described.
6. In breach of that duty, on October 6, 2016 ARMSTRONG was guilty of the following negligent acts and omissions:
 - a. Failing to properly identify, preserve, and protect WES JOHNSON'S femoral nerve;
 - b. Improperly retracting WES JOHNSON's femoral nerve or improperly directing the placement of the retractors; or
 - c. Directly traumatizing WES JOHNSON's femoral nerve.
7. On both January 11, 2017 and June 1, 2017 ARMSTRONG's partner, Dr. Craig Carmichael, performed an electromyogram on WES JOHNSON.
8. Both studies demonstrated a severe left femoral neuropathy that is specific to the branches to the vastus lateralis and rectus femoris muscles.
9. The lesion appears complete with no evidence of voluntary motor unit potential activation.

10. As a direct and proximate result of ARMSTRONG'S negligence, WES JOHNSON endured and continues to endure significant pain and suffering, incurred medical expenses, sustained permanent disability, and suffered loss of a normal life.

* * *

COUNT III
(*Res Ipsa loquitur*)

Plaintiff, WES JOHNSON, complains of defendants, LUCAS ARMSTRONG, SARAH HARDEN, AND PAMELA ROLF as follows:

- 1-9. Plaintiff repeats and realleges paragraphs 1 through 9 of Count I as and for paragraphs 1 through 9 of Count III as though fully set forth herein.
11. During the October 6, 2016 surgery ARMSTRONG was assisted by scrub nurses, SARAH HARDEN and PAMELA ROLF.
12. The injuries to WES JOHNSON's femoral nerve occurred while the retractors, scalpel, electrocautery device and other surgical instruments were under the control of ARMSTRONG, HARDEN, and ROLF.
13. In the ordinary course of events, the injuries sustained by WES JOHNSON would not have occurred if ARMSTRONG, HARDEN, and ROLF had used a reasonable standard of professional care while the retractors, scalpel, electrocautery device and other surgical instruments were under their control. (R. C 27-30)

In his Rule 213(f)(3) disclosures, plaintiff's orthopedic surgeon stated:

B. Sonny Bal, M.D.
2000 E. Broadway, #251
Columbia, MO 65201

- (i) Dr. Bal will testify to the standard of care applicable to a total hip arthroplasty using an anterior approach, whether there were any deviations from that standard in the present case, and what injuries were proximately caused by any such deviations.

(ii) Dr. Bal's opinions and conclusions, and the bases therefore are as follows:

- (a) In his left total hip arthroplasty of 10/6/2016 Lucas Armstrong deviated from the required standard of care in the following respects:
 - 1) making his initial incision much too medially;
 - 2) failing to properly identify the patient's femoral nerve;
 - 3) failing to adequately protect the patient's femoral nerve; and
 - 4) causing injury to the patient's left femoral nerve resulting in permanent denervation of the branches to 2 of the patient's 4 quadriceps muscles, the vastus lateralis and rectus femoris.
- (b) The surgical instruments injuring the patient's femoral nerve were under the control of Lucas Armstrong and his scrub nurse, Sarah Harden, who was acting at his direction.
- (c) In the normal course of a total hip arthroplasty, complete denervation of 2 of a patient's 4 quadriceps muscles does not happen in the absence of negligence.
- (d) Complete denervation of 2 of the patient's 4 quadriceps muscles has caused loss of strength in the patient's left leg resulting in multiple falls and head trauma. (R. C 298-299)

In his sworn deposition testimony that same Rule 213(f)(3) witness testified:

- (a) In his opinion, plaintiff's injury was most likely caused by a retractor. (R. C 659)
- (b) The evidence that this injury was caused by a retractor is that defendant Armstrong's incision was too medial, that Armstrong placed an anterior retractor, and that EMG findings confirm plaintiff's injury. (R. C 660)
- (c) Further evidence that plaintiff's injury was caused by a retractor are the following facts: Medial placement of the

initial incision, the fact that the retractor was moved during surgery, the fact that two branches (vastus lateralis and intermedius) of the femoral nerve would be much closer to the retractor; the retractor tip was placed strikingly close to the femoral nerve when placed near the anterior rim of the acetabulum. (R. C 666)

- (d) "My testimony here is a complete (as opposed to transient) injury of the femoral nerve, as occurred here, verified by repeat EMG and by subsequent treatment by a nerve specialist like Dr. Tung, does not occur absent negligence." (R. C 664)

Nonetheless, the trial court granted summary judgment on the issue of *res ipsa loquitur* in favor of all defendants, reasoning that plaintiff needed a nursing expert to opine as to the proper surgical technique for a nurse's use of retractors, and that plaintiff's orthopedic surgeon was not qualified to testify to the proper technique of a nurse participating in the surgery.

ARGUMENT

I. *Res Ipsa Loquitur* should go to the jury in every medical malpractice case where it is shown that the injury ordinarily would not have happened had proper care been used.

The doctrine of *res ipsa loquitur* is codified at 735 ILCS 5/2-1113 (Medical malpractice - *res ipsa loquitur*) which states in pertinent part:

...Proof of an unusual, unexpected or untoward medical result which ordinarily does not occur in the absence of negligence will suffice in the application of the doctrine.

The doctrine of *res ipsa loquitur* is clearly applicable to the case at bar. In *Walker v. Rumer*, 72 Ill.2d 495 (1978) our Supreme Court stated:

The requirement for the application of the doctrine of *res ipsa loquitur* is not that the surgical procedure be “commonplace” or that the “average person” be able to understand what is involved; the determination which must be made as a matter of law is whether “the occurrence is such as in the ordinary course of things would not have happened” if the party exercising control or management had exercised proper care. *Walker* at 500.

A plaintiff is not required to prove conclusively all the elements of *res ipsa loquitur*, but need only present evidence reasonably showing that the elements exist. In *Poole v. University of Chicago*, 186 Ill.App.3d 554 (1st Dist., 1989) plaintiff’s expert witness testified that although vocal cord paralysis is a risk associated with thyroidectomy, **bilateral** vocal cord paralysis would not occur in the absence of a violation of the standard of care: “there was a deviation somewhere during the operation procedure (because) bilateral (vocal cord paralysis) is just too much to expect by chance.” *Poole* at 556.

In his discovery deposition plaintiff’s Rule 213(f)(3) expert, Dr. Sonny Bal, testified under oath that:

(a) In his opinion, plaintiff’s injury was most likely caused by a retractor.

(R. C 659)

- (b) The evidence that this injury was caused by a retractor is that defendant Armstrong's incision was too medial, that Armstrong placed an anterior retractor, and that EMG findings confirm plaintiff's injury. (R. C 660)
- (c) Further evidence that plaintiff's injury was caused by a retractor are the following facts: Medial placement of the initial incision, the fact that the retractor was moved during surgery, the fact that two branches (vastus lateralis and intermedius) of the femoral nerve would be much closer to the retractor; the retractor tip was placed strikingly close to the femoral nerve when placed near the anterior rim of the acetabulum. (R. C 666)
- (d) "My testimony here is a complete (as opposed to transient) injury of the femoral nerve, as occurred here, verified by repeat EMG and by subsequent treatment by a nerve specialist like Dr. Tung, does not occur absent negligence." (R. C 667)
- (e) In her discovery deposition, defendant Harden testified under oath that she was the second scrub and that the second scrub alone holds the retractor after it is placed or repositioned by the surgeon; Harden testified that that was her role in this particular surgery. (R. C 559)

In his earlier Rule 213(f)(3) disclosures Dr. Bal stated:

- (b) The surgical instruments injuring the patient's femoral nerve were under the control of Lucas Armstrong and his scrub nurse, Sarah Harden, who was acting at his direction.
- (c) In the normal course of a total hip arthroplasty, complete denervation of 2 of a patient's 4 quadriceps muscles does not happen in the absence of negligence. (R. C 299)

On page 73 of his discovery deposition Dr. Bal told counsel for Harden that his Rule 213(f)(3) disclosure accurately reflected his opinions. (R. C 670)

In this case the jury will receive IPI (Civil) 22.01 which states:

Under Count III, the plaintiff has the burden of proving each of the following propositions:

- First: That the plaintiff was injured.
- Second: That the injury was received from retractors which were under the control and management of defendants Armstrong and Harden.
- Third: That in the normal course of events, the injury would not have occurred if the defendants had used ordinary care while the retractors were under their control and management.

If you find that each of these propositions has been proved, the law permits you to infer from them that the defendants were negligent with respect to the retractors while under their control or management.

If you do draw such an inference, and you further find that the plaintiff's injury was proximately caused by that negligence, your verdict shall be for the plaintiff under this Count. On the other hand, if you find that any of these propositions has not been proved, or if you find that the defendants used ordinary care for the safety of the plaintiff in their control and management of the retractors, or if you find that the defendants' negligence, if any, was not a proximate cause of the plaintiff's injury, then your verdict shall be for the defendants under this Count.

Plaintiff bears the burden of presenting evidence reasonably showing the existence of the elements of *res ipsa loquitur* in order to invoke the doctrine. But if plaintiff meets that burden, an inference of negligence arises which will not be taken from the jury. *Dyback v. Weber*, 114 Ill.2d 232 (1986); *Poole, supra*.

In those cases where the allegations of *res ipsa loquitur* have been dismissed, courts of review are quick to reverse. Following a jury verdict in favor of the surgeon in *Poole, supra*, plaintiff appealed claiming that the trial court improperly refused to let the issue of *res ipsa loquitur* go to the jury. The appellate court agreed and reversed judgment. In reaching its decision, the appellate court emphasized that a plaintiff is not required to prove

conclusively all the elements of *res ipsa loquitur*, but need only present evidence reasonably showing that the elements exist. Similarly, in *Adams v. Family Planning Associates Medical Group, Inc.*, 315 Ill.App.3d 533 (1st Dist, 2000), after presentation of the evidence the trial court refused to allow the issue of *res ipsa loquitur* to go to the jury. The trial court was reversed with the appellate court stating at page 545:

In order to show the first element of *res ipsa loquitur*, an occurrence that ordinarily does not happen in the absence of negligence, a plaintiff is not required to show that the injury in question never happens without negligence, only that it does not ordinarily happen without negligence. *Spidle*, 79 Ill.2d at 9, 402 N.E.2d 216.

If the defendant controverts the plaintiff's evidence that the injury ordinarily does not happen in the absence of negligence, that dispute does not provide grounds for taking the issue away from the jury. Factual disputes presenting credibility questions or requiring evidence to be weighed should not be decided by the trial judge as a matter of law. *Spidle*, 79 Ill.2d at 10, 402 N.E.2d 216.

One of the seminal cases concerning the doctrine of *res ipsa loquitur* in the context of a medical malpractice case came out of this Fourth District Appellate Court. In *Spidle v. Steward*, 79 Ill.2d 1 (1980) the trial court directed a verdict in favor of the defendant surgeon on the issue of *res ipsa loquitur*. That ruling was affirmed by this court but reversed by the Illinois Supreme Court which held that the plaintiff's evidence was sufficient to warrant submitting to the jury the *res ipsa loquitur* counts. The Supreme Court ruled that the *res ipsa loquitur* counts should have been submitted to the jury for decision where it was conceded that the patient was injured while under the control of the defendant surgeon and was without contributory negligence as he was completely anesthetized, and where the testimony of plaintiff's expert was such as to permit a reasonable person to conclude that plaintiff's injury

more probably than not resulted from defendant's negligence.

Case law supports the application of this doctrine against multiple defendants where the plaintiff presents evidence that the defendants exercised concurrent or consecutive management or control over the instrumentality that caused the injury. *Samansky v. Rush-Presbyterian-St. Luke's Medical Center*, 208 Ill.App.3d 377 (1st Dist, 1990). See also, *Gatlin v. Ruder*, 137 Ill.2d 284 (1990). The mere fact that a defendant controverts plaintiff's evidence in support of the application of the doctrine of *res ipsa loquitur* does not provide grounds for taking the issue away from the jury. *Adams v. Family Planning Associates, supra*.

Here the granting of summary judgment in favor of all defendants on *res ipsa loquitur* is reversible error. This is best demonstrated by the recent Cook County case of *Willis v. Morales*, 2020 IL App (1st) 180718. Like the case at bar, the plaintiff in *Willis* awoke from surgery with nerve damage. She sued her surgeon, two anesthesiologists, and three nurse anesthetists. At the beginning of the trial the court granted defendants' motion in limine and barred all evidence on the theory of *res ipsa loquitur*. Plaintiff presented an offer of proof that her experts would testify that the injury to her median nerve occurred during the surgery in question, and that the injury would not have occurred absent negligence. A verdict in favor of defendants was reversed by the First District Appellate Court which stated:

¶ 36 . . . “[A] plaintiff seeking to rely on the *res ipsa* doctrine must plead and prove that he or she was injured (1) in an occurrence that ordinarily does not happen in the absence of negligence, (2) by an agency or instrumentality within the defendant's exclusive control. *Heastie*, 226 Ill. 2d at 531-32, 315 Ill. Dec. 735, 877 N.E.2d 1064.

“Illinois law does not require a plaintiff to show the actual force which initiated the motion or set the instrumentality in operation in order to rely on the *res ipsa* doctrine. To the

contrary, if the specific and actual force which initiated the motion or set the instrumentality in operation were known unequivocally, leaving no reason for inference that some other unknown negligent act or force was responsible, the res ipsa doctrine could not even be invoked.” *Heastie*, 226 Ill. 2d at 539, 315 Ill. Dec. 735, 877 N.E.2d 1064.

¶ 37 If the plaintiff was unconscious at the time of the injury, and under the defendants' control, then the plaintiff has adequately shown the control element for res ipsa loquitur, even if she cannot establish the exact instrumentality that caused the injury. *Spidle v. Steward*, 79 Ill. 2d 1, 4, 7-8, 37 Ill. Dec. 326, 402 N.E.2d 216 (1980). Here, if Willis can convince a finder of fact that the injury occurred during the surgery, “it can be inferred * * * that the instrumentality of the injury was the handling” of Willis by defendants. *See, Collins v. Superior Air-Ground Ambulance Service, Inc.*, 338 Ill. App. 3d 812, 820, 273 Ill. Dec. 494, 789 N.E.2d 394 (2003).

¶ 38 Willis’s experts explained that the medical records supported their conclusion that the injury occurred during the surgery on May 21, 2008. Defendants contend that they did not have exclusive control because their expert said the injury might have occurred during the hospitalization that began on May 25, 2008. “A plaintiff need not conclusively prove all the elements of res ipsa loquitur in order to invoke the doctrine. He need only present evidence reasonably showing that elements exist * * *.” *Dyback v. Weber*, 114 Ill. 2d 232, 242, 102 Ill. Dec. 386, 500 N.E.2d 8 (1986). Willis presented enough evidence to raise a question for the jury as to whether defendants had exclusive control over the instrumentality that caused the injury.

¶ 39 Willis’s experts also testified in their depositions that the injury to the median nerve ordinarily would not occur without negligence. None of defendants’ experts disputed this conclusion.

¶ 40 The trial court disallowed the evidence on grounds that Willis’s experts testified that they knew “the specific and actual force” that caused the injuries. *See, Heastie*, 226 Ill. 2d at 539, 315 Ill. Dec. 735, 877 N.E.2d 1064. While several of Willis’s experts said that compression caused the injury, they noted several different possible sources for the compression. As Willis’s arms gradually swelled during the lengthy surgery, the anesthesiologists and nurse anesthetists may have failed to recognize that the arm straps had tightened and put pressure on the nerve. The anesthesiologists and nurse anesthetists may have repositioned Willis’s arms negligently when they changed her position for the abdominal revision. Dr. Flagg may have leaned on Willis’s arms

during the surgery. The excessive fluid administered by all the nurse anesthetists may have aggravated the effect of other pressures on the nerve. The experts testified that they could not determine from the medical records which of the possible sources of pressure caused the injuries. Defense counsel used the uncertainty in closing argument, telling the jurors that if they had unresolved questions about the cause of the injury, they must find in favor of defendants.

¶ 41 The appellate court considered the applicability of *res ipsa loquitur* in similar circumstances in *Kolakowski v. Voris*, 83 Ill. 2d 388, 397, 47 Ill. Dec. 392, 415 N.E.2d 397 (1980), where the court said:

“The defendant * * * argues that plaintiff’s introduction of evidence of specific negligence extinguishes plaintiff’s right to rely on the doctrine of *res ipsa loquitur*. The premise for this argument is that if a plaintiff knows in what respects the defendant was guilty of negligence and presents any specific evidence of the negligent act, the doctrine of *res ipsa loquitur* is inapplicable * * *. Defendant’s theory would be accurate if the evidence introduced by plaintiff conclusively established the exact cause of his injuries. * * * Our appellate court has consistently permitted a plaintiff to introduce evidence of specific negligence without depriving him of his right to rely on the doctrine of *res ipsa loquitur* where such specific evidence does not conclusively establish the cause of the injury.”

¶ 42 Because the experts here could not conclusively establish the cause of Willis’s injury, she could rely on circumstantial evidence to establish her claim. The trial court erred by precluding Willis’s experts from testifying that the injury to Willis’s median nerve would not have occurred absent negligence and by refusing to instruct the jurors on *res ipsa loquitur*. *Willis v. Morales*, 2020 IL App (1st) 180718, ¶¶ 36-42

In its ruling, the trial court here found that the retractor was not within the “exclusive” control of defendant Harden. But the court’s finding is inaccurate on two levels. Firstly, “exclusive” control is no longer an element under IPI 22.01. Secondly, the court’s finding completely contradicts the evidence. The un rebutted deposition testimony of both Dr. Armstrong as well as defendant Harden was that Harden, and Harden alone, was holding the retractors during the surgery in question.

II. Nurse/Technician cannot testify to proper surgical technique.

In her motion for summary judgment, defendant Harden wrote:

The plaintiff must present expert testimony to establish the proper standard of care against which the professional's conduct must be measured, a negligent failure to comply with the standard, and that the injury for which the suit is brought was proximally caused by the negligence of the defendant professional. *Saxton*, 240 Ill.App.3d at 210 (emphasis added); *see also Walski v. Tiesenga*, 72 Ill.2d 249, 257 (1978) (Illinois Supreme Court found allegations of malpractice against defendant doctor for failure to identify the left recurrent laryngeal nerve during surgery was the type of situation requiring expert testimony).

A. Plaintiff has Failed to Establish the Standard of Care Applicable to Nurse Harden.

Without expert testimony defining the standard of care against which the defendant practitioner's conduct is to be judged, there is no means by which the jury may find the defendants deviated from the standard, therefore, even looking at the evidence in the light most favorable to plaintiff, it is clear that no verdict in her favor could ever stand. *Walski*, 72 Ill.2d at 262. A plaintiff's failure to establish a standard of care by expert testimony is a fatal deficiency in a medical malpractice action. *Curtis v. Goldenstein*, 125 Ill.App.3d 562, 565 (3rd Dist. 1984). Even were a plaintiff is relying on the doctrine of *res ipsa loquitur*, the plaintiff is still required to establish the applicable standard of care. *Taylor v. City of Beardstown*, 142 Ill.App.3d 584, 592 (4th Dist. 1986) (discussed further *infra*). (R. C 529)

At the hearing, defendant Harden argued:

To date, plaintiff has - - or I guess a deadline for plaintiff to file or disclose expert witnesses has passed. The only expert disclosed was Dr. Sonny Bal, who is an orthopedic surgeon. Plaintiff filed or disclosed no experts with regard to Nurse Harden or nursing standard of care; therefore, hasn't made a *prima facie* case against Nurse Harden.

Interestingly, the requirement for expert testimony is equally applicable in a basic negligence case as well as one where *res ipsa loquitur* is invoked. The plaintiffs still have to provide or present some expert evidence for each defendant establishing a standard of care they are alleged to have breached. Because Dr. Bal is an orthopedic surgeon, has never practiced as a nurse, he can't offer opinions as to Nurse Harden, and he admitted that in his deposition. (R. 5)

So, without any expert testimony with regard to the standard of care applicable to Nurse Harden, Plaintiff, again, has failed to establish a prima facie case. (R. 6)

The trial court then ruled:

Plaintiffs (sic) must establish duty and breach of duty by a qualified competent witness. The injury alleged here is too complex to excuse the need for expert testimony. In other words, it is beyond the kin of an average juror.

Here, Plaintiff has disclosed only one expert, Dr. Sonny Bal. Dr. Bal acknowledged in his deposition testimony that he is not offering any opinions relative to the nursing standard of care. Even if he were, he is not qualified to do so, as, even though he possesses four degrees, he does not practice within the same school of medicine as Nurse Harden, namely nursing.

Furthermore, based upon the materials provided, there is no evidence in this record of any negligent act or omission on part of Nurse Harden.

Plaintiff argues that case law supports the theory that a theory of res ipsa may apply to more than one defendant while there's - - where there is evidence that defendants exercise concurrent or consecutive management or control over the instrumentality that caused the injury. Plaintiff further references that testimony of Dr. Bal that the injury was caused by a retractor, noting that both Dr. Armstrong and Nurse Harden handled that retractor.

While the proposition of law is correct, it is not applicable in this case. All witnesses testified that Defendant Armstrong, as the surgeon, placed the retractor. While Defendant Harden may have physically held the retractor upon placement, it was only at the direction of Defendant Armstrong. She did not exercise any independent control over any surgical tools, according to the testimony.

Furthermore, the witnesses agree she only acted as directed, and she did not take any actions other than those directed by Dr. Armstrong. Accordingly, the retractor was never under the exclusive control of Nurse Harden.

For all these reasons, the Motion for Summary Judgment as to count three against Nurse Harden is granted. Summary Judgment will also be granted in Advocate's favor as to count four. (R. 12-13)

Both defendant Harden and the trial court are absolutely wrong. In order to testify to proper surgical technique in a given procedure, one must be a surgeon who performs that type of procedure. *See*, 735 ILCS 5/8-2501. *See also*, *Purtill v. Hess*, 111 Ill.2d 229 (1986), and *Sullivan v. Edward Hospital*, 209 Ill.2d.100 (2004).

Furthermore, the roles of nurses and surgical technicians are circumscribed by statute. For example, a nurse (other than an Advance Practice Nurse or Physician Assistant) may not render a medical diagnosis according to § 50-10 of the Nursing Practice Act (225 ILCS 65/50-10). And under § 55 of the Registered Surgical Assistant and Registered Surgical Technologist Title Protection Act (225 ILCS 130/55), “(a) person registered under this Act shall practice under direct supervision.” *See also*, 68 Adm.Code § 1485.40 (b):

“Direct supervision” means supervision by an operating physician, licensed podiatrist, or licensed dentist who is physically present and who personally directs delegated acts and remains available to personally respond to an emergency until the patient is released from the operating room.

In *Iaccino v. Anderson*, 406 Ill.App.3d 397 (1st Dist. 2010) the parents of an infant who sustained brain damage during labor as a result of oxygen deprivation brought a medical malpractice action against the two doctors involved in the baby’s birth. There plaintiff’s nursing expert was permitted to describe what she observed on fetal monitoring strips, but was **not** allowed to testify whether those strips indicated the baby should have been delivered earlier. The appellate court affirmed the trial court’s ruling on the basis that an obstetrical nurse cannot make a diagnosis or opine as to the applicable standard of care for an obstetrician/gynecologist.

At the summary judgment hearing plaintiff argued:

With reference to the fact that we don’t have a nursing expert, that’s

absolutely correct, but that's because a nursing expert cannot render an opinion on what is or is not appropriate with respect to an orthopedic surgical procedure. There is no nurse that's qualified to come in and say this part of the procedure was correct or this part of the procedure was wrong. That cannot be nursing testimony. As a matter of law, it has to be testimony from an orthopedic surgeon, and we have that here. Dr. Bal has stated unequivocally that, in his opinion, the damage to this femoral nerve was the result of the retractors. Nurse Harden was the one holding the retractors. (R. 8)

Plaintiff here was not remiss in failing to offer testimony of a nurse or surgical technician as to whether defendant Harden did or did not comply with the standard of care. This is because no such nurse or surgical technician can be allowed to testify to the proper surgical technique for a total hip arthroplasty using a direct anterior approach. That testimony **must** come from a surgeon. The trial court's ruling is clear reversible error.

III. Physician may testify to standard of care for nurse on surgical team.

In addition to committing reversible error by holding that plaintiff needed expert nursing testimony, the trial court here committed yet another reversible error by ruling that a surgeon is not qualified to testify to proper surgical nursing technique. Although, as a general rule, a physician may not testify to the nursing standard of care, physicians may, in fact, testify to proper nursing procedure depending on the issue at hand. In *Wingo v. Rockford Memorial Hospital*, 292 Ill.App.3d 896 (2nd Dist. 1997), the appellate court ruled that a physician may testify on proper nursing care when the issue involves communication to a physician. In *Wingo*, plaintiff alleged that the hospital's nurse failed to communicate to the patient's physician that the patient's condition had changed. *Wingo* at 900. Three different physician experts testified that failure to communicate this information was a deviation from

the nursing standard of care. The appellate court found that these allegations of negligence were within the testifying doctor's knowledge and experience.

The same rationale applies to nurses and technicians working on a surgical team. In the case of *Petryshyn v. Slotky*, 387 Ill.App.3d 1112 (4th Dist. 2008), this court ruled that an obstetrician was qualified as an expert to testify to the surgical nurse's standard of care. In announcing a "Providing-Medical-Care Continuum" this court stated that the "pivotal analytical issue in answering this question depends on the nature of the interaction between a physician and a nurse as they provide medical care for the same patient." This court went on to state:

Progressing still further along the "providing-medical-care continuum" is a case like the present one, which involves the intrinsically intertwined interaction between a physician and nurse when they are members of the same surgical team. Under this scenario, which is essentially on the opposite end of the "providing-medical-care continuum" from the circumstances in *Dolan*, the physician and nurse, each responsible for their distinct and specialized responsibilities, interact as a team to substantially contemporaneously care of the same patient. *Petryshyn* at 1120.

Here Dr. Bal's testimony that the retractors under the control of Armstrong and Harden caused damage that does not ordinarily occur absent negligence, is enough to allow *res ipsa loquitur* go to the jury.

IV. A failure to name all persons who, more probably than not, contributed to plaintiff's injuries is fatal to a *res ipsa loquitur* count.

In the case at bar the trial court made exactly the opposite ruling that she had made in an earlier *res ipsa loquitur* medical malpractice case; a case that presented very similar facts. And this court affirmed the trial court's earlier ruling. This court therefore cannot affirm

the trial court's ruling in the case at bar.

Amazingly, in the case at bar plaintiff brought this to the trial court's attention, arguing:

You may recall that - - I think it's been a couple of years ago at least - - I tried a *res ipsa* medical malpractice case in front of you. My client was Kristen Nesvacil who developed a rather serious spinal abscess following an epidural injection during the course of labor at Advocate Bromenn Hospital. Mike Kehart was defending the anesthesiologist. Mike Kehart out of Decatur. And, in that particular case, there was the doctor giving the injection and then the nurse assisting him. We didn't feel the nurse was part of the action, but your ruling was well, no, she was part of the procedure in which you alleged the damage occurred, and, by letting her out, you've essentially gotten rid of your *res ipsa loquitur* count. So you granted summary judgment on that basis with respect to the *res ipsa* count in that case.

So, we're frankly following the ruling that you made in the *Nesvacil* case, that because the nurse was involved in the procedure, that if *res ipsa* was going to go forward, then as a player she had to be included in that count. So, we're just trying to be consistent with prior rulings of this court on that issue. (R. 7)

But the trial court ignored this argument and summarily granted judgment to defendant Harden, her employer, and then Dr. Armstrong and his employer on the issue of *res ipsa loquitur*. A trial court cannot make a ruling on a *res ipsa loquitur* medical malpractice case that is sustained by this court and in a subsequent and very similar case, rule exactly the opposite.

In *res ipsa loquitur* actions, parties who more likely than not contributed to plaintiff's injuries are to be joined as defendants. "This helps to preserve the identification element because liability will surely fall on the actual wrongdoer." *Smith v. Eli Lilly & Co.*, 137 Ill.2d 222, 257 (1990). The doctrine of *res ipsa loquitur* does not apply when a plaintiff fails to name all persons or entities who more likely than not caused his injuries. *Raleigh v. Alcon*

Laboratories, Inc., 403 Ill.App.3d 863, 869 (1st Dist. 2010). In *Heastie v. Roberts*, 226 Ill.2d 515 (2007), our Supreme Court stated that to establish a claim for a *res ipsa loquitur* a plaintiff must establish that he was injured (1) in an occurrence that doesn't ordinarily happen in the absence of negligence, and (2) by an agency or instrumentality within the defendants exclusive control. *Heastie* at 531. The *Heastie* court went on to state:

In setting forth the second element, some authorities speak of “management and control” rather than “exclusive control,” but the terms have come to be viewed as interchangeable. In either case, the requisite control is not a rigid standard, but a flexible one in which the key question is whether the probable cause of the plaintiff's injury was one which the defendant was under a duty to the plaintiff to anticipate or guard against. See *Jones v. Minster*, 261 Ill.App.3d 1056, 1061, 200 Ill.Dec. 22, 635 N.E.2d 123 (1994); *Darrough v. Glendale Heights Community Hospital*, 234 Ill.App.3d 1055, 1060, 175 Ill.Dec. 790, 600 N.E.2d 1248 (1992). The traditional formulation of the doctrine also included a requirement that the injury occurred under circumstances indicating that it was not due to any voluntary act or neglect on the part of the plaintiff. *Gatlin v. Ruder*, 137 Ill.2d at 295, 148 Ill.Dec. 188, 560 N.E.2d 586. Consistent with the principles of comparative fault followed in this state, however, a plaintiff is no longer required to plead and prove freedom from contributory negligence in order to make out a prima facie case under the doctrine of *res ipsa loquitur*. *Dyback v. Weber*, 114 Ill.2d 232, 241, 102 Ill.Dec. 386, 500 N.E.2d 8 (1986). *Heastie* at 532.

We note, moreover, that while reliance on the *res ipsa* doctrine may normally require that the injury can be traced to a specific cause for which the defendant is responsible, Illinois law also authorizes use of the doctrine where it can be shown that the defendant was responsible for all reasonable causes to which the accident could be attributed. See *Napoli v. Hinsdale Hospital*, 213 Ill.App.3d 382, 388, 157 Ill.Dec. 531, 572 N.E.2d 995 (1991); see also W. Keeton, Prosser & Keeton on Torts § 39, at 248 (5th ed. 1984). That is precisely the situation plaintiff claims to have been present here.

Similarly, Illinois law does not require a plaintiff to show the actual force which initiated the motion or set the instrumentality in operation in order to rely on the *res ipsa* doctrine. To the contrary, if the specific and actual force which initiated the motion or set the instrumentality in operation were known unequivocally, leaving no reason for inference that some other unknown negligent act or force was responsible, the *res ipsa* doctrine could not even be invoked. See *Collgood, Inc. v. Sands Drug Co.*, 5 Ill.App.3d 910,

916, 284 N.E.2d 406 (1972); see also 65A C.J.S. Negligence § 759, at 555 (2000) (“The *res ipsa loquitur* rule aids to the injured party who does not know how the specific cause of the event that results in his or her injury occurs, so if he or she knows how it comes to happen, and just what causes it * * * there is no need for the presumption or inference of the defendant’s negligence as afforded by the * * * rule”). *Heastie* at 538.

So here we have the inimitable reasoning of the very same trial court on the very same issue, yet supposing exactly the opposite result. As Dickens wrote, “If the law supposes that...the law is an ass - a(n) idiot.”

CONCLUSION

The trial court’s rulings granting summary judgment to all defendants on the issue of *res ipsa loquitur* should be summarily reversed.

Respectfully submitted

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CERTIFICATE OF COMPLIANCE

I certify that this brief conforms to the requirements of Rules 341(a) and (b). The length of this brief, excluding the pages or words contained in the Rule 341(d) cover, the Rule 341 (h)(1) table of contents and statement of points and authorities, the Rule 341(c) certificate of compliance, the certificate of service, and those matters to be appended to the brief under Rule 342(a), is 21 pages or words.

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PROOF OF SERVICE

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned certifies that on the 13th day of April, 2021 at or before the hour of 5:00 p.m. I caused the foregoing instrument to be filed with the Clerk of the Fourth District Appellate Court using Odyssey eFile and Serve, which shall serve the parties of record as designated in the system. The following attorney(s) of record were also served by electronic mail at their primary and secondary addresses of record, as follows:

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Notice of Service of Discovery Documents	7/9/2020	C 373 – C 374
Plaintiff's First Motion to Compel Advocate	7/21/2020	C 375 – C 377
Notice of Service of Discovery Documents	7/24/2019	C 378 – C 379
Defendant's Response to Plaintiff's Motion to Compel	8/11/2020	C 380 – C 390
Notice of Filing	8/11/2020	C 391 – C 392
Notice of Video Evidence Deposition via Video Conference	8/13/2020	C 393 – C 394
Cross-Notice of Evidence Deposition	8/17/2020	C 395 – C 396
Notice of Depositions	8/17/2020	C 397 – C 398
Third Amended Notice of Discovery Deposition via Zoom	8/21/2020	C 399 – C 400
Defendant's Rule 213 (f)(3) Opinion Witness Disclosures	8/28/2020	C 401 – C 504
Defendants Advocate Health and Hospital Corporation dba Advocate BroMenn Medical Center, and Sarah Harden's 213(f)(3) Disclosures	8/28/2020	C 505 – C 524
Motion for Summary Judgment	8/28/2020	C 525 – C 676
Notice of Filing	8/28/2020	C 677 – C 678
Notice of Case Management Conference	9/16/2020	C 679 – C 680
Notice of Service of Discovery Documents	9/18/2020	C 681 – C 682
Plaintiff's First Motion to Compel Armstrong	9/18/2020	C 683 – C 688
Notice of Service of Discovery Documents	9/21/2020	C 689 – C 690
Plaintiff's Response to Advocate Motion for Summary Judgment (2)	9/21/2020	C 691 – C 706

Plaintiff's response to Advocate Motion for Summary Judgment	9/21/2020	C 707 – C 722
Plaintiff's Motion for Extension	9/23/2020	C 723 – C 725
Notice of Zoom Hearing	9/29/2020	C 726 – C 727
Plaintiff's First Amended Motion to Compel Armstrong	10/9/2020	C 728 – C 738
Motion for New Trial Date	10/13/2020	C 739 – C 741
Notice of Hearing	10/13/2020	C 742 – C 744
Notice of Zoom Hearing	10/14/2020	C 745 – C 746
Notice of Filing	10/15/2020	C 747 – C 749
Reply to Motion for Summary Judgment	10/15/2020	C 750 – C 754
Motion for Leave to File Affirmative Defenses	10/21/2020	C 755 – C 758
Defendant's Response to Plaintiff's Motion to Compel	10/28/2020	C 759 – C 777
Notice of Zoom Hearing	10/28/2020	C 778 – C 779
Motion for Leave to File Affirmative Defenses	10/29/2020	C 780 – C 784
Notice of Zoom Motion Hearing	10/29/2020	C 785 – C 787
Motion to Reconsider or in the Alternative, Motion to Strike and Stay	11/4/2020	C 788 – C 792
Notice of Service of Discovery Documents	11/4/2020	C 793 – C 794
Notice of Zoom Hearing	11/5/2020	C 795 – C 796
Plaintiff's Amended Supreme Court Rule 213 (f)(1) and (f)(2) Witness Disclosures	11/5/2020	C 797 – C 802
Affirmative Defenses	11/9/2020	C 803 – C 804
Reply in Support Motion to Compel Armstrong	11/10/2020	C 805 – C 809
Response to Armstrong Affirmative Defenses	11/16/2020	C 810 – C 811

Notice of Zoom Hearing	11/19/2020	C 812 – C 813
Defendant's Supplemental Opinion Disclosures	12/1/2020	C 814 – C 816
Defendant's Supplemental Response to Plaintiff's First Supplemental Discovery Request	12/4/2020	C 817 – C 843
Notice of Filing	12/7/2020	C 844 – C 846
Response to Plaintiff's Motion to Reconsider	12/7/2020	C 847 – C 854
Defendant's Supplemental Rule 213 (f)(2) Disclosure	12/21/2020	C 855 – C 864
Defendant's Supplemental Rule 213 (f)(3) Disclosure	12/21/2020	C 865 – C 876
Order of Indirect Civil Contempt	12/22/2020	C 877 – C 881
Order	12/22/2020	C 882 – C 883
Plaintiff's Supplemental Supreme Court Rule 213 (f)(3) Witness Disclosure of Sonny Bal, MD	12/22/2020	C 884 – C 897
Order	1/5/2021	C 898 – C 899
Correspondence from the Appellate Court	1/6/2021	C 900
Notice of Appeal (2)	1/6/2021	C 901 – C 903
Notice of Appeal	1/6/2021	C 904 – C 905
Appellate Court Docketing Statement	1/7/2021	C 906
Correspondence from Attorney	1/7/2021	C 907 – C 908
Correspondence from the Appellate Court	1/15/2021	C 909
Appellate Court Docketing Statement	1/21/2021	C 910
Correspondence from Attorney	1/22/2021	C 911
Receipt	3/1/2021	C 912
Receipt	3/10/2021	C 913

No. 127942
Consolidated with No. 127944

IN THE SUPREME COURT OF ILLINOIS

WILLIAM "WES" JOHNSON,

Plaintiff-Appellee

v.

LUCAS ARMSTRONG, M.D.,
SARAH HARDEN, and ADVOCATE
HEALTH AND HOSPITALS CORPORATION,
ADVOCATE BROMENN MEDICAL CENTER,

Defendants-Appellants.

) On Petition for Leave to Appeal
) From the Illinois Appellate Court,
) Fourth District, No. 4-21-0014,
)
) There Heard on Appeal From The
) Eleventh Judicial Circuit,
) McLean County, Illinois,
) Trial Court No. 2018 L 126
)
) The Honorable Rebecca S. Foley,
) Judge Presiding
)

NOTICE OF FILING

To: James Ginzkey
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PLEASE TAKE NOTICE that on March 2, 2022, the BRIEF and APPENDIX OF
DEFENDANT-APPELLANT, LUCAS ARMSTRONG, M.D., CERTIFICATE OF

COMPLIANCE, AND CERTIFICATE OF SERVICE, is being filed electronically with the Clerk of the Supreme Court of Illinois, a copy of which is attached and served upon you.

Respectfully submitted,

LUCAS ARMSTRONG, M.D.,
Appellants-Defendants

By: LIVINGSTON, BARGER, BRANDT
& SCHROEDER, LLP



By: /s/ Kevin M. Toth
One of his attorneys

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No. 127942
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CERTIFICATE OF SERVICE

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The undersigned, an attorney, on oath state I served the foregoing BRIEF and APPENDIX OF DEFENDANT-APPELLANT, LUCAS ARMSTRONG, M.D., CERTIFICATE OF COMPLIANCE, AND NOTICE OF FILING, upon counsel listed above via electronic mail on March 2, 2022.

Under penalties as provided by law pursuant to 735 ILCS 5/1-109, I certify that the statements set forth herein are true and correct.

Additionally, upon acceptance by the Court's electronic filing system, the undersigned will mail thirteen (13) copies of the BRIEF and APPENDIX OF DEFENDANT-APPELLANT, LUCAS ARMSTRONG, M.D. to the Clerk of the Supreme Court, 200 East Capitol Avenue, Springfield, Illinois 62701.



By: /s/ Kevin M. Toth

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