

No. 127942
Consolidated with No. 127944

IN THE
SUPREME COURT OF ILLINOIS

WILLIAM "WES" JOHNSON,
plaintiff/appellee

VS.

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

) On Petition for Leave to Appeal
) From the Illinois Appellate Court,
) Fourth District, No. 4-21-0038
)
) There Heard on Appeal From The
) Eleventh Judicial Circuit,
) McLean County, Illinois,
) Trial Court No. 2018 L 126
)
)
) Honorable Rebecca Simmons-Foley
) Judge Presiding

BRIEF OF PLAINTIFF-APPELLEE

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STATUTES AND RULES INVOLVED

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

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.

735 ILCS 5/8-2501

Expert Witness Standards. In any case in which the standard of care given by a medical profession is at issue, the court shall apply the following standards to determine if a witness qualifies as an expert witness and can testify on the issue of the appropriate standard of care.

- (a) Relationship of the medical specialties of the witness to the medical problem or problems and the type of treatment administered in the case;
- (b) Whether the witness has devoted a substantial portion of his or her time to the practice of medicine, teaching or University based research in relation to the medical care and type of treatment at issue which gave rise to the medical problem of which the plaintiff complains;
- (c) whether the witness is licensed in the same profession as the defendant; and
- (d) whether, in the case against a nonspecialist, the witness can demonstrate a sufficient familiarity with the standard of care practiced in this State.

225 ILCS 65/50-10 [Nurse Practice Act]

Definitions. Each of the following terms, when used in this Act, shall have the meaning ascribed to it in this Section, except where the context clearly indicates

otherwise:

* * *

“Registered professional nursing practice” means a scientific process founded on a professional body of knowledge that includes, but is not limited to, the protection, promotion, and optimization of health and abilities, prevention of illness and injury, development and implementation of the nursing plan of care, facilitation of nursing interventions to alleviate suffering, care coordination, and advocacy in the care of individuals, families, groups, communities, and populations. “Registered professional nursing practice” does not include the act of medical diagnosis or prescription of medical therapeutic or corrective measures.

225 ILCS 130/55 [Registered Surgical Assistant and Registered Surgical Technologist Title Protection Act]

Supervision requirement. A person registered under this Act shall practice under direct supervision.

68 Adm. Code §1485.40 [Registered Surgical Assistant and Registered Surgical Technologist Title Protection Act]

Supervision

- a) As stated in Section 10 of the Act, all registered surgical assistants and registered surgical technologists shall perform duties only under direct supervision.
- 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. A registered professional nurse may also provide direct supervision within the scope of his or her license. A registered surgical assistant or registered surgical technologist shall perform duties as assigned. (Section 10 of the Act)

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) filing of 4/14/2020 (A-1) plaintiff disclosed:

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 Dr. Bal 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 technician's use of retractors, and that plaintiff's orthopedic surgeon was not qualified to testify to the proper technique of a technician participating in the surgery. After granting summary judgment to defendant Harden the trial court then granted summary judgment to defendant Armstrong on the issue of *res ipsa loquitur* since all participants in plaintiff's surgery were no longer before the court. See *Raleigh v. Alcon Laboratories, Inc.*, 403 Ill. App. 3d 863 (1st Dist. 2010).

The appellate court reversed the judgment of the trial court and remanded the case for further proceedings. 2021 IL App (4th) 210038.

ARGUMENT

- I. ***Res Ipsa Loquitur* should go to the jury in every surgical case where there is evidence that the injury ordinarily would not have happened had proper care been used.**
- A. **Fourth District case of *Taylor v. City of Beardstown* is not at all relevant to the case at bar.**

In their briefs all defendants argue that here the Fourth District Appellate Court erred by not following its prior case of *Taylor v. City of Beardstown* 142 Ill. App. 3d 584 (4th Dist. 1986). But the *Taylor* case is completely irrelevant to the case at bar. There plaintiff was admitted to the defendant hospital after suffering an epileptic seizure. During his hospital stay plaintiff fell from his hospital bed and suffered a broken hip. More than one year later plaintiff died and a wrongful death claim was filed. Summary judgment in favor of the defendant hospital was affirmed by the Fourth District because plaintiff did not oppose the motion for summary judgment:

We note that in Illinois, where facts contained in an affidavit in support of a motion for summary judgment are not contradicted by a counter-affidavit, then such facts are admitted and must be taken as true. *Heidelberger v. Jewel Co., Inc.* (1947), 57 Ill.2d 87, 92-93, 312 N.E. 2d 601, 604.

Plaintiff here failed in any way to rebut the affirmative evidence proffered by the defendants. While evidence as to a hospital's standard of care may be derived from a variety of sources (*Darling*), plaintiff has simply failed to produce any evidence whatsoever to establish the standard of care or any deviation therefrom. *Taylor* at 598-599

In the case at bar plaintiff did **not** fail to respond to defendants' motions for summary judgment. Rather, plaintiff here filed written Rule 213 (f)(3) opinions of his orthopedic expert, Dr. Sonny Bal, as well as supplied Dr. Bal's sworn testimony, all of which is set forth in plaintiff's Statement of Facts herein. Simply stated, the facts in the *Taylor* case are

completely inapplicable to the case at bar.

And most importantly, here defendants misconstrue the Fourth District's ruling in *Taylor*. Contrary to defendants' arguments, the *Taylor* court did **not** rule that expert testimony is absolutely needed when *res ipsa loquitur* is pleaded. Rather, the *Taylor* court ruled:

Thus, to invoke the doctrine, a proper foundation must be alleged and the elements established. Of particular importance in pleading *res ipsa* is the first element, involving results which would not ordinarily occur were it not for the negligent conduct of the defendant. That element will be established **either** by presenting expert testimony to that effect **or** else by showing the complained of conduct was so grossly remiss that it falls within the common knowledge and understanding of nonmedical persons, thereby obviating the need for expert evidence. *Taylor* at 593. (emphasis added)

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) this 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 plaintiffs 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 filed Rule 213(f)(3) disclosures Dr. Bal had 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)

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 should not be taken from the jury. *Dyback v. Weber*, 114 Ill.2d 232 (1986); *Poole, supra*.

In those cases where 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. 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 is this Court's opinion in *Spidle v. Steward*, 79 Ill.2d 1 (1980). There the trial court directed a verdict in favor of the defendant surgeon on the issue of *res ipsa loquitur*. That ruling was affirmed by the appellate court but reversed by this Court which held that the plaintiff's evidence was sufficient to warrant submitting to the jury the *res ipsa loquitur* counts. This 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. These are exactly the facts in the case at bar.

Additionally, 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 that 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* was 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:

¶ 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 22.02. Secondly, the court’s finding completely contradicts the evidence. The unrebutted 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.

B. Res ispa loquitur may be pleaded in the alternative.

On page 15 of her brief Harden sets forth the following:

The *res ispa loquitur* rule aids 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.

This quote does not come from this Court’s ruling in *Heastie v. Roberts*, 226 Ill. 2d 515 (2007). Rather, it is dicta from the case of *Collgood, Inc. v. Sands Drug Co.*, 5 Ill. App. 3d 910 (5th Dist. 1972).

And the very premise upon which Harden makes this argument (“plaintiff has offered specific evidence”) is unfounded. Paragraph 12 of plaintiff’s *res ispa loquitur* count alleges that the “injuries to WES JOHNSON’s femoral nerve occurred while the retractors, scalpel, electrocautery device and other surgical instruments were under the control of (defendants).” And plaintiff’s orthopedic surgery expert, Dr Bal, merely opined that the retractors used in plaintiff’s hip surgery most likely caused his permanent nerve damage. Firstly, this is an opinion, not a fact. And the jury is entitled to believe Dr. Bal; or not. But more importantly, this opinion is not specific: Was the damage to plaintiff’s nerve done when Dr. Armstrong

initially placed the retractors? Was the damage done when Dr. Armstrong later moved the retractors closer to plaintiff's femoral nerve? Was the damage done because defendant Harden was using too much pressure when she was handling the retractors? Or was the damage done simply because the retractors were in place too long?

This "specific evidence" argument was addressed in this Court's decision in *Kolakowski v. Voris*, 83 Ill. 2d 388 (1980), wherein this Court held:

The defendant next 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 because direct evidence is no longer within the exclusive control of the defendant. Defendant's theory would be accurate if the evidence introduced by plaintiff conclusively established the exact cause of his injuries. Here, the deposition of plaintiff's expert witness, Dr. Fox, reveals that, in his opinion, plaintiff's injuries were the result of the forcing of a bone "plug" against the spinal cord after the disc was removed. This statement "was merely the opinion of the (expert) witness, given, as such, upon a state of facts assumed to be true. It still remained for the jury to determine the facts, and the opinion was nevertheless an opinion only, whether it states what did cause the condition or what might cause it." (*Clifford-Jacobs Forging Co. v. Industrial Com.* (1960), 19 Ill.2d 236, 243, 166 N.E.2d 582.) The inference of negligence raised by the doctrine of *res ipsa loquitur* does not disappear when such specific evidence is admitted. Rather, both the opinion of the expert witness as well as the inference of general negligence arising from the doctrine of *res ipsa loquitur* remain to be considered by the jury with all other evidence in the case. (*Metz v. Central Illinois Electric & Gas Co.* (1965), 32 Ill.2d 446, 449, 207 N.E.2d 305.) 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. (*Collgood, Inc. v. Sands Drug Co.* (1972), 5 Ill.App.3d 910, 916, 284 N.E.2d 406; *Erckman v. Northern Illinois Gas Co.* (1965), 61 Ill.App.2d 137, 147-48, 210 N.E.2d 42. See *Prosser, Torts* sec. 40, at 232 (4th ed. 1971); 3 J. Dooley, *Modern Tort Law* sec. 48.17 (1977); *Annot.*, 33 A.L.R.2d 791, 795 (1954).) Under the circumstances, we find defendant's contention on this issue to be without merit. *Kolakowski* at 397-398.

In a special concurrence in *Kolakowski* this Court cited with approval Prosser, Torts

§ 40 at 232 (4th Ed. 1971):

“Plaintiff is of course bound by his own evidence; but proof of some specific facts does not necessarily exclude inferences of others. When the plaintiff shows that the railway car in which he was a passenger was derailed, there is an inference that the defendant has somehow been negligent. When he goes further and shows that the derailment was caused by an open switch, he destroys any inference of other causes; but the inference that the defendant has not used proper care in looking after its switches is not destroyed, but considerably strengthened. If he goes further still and shows that the switch was left open by a drunken switchman on duty there is nothing left to infer; and if he shows that the switch was thrown by an escaped convict with a grudge against the railroad, he has proved himself out of court. It is only in this sense that when the facts are known there is no inference, and *res ipsa loquitur* simply vanishes from the case. On the basis of such reasoning as this, it is quite generally agreed that the introduction of some evidence which tends to show specific acts of negligence on the part of the defendant, but which does not purport to furnish a full and complete explanation of the occurrence does not destroy the inferences which are consistent with the evidence, and so does not deprive the plaintiff of the benefit of *res ipsa loquitur*.” (Footnotes omitted.) (Emphasis added.) Prosser, Torts sec. 40, at 232 (4th ed. 1971).

Moreover, here the jury will receive IPI 22.02 which reads:

Under our law a plaintiff may attempt to prove in either of two ways that defendants were negligent. He may prove either what defendants actually did or did not do, or, on the other hand, he may attempt to prove the following propositions:

- First: That the plaintiff was injured.
- Second: That the injury was received from surgical instruments 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 surgical instruments 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 instruments 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' negligence, if any, was not a proximate cause of the plaintiff's injury, then your verdict shall be for the defendants under this Count.

In 2001 this Court had the opportunity to revisit the *Kolakowski* “specific evidence v. *res ipsa loquitur*” argument, but chose not to do so. See *Adams v. Family Planning*, 193 Ill.2d 583 (2001). In *Adams* the appellate court had held that “a plaintiff does not forfeit her reliance on the *res ipsa loquitur* doctrine by presenting evidence regarding the specific nature of the defendant's negligence or the cause of the injury.” 315 Ill.App.3d 533 at 546.

Again in 2020 this Court had the opportunity to address this issue. Again this Court declined. *Willis v. Morales*, 159 N.E.3d 952 (2020).

But since this Court accepted this *Wes Johnson* case, plaintiff would urge this Court to clarify the following language in *Heastie v. Roberts*:

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 actor or force was responsible, the *res ipsa* doctrine could not even be invoked. *Heastie* at 539.

Res ipsa loquitur cases arising out of surgery are fundamentally different than *res ipsa loquitur* cases arising in some other context (ie. damages caused to a home by a gas explosion, *Metz v. Central Illinois Electric & Gas Co.*, 32 Ill.2d 446 (1965); new rope

breaking and causing personal injuries, *May v. Columbian Rope Company*, 40 Ill.App.2d 264 (1st Dist., 1963)).

Here, prior to surgery plaintiff had an arthritic hip but had no lower extremity muscle dysfunction/atrophy. After surgery 2 of plaintiff's 4 quadriceps muscles are completely and permanently denervated. Plaintiff has constant pain. Plaintiff has significant loss of strength which has caused him to fall and sustain multiple concussions and traumatic brain injury. Permanent denervation of 2 muscles simply does not occur in the absence of negligence during hip surgery. Defendants' argument that here plaintiff may not avail himself of the doctrine of *res ipsa loquitur* is without merit.

II. Technician cannot testify to proper surgical technique.

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 Nurse 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 here 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. Surgeon may testify to standard of care for technician 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 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 1124 (4th Dist. 2008), the appellate court ruled that an obstetrician was qualified as an expert to testify to a surgical nurse's standard of care. In announcing a "Providing-Medical-Care Continuum" the appellate 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." The appellate 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 permanent denervation of 2 of 4 quadriceps does not ordinarily occur absent negligence, is enough to allow *res ipsa loquitur* to go to the jury.

IV. Plaintiff waived no arguments.

All defendants argue that plaintiff waived certain arguments by failing to raise those arguments in the appellate court. This is not accurate. In his appendix hereto plaintiff is attaching both his Appellate Brief (A-57) and Reply Brief (A- 101) which were filed in the appellate court.

Ant it should be noted that these same waiver arguments were made in the appellate court, which dispatched these waiver arguments in all of 2 sentences:

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. *Johnson* at ¶ 35.

And ultimately, waiver is a limitation on the parties, not the reviewing courts. A court may choose to review any issue in order to achieve a just result. *People v. Hoskins*, 101 Ill. 2d 209 (1984). Waiver may be excused by a reviewing court in the interest of maintaining a sound, uniform body of precedent. *People v. Wilson* 155 Ill. 2d. 374 (1993). Had this Court not desired to address the arguments of the parties below, it is doubtful that this Court would have granted defendants' petitions for leave to appeal.

CONCLUSION

The opinion of the Fourth District Appellate Court should be affirmed.

Respectfully submitted

/s/ James P. Ginzkey
James P. Ginzkey
Attorney for Plaintiff-Appellee

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.

/s/ James P. Ginzkey

James P. Ginzkey

Attorney for Plaintiff-Appellee

PROOF OF SERVICE

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned certifies that the statements in this instrument are true and correct in that on the 4th day of April, 2022 at or before the hour of 5:00 p.m. I caused the foregoing instrument to be filed with the Clerk of the Illinois Supreme Court using Odyssey eFile and Serve, which shall serve the parties of record as designated in the system. The following attorney(s) of record will also be served by electronic mail at their primary and secondary addresses of record, as follows:

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/s/ James P. Ginzkey

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APPENDIX

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1. Plaintiff's Supreme Court Rule 213(f)(3) Witness Disclosure
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3. Plaintiff's Appellate Court Reply Brief - Reply Brief of Appellant A - 101

**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

<p>PLAINTIFFS' SUPREME COURT RULE 213(f)(3) WITNESS DISCLOSURE OF SONNY BAL, M.D.</p>
--

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

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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:

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

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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

February 10, 2019

A - 5

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

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. Wenhai 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,** Vandellune 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." Biolog 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." Biolog Symposium, Washington, DC, June 1-11, 2005.
26. **Bal BS.** "Primary total knee replacement with a zirconia ceramic femoral component." Biolog 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,

February 10, 2019

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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, Zanolco 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 Osteointegration 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 Technology." Tissue Engineering of Articular Cartilage.
February 10, 2019

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.
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February 10, 2019

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Elite reviewer on the Editorial Board, *Journal of Arthroplasty*, September 2006 to December 2016.

ABJS Member Associate Editors Board, *Clinical Orthopaedics and Related Research*, 2006 to present.

Guest Editor, *Journal of Bone and Joint Surgery*, May 2007 to December 2016.

International Editorial Board, *The Knee*, May 2007 to December 2016.

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Reviewer, MU Research Board, Fall 2013: Patient-Specific Rehabilitation in Knee Osteoarthritis (PI, Sayers S).

Editor-in-Chief, *Open Access Surgery*. August 2012 to April 21, 2014.

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Editorial Board, *Arthroplasty Today*, peer-review journal of AAHKS. July 2, 2014 to present.

Musculoskeletal Transplant Foundation, Established Investigator Grant Reviewer 2014.

MU Research Board Peer Grant Reviewer 2014.

Reviewer of abstracts for the 2016 Annual Orthopaedic Research Society Meeting, September 2015.

Associate Editor of Basic Science, Biomechanics and Kinesiology at *The Knee Journal*. December 2015 to December 2016.

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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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IN THE FOURTH DISTRICT APPELLATE COURT
FROM THE ELEVENTH JUDICIAL CIRCUIT
STATE OF ILLINOIS

WILLIAM "WES" JOHNSON,	)	Appeal from the Circuit Court
plaintiff/appellant,	)	of the Eleventh Judicial District
	)	McLean County, Illinois
vs.)	
	)	No.: 2018 L 0000126
LUCAS ARMSTRONG, MCLEAN COUNTY)	
ORTHOPEDICS, LTD., SARAH HARDEN,	)	Honorable Rebecca Simmons-Foley
and ADVOCATE HEALTH AND HOSPITALS	)	Judge Presiding
CORPORATION, d/b/a ADVOCATE)	
BROMENN MEDICAL CENTER,)	
defendants/appellees,)	

BRIEF OF APPELLANT

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ORAL ARGUMENT REQUESTED

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.

<i>Wingo v. Rockford Memorial Hospital</i> , 292 Ill.App.3d 896 (2 nd Dist. 1997)	17
<i>Petryshyn v. Slotky</i> , 387 Ill.App.3d 1112 (4 th 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.

<i>Smith v. Eli Lilly & Co.</i> , 137 Ill.2d 222, 257 (1990).	19
<i>Raleigh v. Alcon Laboratories, Inc.</i> , 403 Ill.App.3d 863, 869 (1 st Dist. 2010).	19-20
<i>Heastie v. Roberts</i> , 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 proximately 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

/s/ James P. Ginzkey

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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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APPENDIX

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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

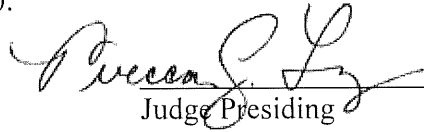
It having come on for hearing upon the oral motion of defendant Lucas Armstrong, and over objection of plaintiff, the Court finds that the retractors in question can no longer be demonstrated to be within the exclusive control of defendant, Lucas Armstrong; rsf 12-22-20

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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18934/Order re MSJ

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

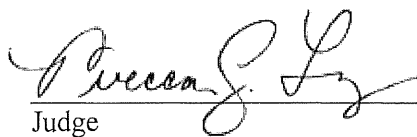
ORDER

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:

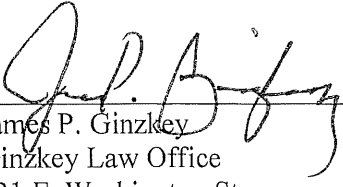


Judge

1/5/2021

Date

AGREED AS TO FORM BY:


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/s/ Scott Schoen
Scott Schoen
Langhenry, Gillen, Lundquist &
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FILED
1/6/2021 3:34 PM
DONALD R. EVERHART, JR.
CLERK OF THE CIRCUIT COURT
MCLEAN COUNTY, ILLINOIS

**APPEAL TO THE ILLINOIS APPELLATE COURT, FOURTH DISTRICT
FROM THE CIRCUIT COURT OF THE ELEVENTH JUDICIAL CIRCUIT
MCLEAN COUNTY, ILLINOIS**

WILLIAM "WES" JOHNSON,

plaintiff-appellant,

vs.

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

defendants-appellees.

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No. 201810000126

Honorable Rebecca S. Foley
Judge Presiding

NOTICE OF APPEAL

NOW COMES plaintiff, William "Wes" Johnson, by his undersigned attorneys, hereby appealing pursuant to Rule 304(a) the trial court's Orders of:

- December 22, 2020 granting defendant, Lucas Armstrong's, Motion for Summary Judgment on Count III of plaintiff's Complaint and entering judgment in favor of defendant Armstrong and against the plaintiff as to Count III; and
- January 5, 2021 granting defendants, Sarah Harden and Advocate Health and Hospitals Corporation d/b/a Advocate BroMenn Medical Center's, Motion for Summary Judgment and entering judgment in favor of those defendants, and against the plaintiff.

William "Wes" Johnson, plaintiff/appellant

by: /s/ James P. Ginzkey
One of His Attorneys

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 6th day of January, 2021 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 parties of record at the email addresses 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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K:\Data\Clients\Johnson, W\0 APPEAL\NoticeAppeal1-6-21

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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: 4-21-0038Circuit Court/Agency No: 2018L000126Trial Judge/Hearing Officer: REBECCA FOLEY

v.

LUCAS ARMSTRONG, ET AL.

Defendant/Respondent

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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: 4-21-0038

Circuit Court/Agency No: 2018L000126

Trial Judge/Hearing Officer: REBECCA FOLEY

v.

LUCAS ARMSTRONG, ET AL.

Defendant/Respondent

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4-21-0038

**IN THE FOURTH DISTRICT APPELLATE COURT
FROM THE ELEVENTH JUDICIAL CIRCUIT
STATE OF ILLINOIS**

WILLIAM "WES" JOHNSON,	)	Appeal from the Circuit Court
plaintiff(s)/appellant(s),	)	of the Eleventh Judicial District
	)	McLean County, Illinois
vs.)	
	)	No.: 2018 L 0000126
LUCAS ARMSTRONG, MCLEAN COUNTY)	
ORTHOPEDICS, LTD., SARAH HARDEN,	)	Honorable Rebecca Simmons-Foley
and ADVOCATE HEALTH AND HOSPITALS	)	Judge Presiding
CORPORATION, d/b/a ADVOCATE)	
BROMENN MEDICAL CENTER,)	
defendant(s)/appellee(s),)	

REPLY BRIEF OF APPELLANT

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ORAL ARGUMENT REQUESTED

ARGUMENT

A. SURGICAL TECHNICIAN HARDEN

Plaintiff is intrigued by the hyperbolic indignation of counsel for surgical technician, Harden. Even a cursory review of the "Point & Authorities" or the body of Plaintiff's Appellate Brief will reveal that there is no citation to the case of *Nesvacil v. Kochiu*.

And contrary to Harden's suggestion, Plaintiff in no wise referred to the trial court as an ass or an idiot. Quoting Dickens, Plaintiff merely argued that the **law** is an ass or an idiot if the **law** supposes two diametrically opposed results based upon the exact same set of facts.

Harden's indignation is even more surprising given the fact that the most she can do with *Petryshyn v. Slotky*, 387 Ill.App.3d 1112 (4th Dist., 1998) is to misrepresent this Court's ruling. Contrary to Harden's argument, this Court's ruling in *Petryshyn* was not based on a surgical nurse's failure to communicate with the surgeon. In fact, the surgical nurses in *Petryshyn* had settled with Plaintiff prior to that case even going to trial. The primary holding in *Petryshyn* was that a surgeon should be able to rely on a scrub nurse or a surgical technician to make an accurate instrument count at the end of the procedure, and to testify that the failure to do so is negligent. Rather than relying on Harden's misinterpretation one would be better served to consult the author of the *Petryshyn* opinion, Justice Steigmann, who states in his treatise:

A physician may be qualified to testify as an expert regarding the standard of care of a nurse who was a surgical team member:

Plaintiff sued her obstetrician and the hospital, alleging medical malpractice, based on complications she suffered after undergoing a C-section. Prior to the C-section, the doctor had placed an intrauterine

pressure catheter (IUPC) into plaintiff's uterus to monitor her labor contractions. The C-section and birth of the child proceeded without incident, but months later, a portion of the IUPC was discovered that had been left in plaintiff. A board-certified physician in obstetrics with many years of experience testified as plaintiff's witness in an evidence deposition not only regarding the defendant physician's standard of care and their breach, but also regarding the nurses' standard of care and their breach. After the hospital settled, the trial court permitted defendant to introduce this expert testimony despite plaintiff's objection. The jury ruled in favor of defendant, and plaintiff appealed. The appellate court affirmed in a decision written by Justice Steigmann that discussed when a physician would be permitted to testify as an expert regarding the standard of care expected of a nurse in the context of the "providing medical-care-continuum." The appellate court said case involved the intrinsically intertwined interaction between a physician and a nurse when they are members of the same surgical team, in which they are interacting substantially contemporaneously to care for the same patient. The appellate court concluded that the expert witness in question "had the requisite expertise and knowledge regarding the responsibilities of the individual surgical team members involved in such procedures," thereby permitting him to testify as an expert witness regarding the nurses' standard of care and breach thereof. Steigmann, *Illinois Evidence Manual* §7:47 (4th Edition)

It is somewhat unclear in the *Petryshyn* case whether the surgical assistant was a licensed nurse or a technician. But no such ambiguity exists in the case of *Kniceley v. Migala*, 237 Ill.App.3d 72 (2nd Dist., 1992). In that case, Plaintiff was a police officer for the village of Villa Park who sued his orthopaedic surgeon following three unsuccessful knee arthroscopies. In each surgery Defendant was assisted by Frank Cassara, a certified surgical tech, which is the same scenario as the case at bar. Here Sarah Harden is a surgical tech, not a licensed nurse. The *Kniceley* court ruled:

Here, the Defendant was an experienced orthopaedic surgeon. The trial court could reasonably have concluded that he was familiar with the standard of care applicable to an individual who assisted him during the surgery and who was under his direction. The trial court

did not err by allowing Defendant to testify about the standard of care applicable to Cassara. *Kniceley* at 80-81.

In the case at bar the trial court committed reversible error by granting summary judgment for Advocate and Sarah Harden on the basis that the testimony of Plaintiff's orthopedic expert was inadmissible. This Court should reverse this ruling and remand this case with directions.

B. DR. ARMSTRONG

Misdirection is a strategy favored by football coaches and defense counsel alike. Here Dr. Armstrong misdirects the attention of this Court by arguing:

- 1.) A bad surgical result, standing alone, is not proof of negligence; and
- 2.) Femoral nerve damage can occur during the course of a hip arthroplasty even when the standard of care is met.

Both of these statements are correct; but both of these statements are utterly irrelevant. Plaintiff's retained orthopedic expert, Dr. Bal, never testified that a bad result is tantamount to negligence. And he readily acknowledged that transient femoral nerve damage can occur even though the standard of care is met. Rather, Dr. Bal testified as follows:

- (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 plaintiffs 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)

And 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)

On Page 9 of his brief, Dr. Armstrong intimates that he owed no duty to Plaintiff. But in his Answer (R. C131) to ¶ 5 of the Complaint (R. C28) Dr. Armstrong admitted that, "at all times alleged herein ARMSTRONG had a duty to act as a reasonably careful orthopedic surgeon under the circumstances described."

Additionally, Dr. Armstrong fails to grasp the principle set forth in *Poole v. University of Chicago*, 186 Ill.App.3d 554 (1st Dist., 1989) wherein plaintiff's expert testified that, although vocal cord paralysis is a risk associated with thyroidectomy, **bilateral** vocal cord paralysis does not occur in the absence of negligence. In the case at bar, Plaintiff did not sustain a mere transient femoral nerve injury. Rather he sustained a **permanent** femoral nerve injury resulting in the complete denervation of two of his four left quadricep muscles.

Plaintiff's left thigh is atrophied resulting in multiple falls and multiple concussions.

C. WAIVER/FORFEITURE RULE

Dr. Armstrong, Harden and Advocate argue that Plaintiff has waived his *res ipsa loquitur* arguments on appeal. Plaintiff is bewildered by Advocate's argument in this regard. Advocate's motion for summary judgment was thoroughly briefed by the parties, which pleadings are in fact part of the record on this appeal; and the report of proceedings with respect to the trial court's ruling on that motion is also included in the record on appeal. (R. 1-20)¹

And Dr. Armstrong's forfeiture argument completely ignores the following two sections of Plaintiff's original brief:

- 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.

* * *

- 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.

There is no merit to the suggestion that Plaintiff has somehow waived or forfeited his *res ipsa loquitur* argument against Dr. Armstrong and Advocate. Firstly, waiver or forfeiture is a limitation on the parties, not on the jurisdiction of the court. See, *Committee for*

¹ Plaintiff's motion to reconsider this ruling was merely to call the trial court's attention to the recent case of *Willis v. Morales*, 2020 IL App 180718 (R. C788); More importantly, Plaintiff did not appeal the denial of his motion to reconsider. Having no transcript of the reconsideration hearing is therefore irrelevant.

Educational Rights v. Edgar, 174 Ill.2d

1 (1996). Even when a party files no brief the Appellate Court may rule on the merits. *Rey v. Rey*, 23 Ill.App.3d 274 (2nd Dist., 1974). Additionally, the failure to present a report of proceedings on appeal does not require automatic dismissal where the issues can be resolved on the record as it stands. *Marx Transport, Inc. v. Air Express International Corp.*, 379 Ill.App. 3d 849 (1st Dist., 2008).

Here Dr. Bal's Rule 213 disclosures and deposition testimony are sufficient to allow Plaintiff's *res ipsa loquitur* counts to go to the jury. The trial court should be 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 6 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 21st day of July, 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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