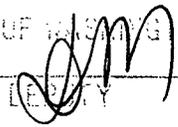


COURT OF APPEALS
DIVISION II

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STATE OF WASHINGTON
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No: 41969-6-II

COURT OF APPEALS, DIVISION II

OF THE STATE OF WASHINGTON, TACOMA

T. ARTHUR GUSCOTT,

Defendant/Counter-Plaintiff/Appellant

vs.

ADVANCED HEALTH CARE, INC.

Plaintiff/Counter-Defendant/Respondent

BRIEF OF APPELLANT

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ORIGIN

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APPENDIX

- A.** *Anderson v. AKZO Nobel Coatings, Inc*, No. 82264-6
 (Washington State Supreme Court filed September 8, 2011)

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I. INTRODUCTION.

In 2006, Appellant T. Arthur Guscott was an 86 year old man with an abdominal aortic aneurysm (AAA). Respondent Advanced Health Care (AHC) provided caregivers for Mr. Guscott. On Christmas day, while being transported to his car by an AHC caregiver, Mr. Guscott suffered a hard fall out of his wheelchair onto the pavement. Three days later his AAA was discovered to be leaking, requiring emergency surgery.

The trial court ruled that Mr. Guscott's physician experts were required to meet a *Frye* challenge and, without holding a *Frye* hearing, excluded those experts' opinions that the hard fall was a cause of the AAA leak. In excluding these opinions, the court found the *Frye* test required Mr. Guscott to prove, *inter alia*, general acceptance in the scientific community that a fall on one's buttocks from a wheelchair could cause an AAA to leak or rupture. Since the trial court's ruling, the Washington Supreme Court has issued its opinion in *Anderson v. AKZO Nobel Coatings, Inc*, No. 82264-6 (Washington State Supreme Court filed September 8, 2011),¹ which revisits and reiterates the applicability of *Frye* in a civil case, making clear that the exclusion of Mr. Guscott's experts' opinions based on *Frye* was erroneous.

¹ At this writing *Anderson v. AKZO* is in slip opinion form. A copy of the slip opinion is in the Appendix. *AKZO* page number cites refer to slip opinion page numbers.

II. ASSIGNMENTS OF ERROR

- A. The Trial Court committed reversible error by: ruling that Guscott's medical experts' opinions implicated *Frye*; failing to conduct a *Frye* hearing once it had so ruled; barring those opinions based on *Frye*; and entering summary judgment based on a lack of expert support for Guscott's theories of causation.
- B. The trial court impermissibly limited itself on reconsideration by failing to consider all materials submitted in light of its failure to hold a *Frye* hearing over Mr. Guscott's objection.
- C. The appropriate standard for determining admissibility of expert testimony in a civil case in light of challenge based on "novelty" is *Daubert*, not *Frye*.

III. STATEMENT OF CASE

A. Mr. Guscott's Injury.

Mr. Guscott was born August 1, 1920. He is a widowed, retired minister. CP 68. In 2005 Mr. Guscott was diagnosed with an abdominal aortic aneurism (AAA), which was intact. CP 436. An AAA is an enlargement of the abdominal aorta typically defined as larger than two times the normal size or greater than three centimeters. CP 697. The location of the aorta varies, but is defined medically as below the diaphragm down to the aortic bifurcations and next to the spine in the back. CP 697.

December 25, 2006, an AHC employee, Sonia Dang, transported Mr. Guscott to Christmas services. CP 450. Following the service, Ms. Dang attempted to transport Mr. Guscott by wheelchair to the car. During transport Mr. Guscott suffered a hard fall onto cement. CP 449-50.

Mr. Guscott was taken to Providence St. Peter Hospital's Emergency Department where he was examined by Dr. Eric Penner. Mr. Guscott was noted to be "pale" and "lightheaded," with charted blood pressures of 60/9, 91/63, and 106/60. CP 435, 443. Dr. Penner also noted tenderness on palpitation over the coccyx and right buttock cheek. CP 435. A nursing assessment revealed right hip pain. CP 439. Dr. Penner did not perform a thorough assessment to determine whether Mr. Guscott's AAA had leaked or ruptured because Mr. Guscott had declined surgical repair of the AAA in the past based on the "life-threatening" nature of the surgery. CP 436, 112. Dr. Penner did order an EKG to rule out a heart attack in light of Mr. Guscott's presentation with low blood pressure. CP 114. Mr. Guscott was discharged from the emergency department to his home with instructions to return if his pain increased. CP 439.

On the night of December 25, 2006, AHC employee, Louise Cornwell noted that Ms. Dang reported to her, "He fell out of his wh/ch and hit the cement hard after church today." CP 449. Ms. Cornwell, whose shift began at 8:00 p.m., observed Mr. Guscott "moaning and

groaning loudly due to pain.” CP 450. His transfers from his recliner to wheelchair to the toilet were very painful. CP 450. Mr. Guscott refused to transfer from his recliner to bed due to pain, but at 1:10 a.m. consented to that transfer. CP 450.

December 26, 2006, AHC employee Gwenn Cioffi, whose shift was from 8 a.m. to 8 p.m., noted Mr. Guscott’s right elbow continued to bleed; he required major assistance, had difficulty urinating, and complained of aches all over. That afternoon, he ate very little, was unable to urinate and groaned with every move. CP 452.

Also on December 26, AHC employee Nurse Andrea Edwards made a scheduled monthly visit to Mr. Guscott’s home. CP 447. Nurse Edwards noted Mr. Guscott’s swollen elbow and complaints of pain when still and on movement, and made an appointment for him with his personal physician, Dr. Widrow, for December 28, 2006. Also on December 26, 2006, at 5:00 p.m., Nurse Edwards reported Mr. Guscott’s condition to his daughter, Deborah, who lived in Chicago, noting that Deborah would come to Washington State and accompany Mr. Guscott to his physician’s visit. CP 448.

On the night of December 26, 2006, AHC employee Cornwell returned to provide home care from 8:00 p.m. to 8:00 a.m. She noted that Mr. Guscott continued to have difficulty urinating, and between 3:00 a.m.

and 4:00 a.m., his urine was “very orange.” CP 452. Ms. Cornwell noted that Mr. Guscott complained of chest pain and was “moaning and groaning” with every move. CP 452.

In the early morning of December 28, 2006, Mr. Guscott was taken by his daughter to Providence Hospital’s emergency department. There he was diagnosed with a leaking AAA, which he chose to have repaired. CP 250-1. Mr. Guscott was flown by helicopter to Harborview Medical Center.

When Mr. Guscott was received at Harborview, at about 3 or 4:00 p.m. on December 28, 2006, he was rushed to the operating room for surgery performed by Dr. Nam Tran. According to Dr. Tran, Mr. Guscott’s rupture was somewhat different from others because it was a “stable rupture.” Mr. Guscott was able to talk to his doctor; he was not hypotensive; he did not have ongoing CPR; he was not on a ventilator. CP 699. The surgery was successful. After nearly 30 days’ admission, Mr. Guscott was transported by air ambulance to a skilled care nursing facility in Lake Forest, Illinois, where he resides today.

B. The Proceedings Prior to the Trial Court’s *Frye* Ruling.

Despite the wheelchair fall, AHC filed suit against Mr. Guscott for caregiver services it had provided. CP 8-12. Mr. Guscott counterclaimed, alleging negligence and violation of the Vulnerable Adult Statute had

caused the fall, which in turn was a cause of his leaking AAA. CP 13-17; 41-49.

The trial court entered an order bifurcating the parties' claims. AHC's claim against Mr. Guscott was settled November 2009; Mr. Guscott's claims against AHC were set for trial January 3, 2011.

Prior to trial AHC moved *in limine* to exclude the testimony of Mr. Guscott's three physician experts on causation, arguing the *Frye* standard. CP 960. In response Mr. Guscott argued that *Frye* was inapplicable and submitted his experts' opinions in support. CP 205, 321, 979.

C. The Experts.

Mr. Guscott relied upon the causation opinions of three physician experts: Dr. Ross Heller, board certified in emergency medicine and employed by the St. Louis University Medical School in the Department of Surgery, Division of Emergency Medicine; Dr. Richard Gore, board certified in diagnostic radiology, practicing at Evanston Hospital, Evanston, Illinois, and professor of medicine at the University of Chicago, Department of Radiology, in Chicago (CP 519-20); and Dr. John Holmes, board certified cardiologist practicing at Virginia Mason Medical Center in Seattle. CP 674. AHC relied upon the causation opinions of two retained physician experts: Dr. Johansen, board certified in vascular surgery, and Dr. Michael J. Peters, board certified in radiology. AHC also

relied on select testimony of Mr. Guscott's vascular surgeon, Dr. Nam Tran. Their pertinent opinions follow.

Dr. Ross Heller has spent most of his emergency medicine career in hospitals designated as level one trauma centers. CP 729, 731-32. As a result, he has evaluated many patients with AAAs and aortic trauma. CP 732.

According to Dr. Heller, translational forces from a blunt deceleration impact were a cause of Mr. Guscott's injury, and those translational forces would be the same whether Mr. Guscott fell on his buttocks or landed on his side. CP 743. Dr. Heller explained that an AAA is very brittle, requiring a fall of very little distance to create sufficient force to cause a leak. CP 742. At his deposition, Dr. Heller demonstrated a close-to-ground fall by holding a cup at seat level and dropping it. CP 738. He explained that he had studied deceleration and acceleration as a flight surgeon and investigator of air crashes while in the U.S. Navy. CP 738.

Dr. John R. Holmes 's cardiology practice includes taking care of patients with aortic disease, including large AAAs, which involves following the patient's condition over many years. CP 676. According to Dr. Holmes, a fall can cause existing AAAs to leak as a result of deceleration and shearing forces. CP 679. Dr. Holmes' opinion is based

in part on medical knowledge that violent falls, even without direct trauma, can cause a normal aorta to rupture; accordingly, a fragile aorta, dilated and calcified, would be easier to rupture with less trauma. CP 679. Dr. Holmes was unaware of any trials of deceleration injuries to a known AAA to see what force would result in rupture. CP 680. Dr. Holmes' opinion was based on knowledge of shear forces on the aorta relating to how large the aorta is, coupled with blood pressure and heart rate, which led him to conclude that a significant deceleration injury would put additional wall stress on the diseased aorta. CP 680.

AHC's retained vascular surgeon expert, Dr. Kaj Henry Johansen, disagrees with the opinions of Dr. Heller and Dr. Holmes, believing that preceding trauma does not lead to rupture of an aneurysm, although he and Dr. Holmes were in agreement that wall stress or "wall tension" will cause an AAA to rupture. CP 143. According to Dr. Johansen, the forces exerted upon Mr. Guscott's aneurysm at the time of his fall were protective, axial forces (CP 143), and that there is no literature suggesting that trauma has ever been associated with aortic aneurysm rupture. CP 143.

AHC also relied upon the deposition testimony of Mr. Guscott's vascular surgeon, Dr. Nam Tran who testified that it was "unlikely" that a fall on one's buttocks would cause an AAA to leak or rupture. CP 700.

In addition to the primary question of whether trauma can cause an AAA to leak or rupture, a second question raised the issue whether an AAA could leak for three days prior to discovery.

On this point, Dr. Heller explained that Mr. Guscott's fall produced not a complete rupture but a leak caused by a small tear in the AAA, which Guscott's own body was able to seal off. CP 736. Dr. Heller explained that once the leak seals itself off, pressure can continue to the point where the body will not be able to wall it off. CP 736. That Mr. Guscott's blood pressure was originally low on examination is consistent with the body's reaction to leaking and subsequently walling off the leak or "temporizing" it. CP 738-9.

Dr. Heller also explained the pathophysiologic process of why the body may not be able to heal the tear: as the leak is temporized, the blood pressure begins to return to normal thereby increasing pressure across a weakened vessel, creating translational forces. CP 744. Dr. Heller has seen patients with AAAs in the emergency department who have fallen and presented in the manner he described. CP 744.

On this point, Mr. Guscott's cardiology expert, Dr. Holmes agreed, stating that Mr. Guscott had an "eggshell" aorta, and he fell hard on December 25; it cracked and started to leak slowly and was a contained rupture – which is why he survived. CP 681. According to Dr. Holmes,

the AAA would leak intermittently and stop and leak, then stop, again and again, until he became anemic enough and in pain enough to develop some angina which got him back to the emergency department. CP 681. Dr. Holmes noted that Mr. Guscott had an AAA which measured 8.2 cm in June 2006. He noted that after rupture, it was measured at 9.4 cm, but it was difficult to say how much of that increase was due to hematoma from the rupture. CP 677.

AHC's expert, Dr. Johansen, fundamentally agreed, stating that aneurysms which have leaked and then stopped leaking have been reported, but are "vanishingly rare." CP 144. Dr. Johansen also conceded that if an aneurysm bleeds into the retroperitoneum, as Mr. Guscott's did, it will frequently "tapenade" or wall itself off and the patient will remain alive. CP 144-5.

On this point, Mr. Guscott's vascular surgeon, Dr. Tran, stated that Mr. Guscott's rupture was somewhat different from others because it was a "stable rupture;" Mr. Guscott was able to talk to his doctor, he was not hypotensive, did not have ongoing CPR, and was not on a ventilator. CP 699.

Mr. Guscott's radiology expert, Dr. Richard Gore, who has published extensively on radiological interpretation, and is experienced in determining the age of bleeding which appears on radiological films,

particularly abdominal bleeds (CP 531-622), addressed the duration of Guscott's bleed from a radiological perspective.

Dr. Gore testified that he has seen patients with ruptured or "leaking" AAAs caused by falls or other trauma. CP 719. He explained that the age of a bleed is significant in determining course of treatment and that he is routinely called upon to determine the age of a bleed. CP 722. Dr. Gore reviewed Mr. Guscott's CT scans taken upon his arrival at Providence's emergency department December 28, 2006, and determined that some of the blood which appeared on the CT scans was most likely 3 days old, while other blood appeared fresh. CP 724-6. Based on this CT review, Dr. Gore opined that Mr. Guscott most likely suffered a rupture or leak of his AAA when he fell on December 25, 2006.

As additional support for his opinion, Dr. Gore noted the absence of a slit like inferior vena cava on Mr. Guscott's CT. CP 725. Dr. Gore explained that the inferior vena cava is typically wide. However, if the body takes blood from the inferior vena cava to help supply more vital organs, the inferior vena cava will appear slit-like. CP 725. The absence of this sign on Mr. Guscott's CT implied Mr. Guscott had not experienced a rapid bleed, but a slow leak. CP 725.

AHC's radiology expert, Dr. Michael J. Peters, also reviewed Mr. Guscott's December 28, 2006 CT scan, but reached a conclusion different

from Dr. Gore's: that all the bleeding occurred within a 10 to 12 hour time period based on the appearance of the hematoma outside of the aorta. CP 633. Dr. Peters testified to observing a significant retroperitoneal hemorrhage of different states of blood, some new, some in his opinion 10 to 12 hours old. CP 633. Dr. Peters does not believe that anyone could determine whether a leak was three days old. CP 634. Dr. Peters' opinion is based on his belief that the patient would simply continue to bleed and either die or have surgical intervention. CP 635. Dr. Peters did acknowledge at his deposition an AAA may bleed for three days, but it would be very rare and never without pain. CP 635.

AHC also relied on the testimony of Mr. Guscott's surgeon, Dr. Tran, who believed it would be hard to tell from a CT scan how old the blood is without a patient history. CP 699.

Mr. Guscott's expert, Dr. Gore, stated that in reaching his opinions, he also considered that Mr. Guscott was severely hypotensive in the emergency department after his fall. CP 718.

Mr. Guscott's cardiology expert, Dr. Holmes, also considered Guscott's history as a basis for his opinion, considering the AHC caregivers' notes that Mr. Guscott had pain "all over" between December 25 and 28, and "heart pain" on the night of the 26th. CP 686. In Dr.

Holmes' opinion this was "rest pain," which is the most concerning type of pain. CP 689.

Additionally, Dr. Holmes based his opinion on the fact that Mr. Guscott's white blood count on December 25, 2006 was 15,000, an indicator of tremendous physical stress, also referred to as demargination. CP 691. By December 28, the white blood count had dropped to 10,000, which is high-normal. CP 691.

In contrast, AHC's expert, Dr. Johansen, stated that Mr. Guscott had no real symptoms consistent with an aneurysm leak or rupture on December 25, 2006. CP 143. However, Dr. Johansen agreed that vascular surgeons typically do not diagnose AAAs. CP 145.

Finally, Guscott's radiology expert, Dr. Gore, was asked at his deposition whether he had determined the "Hounsfield Units" of the blood he identified on Mr. Guscott's CT. CP 722. Dr. Gore said he had not; that the radiologist would need to query the computer to obtain those readings which are often used to determine the density of the blood shown on a CT, density being related to the age of the bleed. CP 723, 725. AHC's radiology expert, Dr. Peters, gave no testimony concerning Hounsfield Units.

D. The Trial Court's Rulings.

Following hearing on AHC's motions *in limine* to bar the causation testimony of his experts, the trial court made the following rulings by "Letter Opinion" dated December 17, 2010, 17 days before trial:

- that because each of Guscott's experts "diagnose and have helpful knowledge of AAAs, the minimum requirements for qualification are met here." CP 342.
- that AHC had met its prima facia burden to show that Guscott's experts "present novel scientific theories," thus raising a *Frye* issue. CP 342.
- The court found that Guscott's experts's opinions were contradicted by Mr. Guscott's surgeon, Dr. Tran, who stated that a fall on one's buttocks was unlikely to cause an AAA to leak or rupture. CP 342.
- Based on Guscott's experts' failure to provide scientific literature associating AAA leaks with falls on one's buttocks, the court struck these opinions under *Frye*. CP 342.
- that Dr. Gore's dating of the leak from Guscott's CT scan is unsupported from a scientific perspective. CP 343.
- Based on the testimony of Dr. Tran that "this is difficult to do accurately, and the only way to determine the duration of the leak is to take a history from the patient and determine when objective symptoms began," the court disallowed Dr. Gore's opinions concerning the density of blood appearing on the CT. CP 342-3.
- In addition, the trial court raised the issue of Hounsfield Units, an acceptable method of measuring the density of blood appearing on a CT scan, noting that this method was not utilized by Dr. Gore. CP 342-3.

- the trial court barred Dr. Heller's opinion that an AAA may leak and clot itself off, stating "there is no scientific basis for this belief." CP 343.

January 3, 2011, the day of trial, the court entered its Order granting AHC's Motions *in Limine* on January 3, 2011. CP 351. That Order tracks the court's Letter Opinion. Also on January 3, 2011, the court entered its Summary Judgment Order finding that Guscott is unable to establish a causal relationship between his wheelchair fall and the rupture of his AAA. CP 430.

January 13, 2011, Guscott filed his Motion for Reconsideration of the trial court's *in limine* rulings which formed the basis of its Order of January 3, 2011 granting Summary Judgment in favor of AHC; Guscott also sought entry of an order vacating the summary judgment order. CP 368-96. In support of reconsideration of the trial court's *Frye* rulings, Guscott argued, *inter alia*, the following points: the trial court improperly barred Dr. Gore's radiological opinions on the age of blood seen on CT based on the deposition testimony of a non-radiologist, Dr. Tran, who stated it was "hard to tell" from a CT scan (CP 385); the trial court improperly barred Dr. Heller's opinion that AAAs can clot off and leak again based on Dr. Tran's testimony that such behavior is "not common" (CP 386); because the trial court did not conduct a *Frye* hearing, ruling should have been reserved until after facts were received in evidence

concerning the mechanics of Mr. Guscott's fall and his clinical presentation to determine whether a genuine *Frye* issue had been raised (CP 391); and, because no *Frye* hearing was held prior to ruling, the trial court should not limit its review to the record before it. CP 391.

Mr. Guscott did supplement the record on Reconsideration with materials including a publication concerning deceleration forces (CP 638) from drop heights of less than 4 feet (CP 640), and showing that vertical falls can injure or rupture internal organs, including the aorta. CP 642. Also included were published studies on the incidence of aorta injury due to side impact collisions (CP 646-7), and a medical article concerning impact of fluid shear stress on an AAA (CP 756), which discusses the shear stress on the wall of an aneurism created by changes in blood pressure. Mr. Guscott also supplemented the record with Dr. Gore's Declaration that subsequent to the trial court's ruling, he measured the Hounsfield Units of the blood density appearing on Mr. Guscott's CT scan and found those measurements consistent with his original opinion – that some of the blood was approximately 3 days old. CP 487, 490. In addition, Dr. Gore's Declaration cited a medical article appearing in *Radiology* (CP 512) as well as a textbook edited by Dr. Gore (CP 624), all dealing with blood in the abdomen and pelvis and the techniques used by

radiologists in aging blood including the aging of blood based on its density. CP 492, 494, 624.

January 18, 2011, the trial court issued its Order (erroneously dated 2010) in letter format partially denying Reconsideration, and pertinently finding that Mr. Guscott was required to present “some evidence to show acceptance in the scientific community of his expert’s [sic] theories.” CP 783. The trial court, however, did allow oral argument on one issue: whether “newly submitted evidence warrants reconsideration of this court’s *Frye* ruling.” CP 784.

Following oral argument of that one issue and consideration of this Court’s opinion in *State v. Copeland*, the trial court, on March 3, 2011, issued its Order denying Reconsideration. CP 935. Therein, the court pertinently found that although the court did not hold a *Frye* hearing, Mr. Guscott’s burden at hearing on AHC’s motions *in limine* was to “present evidence in light of the challenge to his experts ... and he did not meet that threshold burden.” *Id.*

Notice of Appeal was timely filed. CP 938-955. Subsequent to filing the Notice of Appeal the Washington State Supreme Court filed its opinion interpreting the application of *Frye* in the context of civil litigation. *Anderson v. AKZO Nobel Coatings, Inc*, No. 82264-6 (Washington State Supreme Court filed September 8, 2011).

IV. SUMMARY OF ARGUMENT

The trial court's *Frye* rulings are in direct conflict with Washington law as reiterated by the Washington State Supreme Court in *Anderson v. AKZO Nobel Coatings, Inc*, No. 82264-6, September 8, 2011. To the extent the trial court relied upon AHC's argument based on *Grant v. Boccia*, 133 Wn.App. 176 (2006), CP 331, that case was overruled by *AKZO*, wherein the Supreme Court pertinently stated:

Frye does not require that the specific conclusions drawn from the scientific data upon which Dr. Khattak relied by generally accepted in the scientific community. *Frye* does not require that every deduction drawn from generally accepted theories to be generally accepted. Other evidentiary requirements provide additional protections from deductions that are mere speculation. E.g ER 104(a); ER 401; ER 403. Because Dr. Khattak's testimony was not based upon novel science, *Frye* was not implicated in this case...To the extent that the Court of Appeals opinions in *Grant* (citations omitted) and *Ruff* (citations omitted) are inconsistent with this opinion they are overruled.

AKZO at 19.

Moreover, the trial court's ruling was the product of a flawed procedure where the trial court admittedly failed to conduct a *Frye* hearing or *voir dire* the medical experts at trial after determining that a *Frye* issue had been raised and, on reconsideration, refused to reconsider either materials previously submitted or new material submitted in support of reconsideration. Had the trial court done so, it likely would not have

misapplied *Frye* in a case involving “pure opinions” of physicians -- opinions based on their experience and training in recognizing leaking AAAs and, in the case of Mr. Guscott’s radiology expert, in reading CT scans and approximating the age of blood present based on various features.

Finally, to the extent that any one of Mr. Guscott’s medical experts can be said to have relied upon a “novel” methodology, then *Daubert*, not *Frye*, is the appropriate test to apply here. Application of *Frye* in civil litigation improperly elevates the burden of proof in a civil case by requiring the proponent of medical opinions to meet a standard well in excess of “a reasonable degree of medical probability.” Where the Washington State Supreme Court has recently noted that, “In civil cases, we have neither expressly adopted *Frye* nor expressly rejected *Daubert*,” the issue is ripe for review by this Court. *AKZO* at 8.

V. ARGUMENT

A. The Trial Court committed reversible error by: ruling that Mr. Guscott’s medical experts’ opinions implicated *Frye*; failing to conduct a *Frye* hearing once it had so ruled; barring those opinions based on *Frye*; and entering summary judgment based on a lack of expert support for Mr. Guscott’s theories of causation.

1. The Standard of Review is *De Novo*.

Questions of admissibility under *Frye* are reviewed *de novo*. *Anderson v. AKZO Nobel Coatings, Inc*, No. 82264-6 (Washington State Supreme Court filed September 8, 2011) at p. 5. Summary judgment is also reviewed *de novo*, with all inferences taken in favor of the non-moving party. *Id.* Further, in the course of conducting its *de novo* rule of admissibility under *Frye*, the Washington Supreme Court has stated:

The reviewing court will undertake a searching review which may extend beyond the record and involve consideration of scientific literature as well as secondary legal authority.

State v. Copeland, 130 Wn.2d 244, 255-6, 922 P.2d 1304 (1996) [citations omitted].

2. The trial court erred by finding that Mr. Guscott's medical expert opinions were subject to a *Frye* test.

Two months before trial, AHC served its motion *in limine* seeking to bar Mr. Guscott's medical experts based on lack of qualifications. CP 960. In that motion, AHC also urged application of the *Frye* test to bar the experts' opinions -- that a hard fall from a wheelchair was a cause of Mr. Guscott's leaking AAA. AHC characterized Guscott's burden as follows: that the experts' theories of causation must be generally accepted in the relevant medical community (CP, 965, 966, 971), ostensibly relying on *Grant v. Boccia*, 133 Wn.App. 176 (2006). In support of its claim that

Mr. Guscott's theories of causation were "novel," AHC offered testimony of a vascular surgeon, Dr. Tran: that a fall on one's buttocks is "unlikely" to cause an AAA to leak or rupture. CP 342. AHC also offered the vascular surgeon's testimony that it would be difficult to determine the duration of a leak from a CT scan, and the only way to determine the duration is to take a history from the patient and learn when objective symptoms began. CP 342.

Mr. Guscott responded by establishing his experts' qualifications (CP 323), and demonstrating why the *Frye* standard has no application where the basic medical principles were undisputed: that shearing forces can injure the aorta (CP 324), and that blood clots and aortic bleeds may be contained temporarily. CP 324. Mr. Guscott also demonstrated that AHC's own retained expert, Dr. Johansen, as well as Dr. Tran, agreed that, although rare, an AAA leak may stop for a time (CP 699, 752), and that Mr. Guscott's AAA leak was different from others because it was a "stable rupture," according to Dr. Tran. CP 699. Mr. Guscott also demonstrated that the methodology used by his experts involved correlating trauma with documented clinical signs and symptoms (CP 322-3) and objective radiologic findings CP 324, neither of which was claimed to be "novel."

December 17, 2010, the trial court issued its rulings by letter opinion (CP340), which were incorporated into an order on the first day of trial, January 3, 2011. CP 351. The trial court found Mr. Guscott's experts were qualified to render opinions because they "diagnose and have helpful knowledge of AAAs." CP 354. The court went on to address the threshold issue of *Frye's* applicability, pertinently finding that AHC satisfied its *prima facie* burden of showing that Mr. Guscott's experts' theories were "novel." In so finding, the court characterized the issue and the theory as "whether falling out of a wheelchair and landing on one's buttocks can cause an AAA to leak or rupture" (CP 355), thereby assuming how the fall occurred, which was not the subject of summary determination. Once having so characterized Mr. Guscott's theory, the trial court erroneously relied upon the statements by Dr. Tran in his deposition that such a fall was "unlikely" to cause an AAA to leak or rupture and that discerning the age of blood on a CT would be hard to do as a *prima facie* showing that "Mr. Guscott's experts present novel scientific theories." CP 355.

The record establishes Mr. Guscott's experts relied on their training, practical experience and acquired knowledge, rendering *Frye* inapplicable. *State v. Ortiz*, 119 Wn. 2d 294 (1992). Indeed, an expert opinion regarding application of an accepted methodology (such as

correlating clinical signs and radiologic evidence) to a particular medical condition does not implicate *Frye*. Nor is scientific literature required to show general acceptance in this circumstance. *Reese v. Stroh*, 128 Wn. 2d 300 (1995).

In *Reese*, the Court of Appeals rejected the defendant's argument that no scientific studies existed supporting the efficacy of Prolastin therapy to treat AAT deficiency where the defendant did not argue that Prolastin therapy itself was novel, but argued that the efficacy of Prolastin therapy had not been conclusively established. The Court of Appeals found that the expert physician may testify from his own knowledge and experience.

Here, AHC has not argued that deceleration and shearing forces, theories advanced by Dr. Holmes and Dr. Heller, are novel theories in addressing injuries from falls or that correlating clinical signs and symptoms and CT scans with an injury is novel. Rather, AHC's quarrel, and the trial court's focus, centered on Mr. Guscott's expert opinions characterized as "a fall on one's buttocks can cause an AAA to leak or rupture." Because AHC presented no threshold evidence in the form of medical testimony or otherwise which remotely suggested Mr. Guscott's experts' opinions were based on "novel scientific theories," the trial court's threshold ruling, that *Frye* was implicated, resulting in its applying an

erroneous standard for admissibility of Guscott's medical causation testimony – that the specific causation opinions deduced from generally accepted theories and methodologies also need to be generally accepted in the scientific community to survive *Frye* scrutiny. Such a standard is erroneous because it is in direct conflict with Washington law as interpreted by the Washington State Supreme Court in those cases addressing *Frye* in the context of civil litigation.

Most recently, the Supreme Court, in *Anderson v. AKZO Nobel Coatings, Inc*, No. 82264-6 (Washington State Supreme Court filed September 8, 2011), held as follows:

We hold that the *Frye* test is not implicated if the theory and the methodology relied upon and used by the expert to reach an opinion on causation is generally accepted by the relevant scientific community.

AKZO at 1.

In *AKZO*, the plaintiff was exposed to organic solvents while pregnant and working for AKZO. She gave birth to a son with medical abnormalities. In the action against *AKZO* for the child's injuries, the treating physician and a retained medical expert each opined that the child's medical problems were likely the result of exposure to solvent in utero at *AKZO*. The retained expert based his opinion on the medical

records and his own experience and training, including research he himself had done.

The trial court dismissed the claim on summary judgment. The Supreme Court characterized the ruling as follows:

The trial court agreed that under Washington common law there must be a consensus of scientific opinion on the issue of specific causation and granted the motion in limine excluding Dr. Khattak's testimony. We disagree.

AKZO at 11.

In reversing the trial court, the Supreme Court noted that the degree of certainty required for general acceptance in the scientific community is much higher than the concept of probability used in civil courts, pertinently stating:

To require the exacting level of scientific certainty to support opinions on causation would, in effect, change the standard for opinion in civil cases.

AKZO at 15.

The Supreme Court summarized its holding in *AKZO* as follows:

The trial court in this case ruled that under Washington courts' application of *Frye v. United States*, 54 App.D.C. 46, 293 F.1013 (1923), there must be general acceptance in the relevant scientific community that a particular type of in utero toxic exposure can cause a particular type of birth defect before expert testimony or causation is admissible. We disagree.

Id. at 1.

AKZO is directly on point and presents a compelling basis for reversal in this case. This is so because the trial court in the case at bar, in ruling that *Frye* was implicated, relied on a record devoid of any challenge to a “theory” or “methodology” employed by Mr. Guscott’s experts. Rather, the trial court improperly focused on the experts’ opinions of a causal relationship -- opinions challenged by Dr. Tran’s bare assertion that such is “unlikely,” and by AHC’s expert, Dr. Johansen, who stated there is nothing in the medical literature “that trauma of the sort that Mr. Guscott suffered caused – would cause an aortic aneurysm, however large, to rupture.” CP 338 And, in the case of Dr. Gore’s radiological opinion, the trial court relied again on the bare assertion of Dr. Tran, who is not a radiologist, that determining the age of blood from a CT scan would be hard. CP 699.

Nor does *AKZO* make a new pronouncement of law. Rather, therein, the Supreme Court cited its decision in *McLaughlin v. Cooke*, 112 Wn.2d 829 (1989), in reiterating the requirements for admissibility of medical opinions not based on scientific data as follows:

Many expert medical opinions are pure opinions and are based on expertise and training rather than scientific data. We only require that “medical expert testimony ... be based upon a reasonable degree of medical certainty” or probability.

AKZO at 16-17. The Supreme Court, citing its decision in *Reese v. Stroh*, 128Wn.2d 300 (1995), went on to say:

Many medical opinions on causation are based on differential diagnosis. A physician or other qualified expert may base a conclusion about causation through a process of ruling out potential causes with due consideration to temporal factors, such as events and the onset of symptoms.

AKZO at 17.

Mr. Guscott's experts clearly evaluated his signs and symptoms on the day of his fall and correlated those signs and symptoms with his diseased aorta and known trauma, relying only on their training, experience and knowledge to do so. Thus, these are "pure opinions" which were properly based upon a reasonable degree of medical probability. For these reasons, the trial court's ruling implicating *Frye* was reversible error and should be overturned.

3. The Trial Court misapplied *Frye* by requiring scientific proof of every aspect of Mr. Guscott's expert opinions.

Once the trial court erroneously ruled that *Frye* was implicated, the court, without conducting a *Frye* hearing, applied the wrong standard to bar Mr. Guscott's experts' opinions, ostensibly accepting AHC's characterization of Mr. Guscott's burden: "What has Guscott offered in

support of his experts' opinions to establish that their opinions have gained 'general acceptance in the appropriate scientific community?' " CP 284.

Because no studies exist concerning the impact upon an AAA of falls from several feet, Mr. Guscott could not meet this erroneous standard. Nor should he have been required to where the erroneous standard applied by the trial court demanded proof of opinions, not of methodology. On this point, *Intalco Aluminum Corp. v. Department of Labor & Indus.*, 66 Wn. App. 644 (1992), review denied, 120 Wn. 2d 1031 (1993), is instructive. Therein, the Court of Appeals pertinently stated:

The absence of studies linking aluminum plant pot room exposure to neurologic disease does not compel the conclusion that the claimants failed to make a showing of proximate cause. [One NIOSH expert] acknowledged that every year the medical profession discovers that "new" diseases, which were previously thought to have unknown or non-work-related causes, are in fact occupationally related. Further, [one medical expert] testified that the lack of reported cases of neurologic disease among aluminum plant workers does not mean that they do not exist.

Intalco, at 660. See also *Ferebee v. Chevron Chem. Co.*, 736 F.2d 1529, 1535-36 (D.C. Cir), cert. denied, 469 U.S. 1062 (1984), quoted in *Intalco*, at 661. While studies would strengthen an expert's testimony on causation, the competence of expert testimony does not depend on the existence of such studies. *Bruns v. Paccar, Inc.* 77 Wn. App. 201 (1995).

Assuming there are no studies discussing the incidence of AAA leaks or ruptures associated with falls, does not lead one to conclude the subject is controversial, not where principles of deceleration and shearing forces, just like direct trauma, are well-known to cause injury to internal organs, including a healthy aorta, and where each of Mr. Guscott's experts considered Mr. Guscott's clinical signs and symptoms or radiologic evidence following Mr. Guscott's fall in forming his opinions.

Moreover, to the extent the trial court relied upon AHC's argument based on *Grant v. Boccia*, 133 Wn.App. 176 (2006) (CP 331), that case was overruled by *AKZO*, wherein the Supreme Court pertinently stated:

Frye does not require that the specific conclusions drawn from the scientific data upon which Dr. Khattak relied be generally accepted in the scientific community. *Frye* does not require that every deduction drawn from generally accepted theories to be generally accepted. Other evidentiary requirements provide additional protections from deductions that are mere speculation. E.g ER 104(a); ER 401; ER 403. ...To the extent that the Court of Appeals opinions in *Grant* (citations omitted) and *Ruff* (citations omitted) are inconsistent with this opinion they are overruled.

AKZO at 19.

AKZO establishes that the trial court's rulings that opinions that falls "on buttocks" can cause AAAs to rupture, that radiologists can date the age of blood by reading a CT scan, and that AAAs can leak and stop leaking, all required scientific proof, was patently wrong, as was the

court's specifically limiting the experts' testimony to the size of Mr. Guscott's AAA, the risks associated with surgical repair, and typical rate of growth of AAAs – a limitation which essentially barred any and all causation opinions whether raised by AHC or specifically addressed by the trial court. CP 355-7.

January 3, 2011, Mr. Guscott was required to concede in open court that he could not establish causation without the opinions of his medical experts, resulting in entry of summary judgment in favor of AHC. CP 430. The only reason Mr. Guscott could not establish causation is because the trial court barred his experts' opinions for failure to substantiate their theories of causation with scientific articles. CP 355-56. This was fundamentally wrong.

For these reasons, the trial court's ruling that *Frye* required scientific proof of Mr. Guscott's experts' deductions which were drawn from the medical records, CT scans, and basic knowledge of the human aorta and AAAs, was reversible error and should be reversed. Likewise, the resulting summary judgment order should be reversed.

- B. The trial court impermissibly limited itself on reconsideration by failing to consider all materials submitted in light of its failure to hold a *Frye* hearing over Mr. Guscott's objection.

The trial court, in denying reconsideration, acknowledged that no *Frye* hearing had been held but that Mr. Guscott was "on notice" of what was at issue and what his burden was at hearing on AHC's motion *in limine*. CP 936. Mr. Guscott respectfully disagrees.

Given AHC's motion *in limine*, the legitimate issues raised were whether Mr. Guscott's experts were qualified to render opinions and whether those opinions were subject to *Frye*. CP 960. While AHC also claimed that Mr. Guscott's opinions could not pass a *Frye* test, the only basis raised by AHC was plainly improper: that the opinions were unsupported by scientific literature; that other witnesses disagreed with those opinions; and that AHC's counsel found the opinions "not generally accepted in the medical community." CP 966. No evidence was presented demonstrating that Mr. Guscott's experts utilized a methodology which had not gained general acceptance in the relevant community. And, while AHC's counsel did argue that Dr. Gore cited no peer-reviewed articles or studies which supporting his approximating the age of blood on Mr. Guscott's CT scan by looking at it, AHC's motion ignored the fact that its

own retained expert used the same method as Dr. Gore to age Mr. Guscott's bleed. CP 633. In sum, Mr. Guscott reasonably relied upon the trial court's holding a *Frye* hearing if it decided that AHC had demonstrated a basis for so doing with its *limine* motion.

Nor could Mr. Guscott have predicted that the trial court would include a finding of fact in its order granting AHC's *in limine* motion to bar experts – that Mr. Guscott's trauma was a fall on his buttocks, and thus limiting his experts' opinions to such falls.

The trial court addressed this contention in its January 17, 2011, order partially denying reconsideration. CP 784. Therein, the court acknowledged evidence that Mr. Guscott fell on his elbow and “perhaps his side” but denied having made a finding as to how he fell in reaching its *Frye* ruling. In so doing, the trial court disregarded its own pronouncement in its January 3, 2010 order that “the major issue in this case is whether a fall out of a wheelchair and landing on one's buttocks can cause a AAA to leak or rupture.” CP 355. Moreover, the plain language of that order recites that the court relied on Dr. Tran's statement “that a fall to a person's buttocks was unlikely to cause a AAA to leak or rupture” as the sole basis for finding Mr. Guscott's opinions novel for purposes of implicating *Frye* and requiring, in the court's judgment, scientific support. CP 355. Ironically, the trial court, in its January 3,

2011 order, noted that “it is agreed that a major trauma localized to the aneurism, such as a seat belt’s impact during a car accident, can cause an aneurysm to leak or rupture” (CP 355) but did not find consensus on that point sufficient to dispel the notion that Mr. Guscott’s opinions were novel.

Mr. Guscott relied on the trial court’s stated bases set out in its January 3, 2011 order as guidance on the court’s analysis. On reconsideration Mr. Guscott responded, devoting several pages of argument (CP 373-76), and new exhibits (CP 435, 439, 700) to show Mr. Guscott’s trauma from his fall: emergency room records and AHC healthcare records documenting pain and tenderness to his right elbow, right buttock cheek and right hip pain. CP 374-75, 435, 439. Mr. Guscott also submitted Dr. Tran’s testimony that the typical location of an AAA rupture is “posterior and lateral, so usually toward the back and toward the side.” CP 375, 700. The purpose of these materials was to illustrate that AHC’s theory of an axial fall on one’s buttocks, needed to support its expert’s opinion, was not the only viable theory.

How Mr. Guscott fell was most relevant to AHC’s expert, Dr. Johansen, who assumed that Mr. Guscott fell only on his buttocks, an assumption necessary to support his opinion that the fall produced only axial forces and no shearing forces upon the aorta which somehow

“protect” the aneurism. CP 751. In contrast, Dr. Heller opined that translational forces from a blunt deceleration impact would be the same whether Mr. Guscott landed straight on his buttocks or on his side. CP 743. Mr. Guscott himself testified that the chair hit a bump or tar strip and he went over, falling on his arm, then falling again on his buttocks as someone was helping him up. CP 76. However, the trial court granted AHC’s motion *in limine* to bar Mr. Guscott’s testimony based on lack of competence. CP 353-4.

Dr. Holmes, Mr. Guscott’s cardiology expert, assumed Mr. Guscott hit his elbow, buttock and coccyx in the fall. CP 180. In Dr. Holmes’ opinion, a significant injury deceleration or stress would put additional wall stress on the diseased aorta, increasing the risk of rupture, and Mr. Guscott’s aorta was already under significant wall stress due to the size of his aneurism. CP 180.

On reconsideration, Mr. Guscott resubmitted the above testimony of Dr. Heller and Dr. Holmes to the trial court and cited it in his motion. CP 375, 388. Guscott also resubmitted Dr. Holmes’ testimony concerning presentation after the fall, which Dr. Holmes relied upon to find that the fall was a cause of the AAA leak on Christmas day, 2006. Dr. Holmes noted that Mr. Guscott had severe pain over the next three days, and caretaker notes stated he fell “hard” (CP 681, 683), and that his white

blood cell count was elevated at 15,000 on December 25, explaining this is consistent with physical stress from a major injury -- a phenomenon called demargination. CP 691. Dr. Holmes opined that deceleration forces without direct trauma to the aorta can cause a normal aorta to rupture, and, therefore, a fragile aorta would require less force to rupture. CP 679.

On reconsideration, Mr. Guscott also submitted articles dealing with aortic injury from trauma to show that deceleration forces from side impact are well-known to cause rupture in a non-diseased aorta, absent seat belt use. CP 647-52. Mr. Guscott also included a training article for trauma centers discussing organ injury from low level falls. CP 640, 642.

The crux of the error is that the trial court accepted the theory that major trauma localized to the aneurysm can cause an aneurysm to leak or rupture (CP 355), yet required scientific proof of a specific injury resulting in a specific type of trauma. Thus, Mr. Guscott's mission on reconsideration was not only to demonstrate the court's misapprehension that his experts' theory of causation was novel (which is not even the correct standard under *Frye*) but to amplify the nature of Mr. Guscott's theory to the court.

In its cursory opinion of January 18, 2011, the trial court ruled that Mr. Guscott's arguments were "merely a reiteration of his earlier argument and present no meaningful basis for reconsideration" (CP 784), without

address of Mr. Guscott's argument that the court had misapprehended certain facts. CP 381.

Where no *Frye* hearing was held and a finding of material fact was a basis of the trial court's barring of experts, the court committed reversible error by failing to reconsider the above testimony.

Paradoxically, assuming the trial court did not consider Dr. Tran's testimony that a fall on one's buttocks is unlikely to cause an AAA to leak or rupture, then the trial court had no basis, other than the argument of AHC's counsel, to find that Mr. Guscott's opinions were "novel" as to implicate *Frye*. If one party may simply complain that his adversary's experts have not relied on medical articles to support their opinions and have those experts excluded on that basis, then we have reached the nadir of civil procedure.

Also on reconsideration, Mr. Guscott attempted to show that Dr. Gore's approximating the density of blood on Mr. Guscott's CT scan is a routine part of a radiologist's practice by submitting the deposition of AHC's radiology expert, Dr. Peters. Like Dr. Gore, Dr. Peters approximated the density of blood appearing on the CT scan by "looking at the density of the clot" and opined that the oldest blood was 12 hours old. CP 633. In contrast, Dr. Gore opined that, based on his experience,

the old blood appearing on the CT was “more than a day and a half old.” CP 725.

Contrary to AHC's representations, Dr. Gore stated it is possible that the blood is two days old, but “I think more likely, three days.” CP 725. For two-day old blood, Dr. Gore stated he would expect to see a sign that the body was still trying to protect itself, demonstrating a “slit-like inferior vena cava” on the CT scan. Because this was absent, he testified he felt “comfortable with a three-day bleed.” CP 726. Dr. Gore also took into account Mr. Guscott's low blood pressure in the emergency room which is consistent with onset of rupture, as well as the reported trauma which had occurred three days prior to the CT exam. CP 718.

Mr. Guscott sought reconsideration of the court's barring Dr. Gore because, in determining that Dr. Gore's judging the age of blood was novel, the trial court relied on the testimony of the surgeon, Dr. Tran, who is not a radiologist and has had no experience treating patients who have suffered a ruptured AAA following some form of trauma. CP 700.

Specifically, the trial court, in its barring order, ruled as follows:

There is nothing in the record supporting this theory of dating a leak based on a CT scan from a scientific perspective, however, and that is necessary in light of the contradictory evidence from Dr. Tran. This testimony is also disallowed under *Frye*.

CP 356.

Dr. Tran's only testimony was that it was "hard to tell" how old a bleed was looking at a CT scan or viewing the aneurysm intraoperatively without patient history. CP 699. Where Mr. Guscott had cited Dr. Gore's testimony and his many publications, including CT manifestations of Ruptured Abdominal Aneurysms prior to the court's barring order (CP 323), it was reversible error not to grant reconsideration of the barring of Dr. Gore where no *Frye* hearing had been held to bring these matters to light including the trial court's misapprehension of the experts' actual opinions.

Mr. Guscott also sought reconsideration of the order barring Dr. Heller's opinion that an AAA can begin to leak and clot itself off and leak again. The only guidance given by the court in its January 3, 2010 order was, "There is no scientific support in the record for this belief." In so ruling, the trial court apparently disregarded the following testimony from Dr. Tran's deposition which was before it at the time of its order:

It's a little bit different for Mr. Guscott compared to everyone else in that he was a - what I would call a stable rupture, in that the patient comes in he was relatively stable because he was able to talk to us, and he wasn't hypotensive, he didn't have ongoing CPR, he wasn't on a ventilator.

CP 699.

Also, the trial court apparently disregarded the testimony of AHC's expert, Dr. Johansen, also submitted to the court prior to its limine order. Dr. Johansen reluctantly agreed that the fact of aneurysms leaking for a few days and stopping "certainly has been reported, but it's vanishingly rare." CP 325. Dr. Johansen retreated from this answer later in his deposition, asking to "refine. . . or expand" it, and then stating that "if (the blood) issues in the retroperitoneum, then it will frequently tapenade itself. Tapenade means sort of walls itself off temporarily....and the patient will remain alive." CP 325, 752. AHC's own expert's opinion thus did not differ from the opinion barred by the order- aneurysms may leak, stop, and begin leaking again.

The foregoing testimony, submitted before the trial court entered its order barring Mr. Guscott's experts, showed that Dr. Heller stated a medical fact of what can occur and an opinion of what probably had occurred in this case.

On reconsideration, Mr. Guscott resubmitted the above testimony and called the court's attention to Dr. Tran's testimony that it is merely "not common" for an AAA to rupture and then re clot on its own. CP 699. The trial court disregarded Mr. Guscott's submission, finding that it was

an argument previously raised and not a meaningful basis for reconsideration. CP 784.

The trial court, as an additional basis for denying reconsideration, stated that “opinions of Mr. Guscott’s experts have changed – both in substance and basis. New theories are not admissible on motions for reconsideration.” CP 936. Because the trial court did not identify any new opinions or bases, Mr. Guscott must assume this refers to Dr. Gore’s declaration wherein he addresses the Hounsfield Units he obtained on Mr. Guscott’s CT scan after the trial court had barred his testimony. CP 487, 490-92. Because the trial court, in its order barring Dr. Gore, referenced his failure to obtain the Hounsfield Units in determining the density of blood on the CT (CP 356), Dr. Gore obtained this data for Mr. Guscott’s CT, which supported his original opinions on the age of the bleed. Other than this example, Mr. Guscott’s opinions and the bases therefore remained unchanged. The scientific articles were submitted because the court required them, not because Mr. Guscott’s experts wished to rely upon them.

The trial court did allow limited reconsideration and hearing on only one issue – whether, under *State v. Copeland*, 130 Wn.2d 244, 255-6, 922 P.2d 1293 (1996), the court had authority to consider “materials outside the record,” which in this case amounted to the new material

submitted by Mr. Guscott on reconsideration. CP 936. The court found that *Copeland's* purpose is not "to open up the record indefinitely" and denied reconsideration on that basis.

The failure of a trial court to consider all information available in the context of making a determination under *Frye* does violence to the spirit of *Frye*, which is to use all information available to determine admissibility. This spirit is reflected by the Washington Supreme Court who stated with regard to *Frye*:

A reviewing court will undertake a searching review that is not confined to the record and may involve consideration of scientific literature as well as secondary legal authority. .

State v. Copeland, 130 Wn.2d 244, 255-6, 922 P.2d 1293 (1996) [citations omitted].

Where the trial court elected to rule without holding a *Frye* hearing (CP 936), examination of new materials was called for. In the alternative, where no *Frye* hearing was held, at a minimum, the trial court should have examined Mr. Guscott's claim of misapprehension by reviewing the material in the record and allowing argument thereon. Such a procedure would not be tantamount to "opening the record indefinitely." In this case, judicial economy trumped Mr. Guscott's right to his day in court. If *Frye* is indeed implicated, Mr. Guscott submits that the trial court has a duty to

allow full hearing including the testimony of the experts whose opinions have been labeled “novel.”

- C. The appropriate standard for determining admissibility of expert testimony in a civil case in light of challenge based on “novelty” is *Daubert*, not *Frye*.

The Washington Supreme Court, in *Anderson v. AKZO*, addressed the differences between the *Frye* standard and the *Daubert* standard, set out in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. at 592-93 for determining whether “novel” scientific theories or methodology may form the basis for a scientific opinion, noting that, unlike *Frye*, the *Daubert* standard does not require general acceptance in the relevant scientific community. Rather, *Daubert* requires only that the reasoning or methodology underlying the testimony be scientifically valid and can be applied to the facts at hand. *AKZO* at p.7. The Supreme Court pertinently stated, “In civil cases, we have neither expressly adopted *Frye* nor expressly rejected *Daubert*,” thus suggesting the issue is ripe for review. *AKZO* at p. 8.

In *AKZO*, the Supreme Court considered the *Frye* test in the context of civil litigation, therein setting forth a compelling rationale for the current limited application of *Frye* in civil cases, namely, the absence of a requirement that plaintiff’s theory of causation have widespread

acceptance in the relevant scientific community. *AKZO* at 15. The Court reiterated the burden of proof to establish causation in a civil case as a “preponderance” or more than 50%, in contrast to a 95% probability customarily required for a scientific finding to have acceptance, characterizing this dichotomy as comparing “apples to oranges.” *Id.* at 15.

The Court pertinently stated:

To require the exacting level of scientific certainty to support opinions on causation would, in effect, change the standard for opinion testimony in civil cases.

AKZO at 15.

The Supreme Court’s discourse concerning *Frye* makes clear the potential mischief a litigant may face where, as in the instant case, a party is required to furnish the trial court with scientific articles supporting his theories of causation on the eve of trial, or have those theories barred. Who can say what interest or funding level is required before studies are commenced to determine whether a specific harm produces a specific type of injury? A civil litigant’s access to the courthouse should not be restrained by the chance of the misapplication of *Frye* and the lack of scientific interest in his particular injury.

The Supreme Court decided *AKZO* without deciding whether *Daubert* should be the standard in civil cases, stating:

In the case before us, the parties and lower courts assume that *Frye* is applicable, and for the purpose of this opinion, we will assume without deciding that *Frye* is the appropriate test for civil cases.

AKZO at 8.

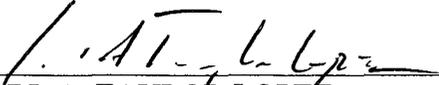
Thus, the issue ripe for review. Moreover, a finding by this Court that *Daubert* is the proper standard in civil cases may encompass whether the record in this case required Mr. Guscott's experts' opinions to meet the reliability test imposed by *Daubert*, and if so, that the reasoning and methodology underlying those opinions is scientifically valid and can be applied to the facts at hand. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. at 592-93. This finding is called for where the applicable science is medicine, including anatomy, aortic disease, blood flow and shearing forces, and radiological interpretation, and where the record shows AHC's experts relied upon the same reasoning and methodology, albeit reaching different conclusions.

VI. CONCLUSION

The order preventing Mr. Guscott's experts from testifying on causation should be reversed. The summary judgment order of dismissal based on the absence of causation testimony should also be reversed and vacated. This cause should be remanded for trial.

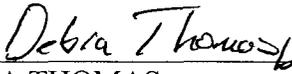
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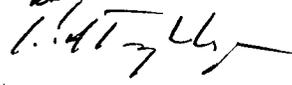
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IN THE SUPREME COURT OF THE STATE OF WASHINGTON

JULIE ANDERSON, individually)
and on behalf of the Estate of)
DALTON ANDERSON, and)
DARWIN ANDERSON, individually,) No. 82264-6
)
Appellants,) En Banc
)
v.)
)
AKZO NOBEL COATINGS, INC.,)
and KEITH CROCKETT, a)
Washington resident,)
)
Respondent.) Filed September 8, 2011
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CHAMBERS, J. — The trial court in this case ruled that under Washington courts’ application of *Frye v. United States*, 54 App. D.C. 46, 293 F. 1013 (1923), there must be general acceptance in the relevant scientific community that a particular type of in utero toxic exposure can cause a particular type of birth defect before expert testimony on causation is admissible. We disagree. We hold that the *Frye* test is not implicated if the theory and the methodology relied upon and used by the expert to reach an opinion on causation is generally accepted by the relevant scientific community. Additionally, we hold that Julie Anderson has not stated a

cognizable claim for wrongful discharge in violation of public policy under this court's opinion in *Cudney v. AlSCO, Inc.*, No. 83124-6 (Wash. Sept. 1, 2011), and we affirm the trial judge's preliminary ruling on comparative fault. We reverse in part, affirm in part, and remand for further proceedings consistent with this opinion.

FACTS

As this case is here on cross-motions for summary judgment, we take the facts in the light most favorable to the nonmoving party with respect to the particular claim. Anderson worked for Akzo Nobel Coatings, Inc., from 1998 until she filed a safety complaint with the Washington State Department of Labor and Industries (L&I) and was fired. While employed, she was promoted several times, and at the time her employment terminated she was the health, safety, and environmental coordinator at her facility. While it was not officially part of her job, Anderson regularly mixed paint, perhaps even daily. Employees were required by official company policy to wear respirators when mixing paint, but there is reason to believe that this policy was not rigorously enforced and may have been actively undermined by management. According to Anderson (but vigorously disputed by the company), she was told by her supervisor that she "did not need to wear a respirator when mixing toxic paint because the air monitoring that was conducted by Akzo Nobel headquarters . . . had purportedly determined that there was no health threat." Clerk's Papers (CP) at 104; see also CP at 157. There was also evidence, again, vigorously disputed by the company, that the respirators were not properly maintained and that air testing in the mixing room had purposefully not been done

properly.

Anderson gave birth to a son, Dalton Anderson, in January 2000. By 2003, it was clear Dalton suffered from “medical abnormalities.” CP at 104. He was diagnosed with a neuronal migration defect, congenital hemiplegia, microcephalus, and a multicystic dysplastic kidney, among other things, along with “delays in motor, communication, cognitive, and adaptive behavior.” CP at 113-14, 116. Anderson looked hard for both appropriate treatment and for a cause. One of Dalton’s doctors, Dr. Chris B. Stefenelli, concluded that Dalton’s developmental malformations were likely due to his mother’s paint exposure at Akzo. CP at 105; *see also* CP at 116-17 (letter from Dr. Stefenelli, referring to Dalton’s “significant medical problems very likely as a result of significant exposure to organic solvents while in utero”). Dr. Sohail Khattak, who published a paper on the correlation between exposure to organic solvents in utero and birth defects while he was a fellow at the Motherisk Program, a division of Clinical Pharmacology and Toxicology at the University of Toronto, was willing to testify that Dalton’s birth defects were caused by organic solvent exposure. CP at 912-17 (affidavit); CP 231-34 (excerpt from Sohail Khattak, Guiti K-Moghtader, et. al., *Pregnancy Outcome Following Gestational Exposure to Organic Solvents*, 281 JAMA 1106 (1999)).

Meanwhile, Anderson became increasingly concerned about the safety practices at Akzo. She made an anonymous complaint to L&I in 2003, which resulted in an inspection and citation against Akzo for safety violations. At that point, Anderson learned that the safety protocols she and the company had been

following were, in her words, “all wrong.” CP at 106. A year later, believing that the company had not meaningfully responded to the safety concerns, Anderson filed a formal complaint. This one was not anonymous. A second state inspection followed and found several safety violations, including inadequate training and inadequate safety equipment. Within days, Anderson was fired on the ground she had taken paint for personal use without payment. According to Anderson, as was customary with employees, she had purchased the paint for a friend, collected the money, and stapled the money to a form L-10, which had not yet been inventoried. According to Akzo, she was given an opportunity to explain why she had taken the paint without paying for it first and she failed to provide a “consistent, truthful answer.” CP at 148. Anderson initially filed a claim for retaliatory discharge with L&I under RCW 49.17.160, but abandoned it believing it was futile.

Anderson sued Akzo for negligence and wrongful discharge. Among other things, Akzo apparently raised comparative negligence as a defense in its answer. Anderson unsuccessfully moved for summary judgment striking that defense, initially on the ground that Akzo had submitted no evidence supporting the theory. Later, Akzo successfully moved in limine to strike most of Anderson’s experts, on the ground that their proposed testimony did not meet the *Frye* standard. Based on that ruling, Akzo also successfully moved for summary judgment on the negligence claim because, without those experts, Anderson could not show that her paint exposures caused her son’s injuries. Meanwhile, Akzo successfully moved for summary judgment on the wrongful discharge claim on the ground that the statutory

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remedy available under RCW 49.17.160 preempted the common law wrongful discharge claim.

Anderson sought, and we granted, direct review.

ANALYSIS

Questions of admissibility under *Frye* are reviewed de novo. *State v. Copeland*, 130 Wn.2d 244, 255, 922 P.2d 1304 (1996) (citing *State v. Cauthron*, 120 Wn.2d 879, 887, 846 P.2d 502 (1993)). We also review summary judgment de novo, with all inferences taken in favor of the nonmoving party. *Mulcahy v. Farmers Ins. Co.*, 152 Wn.2d 92, 98, 95 P.3d 313 (2004) (citing *Jones v. Allstate Ins. Co.*, 146 Wn.2d 291, 300, 45 P.3d 1068 (2002); *Mountain Park Homeowners Ass'n v. Tydings*, 125 Wn.2d 337, 341, 883 P.2d 1383 (1994)). As Anderson is the nonmoving party as to Akzo's summary judgment motions dismissing her negligence and wrongful discharge theories, and Akzo is the non-moving party as to Anderson's summary judgment motion on contributory negligence, the burden shifts with the issues.

Causation and *Frye*

Trial judges perform an important gate keeping function when determining the admissibility of evidence. ER 104. Courts must interpret evidence rules mindful of their purpose: "that the truth may be ascertained and proceedings justly determined." ER 102. Generally, the admissibility of expert testimony in Washington is governed by ER 702.¹ *See also Reese v. Stroh*, 128 Wn.2d 300, 305,

¹"If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill,

907 P.2d 282 (1995). Expert testimony is usually admitted under ER 702 if it will be helpful to the jury in understanding matters outside the competence of ordinary lay persons. *Id.* at 308 (citing *State v. Ciskie*, 110 Wn.2d 263, 279, 751 P.2d 1165 (1988)). Unreliable evidence is not helpful to the jury, and determining whether scientific-seeming evidence is sufficiently reliable to be admissible has vexed courts at least since *Frye*, and possibly since the fourteenth century when judges first started consulting with scientists. See Lee Loevinger, *Science as Evidence*, 35 *Jurimetrics J.* 153, 154 & n.4 (1995) (citing Edmund Morgan, Foreword, American Law Institute *Model Code of Evidence* 34 (1942)). Nonetheless, novel scientific evidence, especially that still in the experimental stage, continues to present special challenges. See Robert H. Aronson, *The Law of Evidence in Washington* § 702.04[9][a] at 702-29 (4th ed. 2009).

There are two accepted common law approaches for determining the admissibility of novel scientific evidence. The *Frye* test was established in 1923 by the United States Court of Appeals of the District of Columbia Circuit. The *Frye* court articulated the approach as follows:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the

experience, training, or education, may testify thereto in the form of an opinion or otherwise.”
ER 702.

particular field in which it belongs.

Frye, 54 App. D.C. at 47. Thus, under *Frye*, the court's role is to determine whether the theory has been generally accepted in the relevant scientific community. *Reese*, 128 Wn.2d at 306.

Precisely seven decades later, in *Daubert*, the United States Supreme Court rejected the *Frye* general acceptance test because Federal Rule of Evidence 702 does not expressly require general acceptance, and such a requirement is inconsistent with the thrust in the Federal Rules of Evidence's relaxation of the traditional barriers to "opinion testimony." *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 588, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993). Under *Daubert*, the court must determine if the reasoning or methodology underlying the testimony is scientifically valid and can be applied to the facts at hand. *Id.* at 592-93. These two tests, the *Frye* test and the *Daubert* test are often referred to as the "general acceptance" and "reliability" tests respectively. *See, e.g.*, David E. Bernstein, *Frye, Frye, Again: the Past, Present, and Future of the General Acceptance Test*, 41 *Jurimetrics J.* 385, 388-89 & n.31 (2001) (citing Charles T. McCormick, *Handbook of the Law of Evidence*, 363 (1954); *In re "Agent Orange" Prod. Liab. Litig.*, 611 F. Supp. 1223, 1243-48 (E.D.N.Y. 1985), *aff'd on other grounds*, 818 F.2d 187 (2d Cir. 1987) (additional citation omitted)).

Washington courts, at least in criminal cases, have long adopted the *Frye* "general acceptance" standard. In *Copeland*, 130 Wn.2d 244, we were asked to reject the *Frye* test in favor of *Daubert*. Despite the national trend toward *Daubert*, we declared our continued adherence to the more stringent *Frye* test. *Id.* at 251; *see*

also Aronson, *supra*, at § 702.04.[9][c][ii]. In civil cases, we have neither expressly adopted *Frye* nor expressly rejected *Daubert*. In *Reese*, we concluded that it was unnecessary for the Court of Appeals to have reached the issue of whether *Daubert* applied in a civil case since the opponent of the testimony “did not argue that the theory or the methodology involved . . . lacks acceptance in the scientific community.” *Reese*, 128 Wn.2d at 307. Since the real challenge was whether the proffered testimony had a proper foundation, we resolved the question presented under ER 702 and 703. *Id.* at 304, 308-09. However, since the courts below in *Reese* considered *Frye* and *Daubert*, we reviewed their applicability.² *Id.* at 305-08; *see also generally* 5B Karl B. Tegland, *Washington Practice: Evidence Law & Practice* § 702.19, at 88 (5th ed. 2007) (“For the moment, it seems safe to presume that *Frye* continues to apply in civil cases until the Washington Supreme Court explicitly says otherwise.” (citing *Reese*)). In the case before us, the parties and lower courts assume that *Frye* is applicable, and for the purposes of this opinion, we will assume without deciding that *Frye* is the appropriate test for civil cases.

As we recently summarized, under *Frye*:

The primary goal is to determine “whether the evidence offered is based on established scientific methodology.” *State v. Gore*, 143 Wn.2d 288, 302, 21 P.3d 262 (2001). Both the scientific theory underlying the evidence and the technique or methodology used to implement it must be generally accepted in the scientific community for evidence to be admissible under *Frye*. *Id.* “If there is a *significant* dispute among *qualified* scientists in the relevant scientific community,

² In *Reese*, the concurrence suggested that the *Daubert* test was the appropriate test to apply in a civil case given the different burden of proof required in a civil proceeding. *See Reese*, 128 Wn.2d at 310, 312 (C. Johnson, concurring).

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then the evidence may not be admitted,” but scientific opinion need not be unanimous. *Id.*

State v. Gregory, 158 Wn.2d 759, 829, 147 P.3d 1201 (2006) (emphasis in original).

Specifically, our courts consider “(1) whether the underlying theory is generally accepted in the scientific community and (2) whether there are techniques, experiments, or studies utilizing that theory which are capable of producing reliable results and are generally accepted in the scientific community.” *State v. Riker*, 123 Wn.2d 351, 359, 869 P.2d 43 (1994). “Once a methodology is accepted in the scientific community, then application of the science to a particular case is a matter of weight and admissibility under ER 702, which allows qualified expert witnesses to testify if scientific, technical, or other specialized knowledge will assist the trier of fact.” *Gregory*, 158 Wn.2d at 829-30 (citing ER 702). Only after novel scientific evidence is found admissible under *Frye* does the court turn to whether it is admissible under ER 702. *Cauthron*, 120 Wn.2d at 889-90.

With this background, we examine the disputed evidence and proposed expert testimony in this case. Anderson relied heavily upon the expert opinion of Dr. Khattak, who was prepared to testify “within a reasonable degree of medical certainty, as to the cause of Dalton’s malformations as being in utero workplace exposure to Julie Anderson while employed with Akzo Nobel.” CP at 913. He based this on Dalton’s medical records (including the opinion of Dalton’s cardiologist that “Dalton’s significant medical problems may ‘*very likely*’ be as a result of ‘*significant exposure to organic solvents in utero*’”; Akzo’s Material

Safety Data Sheets; and his own experience and training, including the work he himself did that was reported in the Journal of the American Medical Association (JAMA). CP at 912-17. The trial court summarized the JAMA article as follows:

The study matched 125 women who were exposed to organic solvents at their work places while they were pregnant, with 125 controls – expectant mothers who were not exposed to organic solvents – and then followed these women prospectively. The study found that 13 members of the exposed group gave birth to babies with “major malformations,” versus only 1 member of the unexposed group. The expected rate of major malformations was 1% to 3%; thus the 10.4% rate (13 out of 125) in the exposed group was considered significant. The “major malformations” the study found ranged from heart malformations to urinary tract malformations. 13 different “major malformations were listed in Table 4 of the study. One was described as a ‘neuronal migration defect and focal corical dysplasia heterotopias.’”

Because the study stated that 13 of the children born to mothers who had been exposed to organic solvents had “major malformations” and listed 13 different “major malformations”, the implication is that only one of the children born to the mothers in the exposed group showed a neuronal migration defect. Dr. Khattak acknowledged at his deposition that PMG is found in at least of 1 out of every 2,500 births, even in populations with no known organic solvent exposures.

CP at 785-86 (footnotes omitted) (citing Khattak, *supra*, at 1106).

Akzo’s expert, Dr. Gideon Koren (a coauthor on the JAMA article), was prepared to testify that the JAMA article does not establish the existence of a causal relation between exposure to organic solvents and birth defects.³ It appears the

³The study was simply designed to see if there was a correlation between such in utero exposures and birth defects; the study was not designed to find cause.

relevant scientific community has yet to seriously research whether exposure to the specific type of organic solvents present in Akzo's auto paint can cause the specific type of birth defects at issue. Akzo asserts that Dr. Khattak tacitly acknowledged that there was no general consensus on any causal connection when he said that "we don't have enough research, you're absolutely right" and when he characterized the state of scientific knowledge as "evolving." CP at 635, 659. Akzo contends that it is not enough "to argue, therefore, that expert opinion testimony is admissible solely because it is based on accepted scientific techniques. Not only the technique used to accumulate scientific data or information, but also the theory of causation arrived at, must be 'generally accepted' in the scientific community." Resp'ts' Br. at 21-22. The trial court agreed that under Washington common law there must be consensus of scientific opinion on the issue of specific causation and granted the motion in limine excluding Dr. Khattak's testimony. We disagree.

This court has never considered whether, as a threshold matter, there must be scientific consensus that a specific type of exposure causes a specific type of injury before expert testimony is admissible under *Frye*. The trial court relied heavily upon, and likely felt bound by, two Court of Appeals cases, *Grant v. Boccia*, 133 Wn. App. 176, 137 P.3d 20 (2006), and *Ruff v. Dep't of Labor & Indus.*, 107 Wn. App. 289, 28 P.3d 1 (2001). In *Grant*, the Court of Appeals affirmed a trial court's decision under *Frye* to exclude an expert who would have testified that the plaintiff's condition was caused by an automobile accident. *Grant*, 133 Wn. App. at 181-82. The court concluded that the relevant scientific community was divided

on the causal relationship between trauma and fibromyalgia. *Id.* at 181-83. In *Ruff*, based upon largely normal test results that, in their view, excluded alternative diagnoses, several experts opined that Ruff suffered from porphyria resulting from workplace exposures to chemicals. *Ruff*, 107 Wn. App. at 293-94, 302.

Additionally, one expert had relied upon a blood enzyme test whose efficacy had not been substantiated by control group testing or peer review. *Id.* at 302. The Court of Appeals held the experts' testimony did not satisfy *Frye*'s clear requirement of acceptance in the relevant scientific community. *Id.*

Again, the trial court, in its gate keeping role, must decide if evidence is admissible. ER 102; ER 104(a). To satisfy the pursuit of truth, evidence must meet certain criteria. Evidence must be probative, relevant, and meet the appropriate standard of probability. ER 102; ER 401; ER 402; ER 403; *see, e.g., State v. Riker*, 123 Wn.2d 351, 359, 869 P.2d 43 (1994). Expert testimony, in addition, must be helpful. ER 702. Evidentiary rules provide significant protection against unreliable, untested, or junk science. 5B Teglund, *supra*, § 702.18, at 81. The *Frye* test is an additional tool used by judges when proffered evidence is based upon novel theories and novel techniques or methods. *Reese*, 128 Wn.2d at 306. In our courts, scientific evidence must satisfy the *Frye* requirement that the theory and technique or methodology relied upon are generally accepted in the relevant scientific community. *State v. Martin*, 101 Wn.2d 713, 719, 684 P.2d 651 (1984). Having satisfied *Frye*, the evidence must still meet the other significant standards of admissibility. For example, persons performing experiments and interpreting results

must be qualified. ER 702 and ER 703 mandate the evidence must be relevant and helpful.⁴ Expert medical testimony must meet the standard of reasonable medical certainty or reasonable medical probability. *See, e.g., Ritzschke v. Dep't of Labor & Indus.*, 76 Wn.2d 29, 30, 454 P.2d 850 (1969); *O'Donoghue v. Riggs*, 73 Wn.2d 814, 822-23, 440 P.2d 823 (1968); *see also* Restatement (third) of Torts: Liability of Physical and Emotional Harm § 28 cmt. c(5); Black's Law Dictionary 1380 (9th ed. 2009) (noting that reasonable medical probability and reasonable medical certainty are used interchangeably). Finally, evidence is tested by the adversarial process within the crucible of cross-examination, and adverse parties are permitted to present other challenging evidence. *See Daubert*, 509 U.S. at 596 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." (citing *Rock v. Arkansas*, 483 U.S. 44, 61, 107 S. Ct. 2704, 97 L. Ed. 2d 37 (1987))).

Frye envisioned an evolutionary process with novel scientific techniques passing through an "experimental" stage during which they would be scrutinized by

⁴ For example, polygraph tests have been widely excluded based not only on *Frye* but as unreliable under ER 702 and as unfairly prejudicial under ER 403. *See, e.g., United States v. Cordoba*, 194 F.3d 1053, 1062 (9th Cir. 1999) (affirming trial court exclusion of polygraph under ER 702 and *Daubert*); *United States v. Kwong*, 69 F.3d 663, 668 (2d Cir. 1995) (holding that the polygraph results were excludable under Rule 403); *see also United States v. Scheffer* 523 U.S. 303, 313, 118 S. Ct. 1261, 140 L. Ed. 2d 413 (1998) ("By its very nature, polygraph evidence may diminish the jury's role in making credibility determinations."). As the United States Supreme Court noted, "there is simply no consensus that polygraph evidence is reliable. To this day, the scientific community remains extremely polarized about the reliability of polygraph techniques." *Id.* at 309-10 (citing 1 David L. Faigman, et al., *Modern Scientific Evidence* 565, n. †, § 4-2.0, to § 14-7.0 (1997)).

the scientific community until they arrive at a “demonstrable” stage. *Frye*, 54 App. D.C. at 47. However, science never stops evolving and the process is unending. Each scientific inquiry becomes more detailed and nuanced. As one commentator has noted, there is a “difference between the quest for truth in the courtroom and in the laboratory. Law must resolve disputes finally and quickly, whereas science may consider a multitude of hypotheses indefinitely.” Loevinger, *supra*, at 153, 177.

Further, scientific standards and legal standards do not always fit neatly together.⁵ Generally, the degree of certainty required for general acceptance in the scientific community is much higher than the concept of probability used in civil courts. While the standard of persuasion in criminal cases is “beyond a reasonable doubt,” the standard in most civil cases is a mere “preponderance.” *Victor v. Nebraska*, 511 U.S. 1, 5, 114 S. Ct. 1239, 127 L. Ed. 2d 583 (1994) (citing *In re Winship*, 397 U.S. 358, 90 S. Ct. 1068, 25 L. Ed. 2d 368 (1970)); 14A Karl B. Tegland, *Washington Practice: Civil Procedure* § 30.13, at 228 (2d ed. 2009). In order to establish a causal connection in most civil matters, the standard of

⁵ As was noted by another commentator:

Science and law have very different norms and very different purposes. Law attempts to resolve disputes among members of society with minimal direct conflict and animosity. Lawyers can be seen as knights who represent their kingdoms during disputes. In contrast, science involves the exploration of ideas and theories through the use of empirical research; science is more of a communal effort in the sense that discoveries are made as part of, and shared with, the whole scientific community. Forcing scientists into the courtroom on one party’s side has created what has been called “adversary science.”

Thomas Michael Spitaletto, *The Frye Standard Finally Fries: Has Daubert v. Merrell Dow Furthered the Use of Scientific Evidence in Our Legal System?*, 14 *Rev. Litig.* 315, 319-20 (1994) (footnotes omitted).

confidence required is a “preponderance,” or more likely than not, or more than 50 percent. See Lloyd L. Wiehl, *Our Burden of Burdens*, 41 Wash. L. Rev. 109, 110 & n.4 (“The Washington court has reduced the burden to the probability factor.”). By contrast, “[f]or a scientific finding to be accepted, it is customary to require a 95 percent probability that it is not due to chance alone.” Marcia Angell, M.D., *Science on Trial: The Clash of Medical Evidence and the Law in the Breast Implant Case 114* (1996). The difference in degree of confidence to satisfy the *Frye* “general acceptance” standard and the substantially lower standard of “preponderance” required for admissibility in civil matters has been referred to as “comparing apples to oranges.” *Id.* To require the exacting level of scientific certainty to support opinions on causation would, in effect, change the standard for opinion testimony in civil cases. See *Reese*, 128 Wn.2d at 310, 312 (C. Johnson, concurring).⁶

This court has consistently found that if the science and methods are widely accepted in the relevant scientific community, the evidence is admissible under *Frye*, without separately requiring widespread acceptance of the plaintiff’s theory of causation. See, e.g., *Gregory*, 158 Wn.2d at 829; *Copeland*, 130 Wn.2d at 255; *Reese*, 128 Wn.2d at 309; *Cauthron*, 120 Wn.2d at 887. Of course the evidence

⁶ As a comment to the *Restatement of Torts* notes:

Of course, the plaintiff need not prove the defendant’s tortious conduct was a cause of the harm with a high degree of certainty. The civil burden of proof merely requires a preponderance of the evidence, and the existence of other, plausible causal sets that cannot be ruled out does not, by itself, preclude the plaintiff from satisfying the burden of proof on causation.

Restatement (third) of Torts: Liability of Physical and Emotional Harm § 28 cmt. b.

must also meet the other evidentiary requirements of competency, relevancy, reliability, helpfulness, and probability. As this court observed in *Reese*:

We do not find that lack of statistical support fatal to Dr. Fallat's causation opinion. Such support is required neither by ER 702, ER 703, nor by our case law. Rather, medical expert testimony must be based upon a "reasonable degree of medical certainty." *McLaughlin [v. Cooke]*, 112 Wn.2d [829] at 836, 774 P.2d 1171 [(1989)](citing *State v. Crenshaw*, 98 Wn.2d 789, 802 n.2, 659 P.2d 488 (1983)); see also 5A Teglund, § 291 at 396. Evidence establishing proximate cause in medical malpractice cases must rise above speculation, conjecture, or mere possibility. See *McLaughlin*, 112 Wn.2d at 837, 774 P.2d 1171; see also *Coffman v. McFadden*, 68 Wn.2d 954, 961, 416 P.2d 99 (1966).

We agree with the Court of Appeals that Dr. Fallat's proposed testimony, based on the information known to the medical profession at the time of Plaintiff's treatment, "is the type of information jurors and their physicians rely on in their everyday lives to make decisions about health care. There is nothing mystical about it, and jurors are perfectly capable of determining what weight to give this kind of expert testimony." *Reese*, 74 Wn. App. at 565, 874 P.2d 200. A jury can certainly evaluate the foundation for Dr. Fallat's opinion that the failure to prescribe Prolastin therapy caused a preventable worsening of the Plaintiff's condition. Furthermore, the jury can evaluate the Defendant's reasons for failing to apply Prolastin as well as the lack of substantial statistical support concerning the therapy's efficacy.

Reese, 128 Wn.2d at 309. The absence of "a statistically significant basis" for the expert's opinion that the plaintiff would have benefited from the Prolastin therapy neither implicated *Frye* nor rendered the proffered testimony inadmissible. *Reese*, 128 Wn.2d at 305, 307. Many expert medical opinions are pure opinions and are based on experience and training rather than scientific data. We only require that

“medical expert testimony . . . be based upon ‘a reasonable degree of medical certainty’” or probability. *McLaughlin v. Cooke*, 112 Wn.2d 829, 836, 774 P.2d 1171 (1989) (citing *State v. Crenshaw*, 98 Wn.2d 789, 802 n.2, 659 P.2d 488 (1983)); *see also* 5B Tegland, *supra*, at 122-23; Black’s Law Dictionary 1380 (9th ed. 2009). Many medical opinions on causation are based upon differential diagnoses. A physician or other qualified expert may base a conclusion about causation through a process of ruling out potential causes with due consideration to temporal factors, such as events and the onset of symptoms. *E.g. Reese*, 128 Wn.2d at 307, 309; *Marsh v. Valyou*, 977 So.2d 543, 548 (Fla. 2007).⁷

In the case before us, the plaintiff presented evidence that tended to show it is generally accepted by the scientific community that toxic solvents like the ones to which Anderson was exposed are fat soluble, pass easily through the placenta and dissolve into the amniotic fluid inside the uterus, and may damage the developing brain of a fetus within the uterus.⁸ Anderson contends that Dalton suffers from a malformation/encephalopathy referred to as a neuronal migration disorder caused by in utero organic solvent exposure, among other things. Akzo’s expert concluded that Dalton did not have a neuronal migration defect, but instead “has a birth defect

⁷ For example, the Florida Supreme Court held that “[b]ecause testimony causally linking trauma to fibromyalgia is based on the experts’ experience and training, it is ‘pure opinion’ admissible without having to satisfy *Frye*.” *Marsh*, 977 So. 2d at 549 (citing *State Farm Mut. Auto. Ins. Co. v. Johnson*, 880 So. 2d 721, 732 (Fla. Dist. Ct. App. 2004).

⁸ We note that counsel neglected to provide a specific citation to the record for this, instead referring us to “CP 577-768 (Exhibit 23 to Declaration of Beauregard (Schultz Deposition Page 65 lines 20 to 25 to Page 26 lines 1 to 4)).” Appellants Reply Br. at 5 n.8. This was not a helpful citation. Counsel is encouraged to provide the court with a specific page citation in the record in future cases.

known as polymicrogyria” (also known as PMG).⁹ CP at 895. According to Akzo’s evermore nuanced argument, to satisfy *Frye*, Anderson must establish that the specific causal connection between the specific toxic organic solvents to which she was exposed and the specific polymicrogyria birth defect is generally accepted in the scientific community. If we were to accept Akzo’s argument and require “general acceptance” of each discrete and evermore specific part of an expert opinion, virtually all opinions based upon scientific data could be argued to be within some part of the scientific twilight zone.

The *Frye* test is only implicated where the opinion offered is based upon novel science. *Reese*, 128 Wn.2d at 306. It applies where either the theory and technique or method of arriving at the data relied upon is so novel that it is not generally accepted by the relevant scientific community. There is nothing novel about the theory that organic solvent exposure may cause brain damage and encephalopathy. *See, e.g., Berry v. CSX Transp., Inc.*, 709 So. 2d 552, 568 & n.12, 571-72 (Fla. Dist. Ct. App. 1998) (surveying medical literature). Nor does it appear that there is anything novel about the methods of the study about which Dr. Khattak wrote. Khattak, *supra*, at 1106. *Frye* does not require that the specific conclusions drawn from the scientific data upon which Dr. Khattak relied be generally accepted in the scientific community. *Frye* does not require every deduction drawn from generally accepted theories to be generally accepted. Other evidentiary requirements provide additional protections from deductions that are mere

⁹Anderson disagrees that Dalton’s neuronal migration disorder is a polymicrogyria defect.

speculation. *E.g.*, ER 104(a); ER 401; ER 403. Because Dr. Khattak's testimony was not based upon novel science, *Frye* was not implicated in this case. Other evidentiary standards properly balance the parties' right to advance their theories of the case. To the extent that the Court of Appeals opinions in *Grant*, 133 Wn. App. 176, and *Ruff*, 107 Wn. App. 289, are inconsistent with this opinion, they are overruled.¹

Comparative Negligence

Anderson argues that the trial court erred by refusing to grant her motion for partial summary judgment dismissing Akzo's comparative negligence defense.¹¹

We disagree.

Anderson contends that the comparative fault of a mother for her son's birth defects occurring in utero is neither factually nor legally permissible. Certainly, this court has never recognized a cause of action by a child against a mother for negligent prenatal injury. Nor are we asked to recognize a duty of a mother to a

¹ We do not fault Akzo for challenging the evidence under *Frye*, or the superior court for applying it. Given that this court had not yet spoken, it was a reasonable approach to the issues.

¹¹ The trial court order relevantly states:

It is hereby ORDERED that the Anderson family's motion for summary judgment for the dismissal of Akzo Nobel's **comparative fault** affirmative defense with respect to **Dalton Anderson** is GRANTED.

. . . .
ORDERED that the Anderson family's motion for summary judgment for the dismissal of Akzo Nobel's **comparative fault** affirmative defense with respect to **Julie Anderson** is DENIED.

CP at 195. We lack the complaint and other documents, and the arguments made before us by the parties make it unclear exactly what claims, theories, or damages claims have been made. However, it appears that this order related both to Julie Anderson's individual claims and to claims made on behalf of her son.

child in utero in this case. Thus, Anderson is correct that she cannot under our law be a party whose fault caused injury or damage to Dalton. However, it appears she also makes a claim independent of Dalton's for injuries and damages she suffered as a result of chemical exposures at Akzo. It is unclear because we were not provided with the complaint nor are either party's contentions surrounding this issue clearly articulated. The record also suggests that Akzo alleges Anderson was negligent for smoking during pregnancy, thereby negligently injuring Dalton. Anderson is correct that she had no legally enforceable duty not to smoke, and therefore she cannot be contributory negligent under such a theory.¹²

But Anderson contends that Akzo was negligent for exposing her to organic solvents. To the extent that Anderson was aware of the risk and voluntarily exposed herself to solvents that caused her harm and gave rise to her independent injury, she may be comparatively at fault. Implied unreasonable assumption of the risk is comparative negligence under our comparative fault system. *Scott v. Pac. W. Mountain Resort*, 119 Wn.2d 484, 498-99, 834 P.2d 6 (1992). As we noted in *Scott*:

implied reasonable and unreasonable assumption of risk arise where the plaintiff is aware of a risk that already has been created by the negligence of the defendant, yet chooses voluntarily to encounter it. In such a case, plaintiff's conduct is not truly consensual, but is a form of contributory negligence, in which the negligence consists of making the wrong choice and voluntarily encountering

¹² We are mindful that a causal issue would be raised if Dalton's numerous defects were caused by exposure to smoking instead of organic solvents, but Akzo raised smoking in a claim of comparative negligence; it did not, as far as we can tell from the record, suggest alternative causation.

a known unreasonable risk.

Id. at 499 (quoting *Leyendecker v. Cousins*, 53 Wn. App. 769, 773-74, 770 P.2d 675 (1989)). On the record and argument before us, Akzo’s viable allegations of comparative fault are limited to its claim that Anderson knew the hazards of exposure to solvents and voluntarily and unreasonably exposed herself to them. Taking the evidence most favorable to Akzo as the nonmoving party, there was evidence that Anderson disregarded official policy to wear a respirator.¹³ Given that this is a pretrial motion made before the close of the discovery period, and that the burden is on Anderson, we cannot say that the judge erred by denying the motion for partial summary judgment.

Anderson also argues that allowing Akzo to attribute any fault to her would violate Washington’s Law Against Discrimination (WLAD), chapter 49.60 RCW. Both the Human Rights Commission and this court have recognized that WLAD forbids discrimination based on pregnancy. *Hegwine v. Longview Fibre Co.*, 162 Wn.2d 340, 362, 172 P.3d 688 (2007); WAC 162-30-020. Among other things, “[i]t is an unfair practice for an employer, because of pregnancy . . . to . . . [i]mpose different terms and conditions of employment on a woman.” WAC 162-30-020(3)(a)(ii).

However, we are unpersuaded that Anderson has shown, as a matter of law,

¹³While we find summary judgment that a mother may be comparatively at fault on her own claim for damages as a result of failing to follow company safety protocols was properly denied, we do not mean to imply that in every case, or even in this one, such an issue should go to trial. We simply decline to overturn the trial judge’s ruling on summary judgment based on the record before us and the argument presented. Further, again we do not mean to imply that she owed an independent duty to her unborn child.

that Akzo did impose different terms on her because of her pregnancy. She submitted evidence that she was told to wear a respirator while pregnant and that other employees were not, there are also facts from which the jury could find that every employee was required to wear a respirator, regardless of pregnancy. Further, we are skeptical, given the record before us, that requiring special precautions for pregnant employees would necessarily be considered discrimination in violation of the WLAD. There may or may not remain factual or legal issues regarding discrimination under the WLAD but, on the record and argument before us, we are unprepared to rule that summary judgment was improperly denied. Should the comparative negligence claim proceed to trial, careful consideration must be given to how the jury is instructed and the argument limited. *See, e.g.*, RCW 4.22.020 (negligence of the parent may not be imputed to the child).

Wrongful Discharge

Anderson contends she was wrongfully discharged in violation of public policy for making a Washington Insurance Safety and Health Act of 1973 (WISHA), chapter 49.17 RCW, complaint about workplace conditions. In *Cudney v. AlSCO, Inc.*, No. 83124-6 (Wash. Sept. 1, 2011), this court concluded that a common law wrongful discharge in violation of public policy claim may not be predicated on an employer's alleged retaliation against an employee for making such a complaint to the Washington State Department of Labor and Industries. Accordingly, we affirm the trial court's ruling on this issue.

CONCLUSION

We hold that the *Frye* test is not implicated if the theory and the methodology relied upon and used by the expert to reach an opinion on causation is generally accepted by the relevant scientific community. We affirm the trial court's rulings on comparative fault and wrongful discharge. We reverse in part, affirm in part, and remand to the trial court for further proceedings consistent with this opinion.

AUTHOR:

Justice Tom Chambers

WE CONCUR:

Chief Justice Barbara A. Madsen

Justice Mary E. Fairhurst

Justice Charles W. Johnson

Justice James M. Johnson

Justice Gerry L. Alexander

Justice Debra L. Stephens

Richard B. Sanders, Justice Pro
Tem.

Justice Susan Owens

COURT OF APPEALS
DIVISION II

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STATE OF WASHINGTON
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DEPUTY

No: 41969-6-II

COURT OF APPEALS, DIVISION II
OF THE STATE OF WASHINGTON, TACOMA

T. ARTHUR GUSCOTT,

Defendant/Counter-Plaintiff/Appellant

vs.

ADVANCED HEALTH CARE, INC.

Plaintiff/Counter-Defendant/Respondent

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ORIGIN

I, Cynthia L. Ringo, declare and state as follows:

1. I am and at all times herein was a citizen of the United States, a resident of Snohomish, County, Washington, and am over the age of 18 years.

2. On the 21st day of November, 2011, I caused to be served these document as follows:

- Brief of Appellant; and
- Certificate of Service

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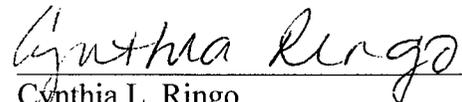
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I declare under penalty of perjury under the laws of the State of Washington that the above is true and correct.

Dated at Seattle, Washington, this 21st day of November, 2011.


Cynthia L. Ringo