
Presenting and Challenging Expert Testimony: Winning the Battle and the War

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Trials are at times won or lost based on experts and the lawyer's ability to make the most of the rules governing the admissibility of expert testimony. This article provides tips to ensure that your expert's opinion reaches the jury, or conversely, that your opponent's expert opinion does not.

There is no question that an expert can provide valuable—even case-ending—testimony. For example, the expert's well-reasoned opinion can lend credibility to counsel's arguments made to the jury by narrating and reinforcing the major themes of your case. Moreover, through the expert, counsel can often introduce helpful evidence that is otherwise inadmissible. Importantly, the expert can tie together counsel's theories into a final opinion that proves the ultimate issue of the case.

A good expert is a competent narrator who helps to advance the theme of your case. In a federal criminal case I tried, over strenuous objection I called a psychologist who had diagnosed the government's informant as a pathological liar. In support of my expert's opinion, the court also permitted me to introduce examples of the informant's behavior that the expert had relied upon for his diagnosis. With this one expert, I was able to both discredit the government's main witness and provide a counter-narrative to the one that was presented by the government, namely that my client purportedly confessed an intent to commit the crime in a statement to an alleged co-conspirator, the government's informant and the

person who prompted its investigation. Through expert testimony, we developed a forceful narrative centering on the theme that the government had unwittingly based its entire investigation on the statements of a pathological liar. We succeeded in showing the jurors that the government had been seriously misled by its own informant.

The range of subject matter of relevant permissible expert testimony is only limited by the trial lawyer's creativity. Experts can take the lawyer and jurors into areas they previously knew little about. Experts can recreate for the jury experiences about which they could otherwise only guess—experiences that are far removed from the juror's own life experience. In another case I tried, the court allowed me to call a retired Rand Corporation research expert to testify as to the traumatic impact that specific events of the Vietnam War had on Vietnamese immigrants in general and on my clients in particular.

Recreation of events occurs regularly in courtrooms through the use of scientific techniques, experts can vividly recreate for jurors accident scenes or other relevant conditions. The only requirement is that the demonstration or experiment must be sufficiently similar so that it fairly replicates the conditions it purports to represent.¹ In another case I tried, my client had a profound hearing loss. The government had a tape-recorded telephone conversation of my client purportedly expressing joy that the alleged crime had been carried out. Recognizing that my client might not be believed if he simply testified that he did not comprehend what was said during the conversation, and knowing the potential numbing effect of technical evidence, I used an expert audiologist to highlight my client's hearing deficits.

The audiologist demonstrated what my client actually heard during the critical tape-recorded phone call. He accomplished this by removing certain sounds from the government's recording to replicate the limitations of my client's hearing, thereby illustrating precisely what my client could and could not hear during the telephone conversation. By recreating the conversation as my client experienced it, and by allowing the jurors to hear the conversation just as my client heard it, we had evidence that engaged the jury and made a far greater impact. The jurors became experts on my client's profound hearing loss and accepted our theory of the case. Consequently, the jury acquitted my client.

Because expert testimony is so significant, counsel must ensure that the testimony will withstand an

¹ See e.g., *Dyer v. R.E. Christiansen Trucking, Inc.*, 318 Or 391, 400 (1994) (trial court did not err in excluding videotape demonstration of "trailer sweep" when it was not sufficiently similar to facts of case to be relevant); *Myers v. Cessna Aircraft Corp.*, 275 Or 501, 509-10 (1976) (admitting expert testimony and lab results where experiment conditions were the same as the conditions under which the evidence indicates the plane was operating).

evidentiary challenge. For this reason, it is worthwhile to remind ourselves of some basic legal principles governing expert evidence. Counsel should also be familiar with the tools available to ensure that your expert's testimony is admitted and conversely must understand how to use the Rules of Evidence to exclude the opponent's expert.

The Rules of Evidence define the permissible scope of expert testimony. We are permitted to call experts when there are issues in a case that are beyond the common knowledge of the jury. Expert witnesses therefore must have scientific, technical, or other specialized knowledge through advanced education or significant training. They can testify to ultimate issues in a case and render opinions without personal knowledge of the events. For example, an expert may be called to provide an opinion about the cause of injury or illness, an essential element of the claim. In this regard the expert is uniquely qualified to testify to that ultimate issue.² However, trial counsel still needs (i) to be familiar with the qualifications of each party's expert, (ii) to understand the record the expert relied on in rendering her opinion, and (iii) to know whether her opinion is based on proper methodologies.

Courts often admit expert testimony over the objections of counsel, leaving the jury to determine the weight that the testimony should be given. Thus, an advocate should think twice about challenging an expert where there is simply a dispute within the relevant community over the expert's opinion. If the expert's testimony is likely to be admitted over your objection, you will have probably previewed to opposing counsel and the expert the nature of your cross-examination thereby providing them with an opportunity to shore up their arguments.

This concern, of course, should not prevent you from waging a challenge where the expert's procedures render the opinion unreliable, or where the opinion itself is without basis. In such cases, the expert's opinion will not be admitted. For this reason, counsel must be prepared to challenge the expert's theory or scientific methods. For example, a litigant might try to use a psychologist to explain why a victim changed her story or recalled a memory after many years. You must be ready to challenge these likely unreliable theories or the scientific methodology underlying the evidence through a hearing where the expert is subject to cross-examination or will be challenged through the

2 See *Madrid v. Robinson*, 324 Or 561 (1997) (accident reconstruction expert permitted to testify to what "caused" the accident). See generally Rule 704 ("Testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact.").

presentation of competing expert testimony.³

Because expert testimony can be so persuasive, courts have a duty to disallow unreliable or unduly prejudicial expert evidence. Courts have developed a process to assess the reliability of the expert's opinion pretrial and determine whether the jury should hear it. Your chance of prevailing at trial may depend on the outcome of these challenges. Therefore, it is important to resolve these issues by motion as soon as possible.

I. Expert Testimony is Generally Admissible if Reliable and Helpful to the Trier of Fact

"Believe the one who has proved it. Believe an expert."

—*Virgil, Aeneid*

Expert testimony generally will be admitted if the expert is qualified and the opinion is reliable. Oregon and federal rules provide a liberal standard for admissibility of expert testimony. If a qualified expert's "scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue" then the testimony is admissible.⁴ Even though the standard is liberal, the rules do not permit all expert testimony. Trial courts perform a crucial "gatekeeper" function. First, the trial court must determine whether an expert possesses the appropriate qualifications through either training or experience, or both. The trial court must then decide whether that opinion will ultimately assist the fact finder.⁵

3 In federal court and in state criminal proceedings, challenges to experts often occur pretrial. In both state and federal court, the parties are provided expert discovery pretrial, enabling us to make pretrial challenges to this evidence. I am a criminal law practitioner and therefore my experience is with pretrial hearings and this article does not discuss the nuances of setting up challenges when you learn of an expert for the first time during the trial itself. See *Stevens v. Czerniak*, 336 Or 392, 404-05 (2004) (Oregon Rules of Civil Procedure do not permit court to require pretrial discovery of experts).

According to my experienced colleagues who try civil cases in state court, litigants are required to make their challenges to expert witnesses often during trial because of the lack of pretrial discovery of experts. Thus, it is even more important to know the law and be familiar with the science. The downfall of litigating these objections during trial is the risk that the case may end up gutted of its experts and unable to proceed. As discussed below, in some civil cases, the parties challenge an expert pretrial, but in others, these decisive issues are litigated during trial.

4 Rule 702. The federal rule is similar, and provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

5 Rule 702.

A. An Expert Must Be Qualified

“An expert is a man who has made all the mistakes that can be made, in a very narrow field.”

—Neils Bohr

An expert must be qualified by knowledge, experience, education, or training to testify about a particular subject-matter. “The witness must have such skill, knowledge or experience in the field or calling in question as to make it appear that his opinion or inference-drawing would probably aid the trier of the facts in his search for the truth.”⁶

Professional degrees are not necessarily required in order for an expert to be qualified to testify about an area where that expert has practical or technical experience. In *State v. Rogers*, for example, the Oregon Supreme Court determined that the expert, who was a properly qualified psychologist, had focused on neuropsychological issues and therefore was qualified to testify on a neuropsychological matter despite not having a degree in that particular discipline.⁷ In *State v. Moore*, however, the court found an expert unqualified to testify regarding battered spouse syndrome when that expert did not have any degrees in the subject matter. Notably in *Moore*, the expert witness not only lacked a degree in the subject matter, she also had limited experience as a counselor. Given the inherent complexity of a battered spouse defense, requiring the expert to “evaluate the literature and the various phases of the syndrome and to apply the syndrome to the particular facts of the case[,]” the expert’s lack of training and education rendered her unqualified to testify and the jury did not hear her opinion.⁸

Training or job experience may also qualify a witness as an expert. In *State v. Park*, a forest service officer qualified to testify that marijuana plants were “clones.” The court found he was qualified because he had over 16 hours of training in differentiating different types of marijuana plants.⁹ Importantly, the training or experience must be relevant to the issue. For example, a police officer’s general training is not sufficient to qualify him as an expert in the cause of an accident.¹⁰ An expert’s qualifications depend heavily on the facts of a particular case; thus if the subject-matter of the testimony is an area that requires special training, an expert will not be qualified without that training.¹¹

The determination of the expert’s qualifications

6 *Sandow v. Weyerhaeuser Co.*, 252 Or 377, 380 (1969).

7 *State v. Rogers*, 330 Or 282, 317 (2000).

8 *State v. Moore*, 72 Or App 454, 459, rev den 299 Or 154 (1985).

9 *State v. Park*, 140 Or App 507, 514 (1995), rev den 323 Or 690 (1996).

10 See *Davis v. County of Clackamas*, 205 Or App 387, 395, rev den 341 Or 244 (2006) (officer could not give opinion as an expert because he did not apply specialized knowledge as an accident reconstructionist).

11 See *State v. McFarland*, 221 Or App 567, 577 (2007) (trainee in Drug Recognition Expert (DRE) protocol was not qualified to testify as an expert because not adequately trained).

relates directly to the purpose of Rule 702—assisting the trier of fact—because an expert is only helpful to the jury if he or she is qualified. As the Oregon Supreme Court explained it:

Because of these qualifications he is permitted to express his opinion as a witness so that the jury may have the benefit of his special ability to draw inferences from the facts in evidence. “The expert witness is granted the privilege of expressing to the jury an opinion because his superior training enables him to arrive at a conclusion which is more likely to be sound than that of the average juror.”¹²

Thus, it is very important for advocates to understand the qualifications of their own experts and their opponent’s experts and raise issues of qualification before the expert ever meets the jury.

B. An Expert’s Opinion Must Be Reliable

“For every expert there is an equal and opposite expert; but for every fact there is not necessarily an equal and opposite fact.”

—Thomas Sowell

An expert witness is only helpful to the trier of fact if the expert’s opinion itself is reliable. If an expert is offering a scientific opinion, one that “draws its convincing force from some principle of science, mathematics and the like”¹³ the court applies a more rigorous test and analyzes multiple factors that go to the reliability of the expert’s proffered testimony. Challenges to expert witnesses go to two different areas: whether the advocate’s theory that the expert’s testimony supports is valid and whether the methods or protocols used to reach that theory are valid.¹⁴

For example, in a recent case I handled, I challenged the government’s key expert in a pretrial hearing. I argued that the expert relied on outdated methods and protocols and therefore his results were unreliable. Because I effectively discredited the expert’s conclusions during the pretrial hearing, the government realized that it could not establish a central element of its case and voluntarily dismissed the charges. Testing the reliability of your adversary’s expert can have case-altering effects. Below are the factors to be aware of as you craft your arguments.

1. Daubert and the Federal Standard

The standards for admissibility of scientific evidence have changed over time. Under federal law, courts were hamstrung by the burdensome *Frye* test, which only permitted scientific evidence to come in when it was generally accepted in the field.¹⁵ This excluded too much evidence as science and research progressed.

12 *State By & Through State Highway Comm’n v. Arnold*, 218 Or 43, 64-65, reh’g denied and opinion modified, 218 Or 43 (1959).

13 *State v. Brown*, 297 Or 404, 407 (1984).

14 *State v. O’Key*, 321 Or 285, 292-93 (1995).

15 *United States v. Frye*, 293 F 1012 (DC Cir 1923).

Novel but otherwise reliable evidence was not admissible. In *Daubert v. Merrell Dow*, the United States Supreme Court determined that the Rules of Evidence superseded the *Frye* test and adopted a “flexible approach” designed to liberalize the introduction of scientific evidence:

Faced with a proffer of expert scientific testimony, then, the trial judge must determine at the outset, * * * whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.¹⁶

Daubert proposed four principal factors to aid in this analysis: (1) whether the theory or technique can be and has been tested; (2) whether the theory or technique can be and has been subject to peer review; (3) the known or potential rate of error; and (4) the degree of acceptance in the relevant scientific community. Although *Daubert* involved a question of scientific evidence, later in *Kumho Tire Co., Ltd. v. Carmichael*, the United States Supreme Court held that the trial court’s gatekeeping obligation to determine the reliability of the evidence extended to “technical or other specialized knowledge” as well.¹⁷

2. Brown/O’Key and the Oregon Standard

The Oregon Supreme Court also adopted a different multi-factor test for the admissibility of scientific evidence. Under *State v. Brown* and *State v. O’Key*, courts must determine the probative value of the scientific evidence or whether the “proposed evidence is based on scientifically valid principles and is pertinent to the issue to which it is directed.”¹⁸ But this test is not “a mechanical checklist of foundational requirements.”¹⁹ The overall touchstone is the reliability of the scientific opinion.

In *Brown*, a case about polygraph tests, the court set forth seven factors that Oregon trial courts had to consider before ultimately deciding that the polygraph technique was not admissible.²⁰ Thus, *Brown*, which predated *Daubert v. Merrell Dow*, established a separate and distinct multi-factor test for Oregon courts. Those factors are: (1) the technique’s general acceptance in the field; (2) the expert’s qualification and stature; (3) the use that has been made of the technique; (4) the potential rate of error; (5) the existence of specialized literature; (6) the novelty of the

invention; and (7) the extent to which the technique relies on the subjective interpretation of the expert.²¹ The court in *Brown* concluded that “under proper conditions polygraph evidence may possess some probative value and may, in some cases, be helpful to the trier of fact[;]” however, the court determined the evidence was inadmissible based on different considerations than its potential reliability “under proper conditions,” demonstrating that evidence that otherwise meets the scientific hurdle may still be excluded. The court reasoned the introduction of polygraph evidence might lead to undue delay in proceedings, and to confusing battles of the experts. The court also concluded that jurors might overvalue polygraph evidence, and found that polygraph evidence impermissibly comments on the credibility of witnesses.²²

A few years later, in *O’Key*, the Oregon Supreme Court incorporated the test set forth by the United States Supreme Court in *Daubert v. Merrell Dow*. No one factor is dispositive.²³ Unlike the United States Supreme Court’s ruling in *Kumho Tire*, Oregon courts have not ruled that the *Brown/O’Key* test applies to “technical or other specialized knowledge” as well as *scientific* evidence; however, Oregon courts define scientific evidence broadly. For instance, the courts routinely allow testimony on issues of medical causation,²⁴ psychological syndromes,²⁵ and drug or alcohol testing.²⁶ Oregon courts also have recognized that it is often difficult to distinguish between scientific evidence and evidence involving technical or other specialized knowledge because “[m]ost expert testimony rests at least partly on science.”²⁷

3. The Court’s Belief of the Jury’s Perception Categorizes Evidence as “Scientific”

An advocate must be on the lookout for expert opinions that appear to be scientific and will be relied

21 *Id.* at 422-37.

22 *Id.* at 440-41.

23 The factors enunciated in *Brown/O’Key* are not the only relevant considerations. In a footnote in *Brown*, and recognized again by the Supreme Court in *Marcum v. Adventist Health System*, 345 Or 237, 244 n 7 (2008), are 11 more factors: (1) the potential rate of error in using the technique; (2) the existence and maintenance of standards governing its use; (3) presence of safeguards in the characteristics of the technique; (4) analogy to other scientific techniques whose results are admissible; (5) the extent to which the technique has been accepted by scientists in the field involved; (6) the nature and breadth of the inference adduced; (7) the clarity and simplicity with which the technique can be described and its results explained; (8) the extent to which the basic data are verifiable by the court and the jury; (9) the availability of other experts to test and evaluate the technique; (10) the probative significance of the evidence in the circumstances of the case; and (11) the care with which the technique was employed in the case.

24 *Jennings v. Baxter Healthcare Corporation*, 331 Or 285, 304 (2000).

25 *State v. Milbradt*, 305 Or 621, 631 (1988).

26 *State v. Sampson*, 167 Or App 489 (2000).

27 *O’Key*, 321 Or at 291 (quoting Christopher B. Mueller and Laird C. Kirkpatrick, *Modern Evidence* § 7.8, 990 (1995)).

16 *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 US 579, 592-93 (1993).

17 526 US 137, 141-42 (1999).

18 *O’Key*, 321 Or at 303.

19 *Id.* at 300.

20 *Brown*, 297 Or at 445.

upon by the jury as such. The Oregon Supreme Court concluded that whether proffered expert testimony is scientific, requiring the proponent to establish an appropriate foundation, “depends primarily on whether the trier of fact will perceive the evidence as such.”²⁸ In that case, *State v. Marrington*, the state called a psychologist to testify that the victim’s delay in reporting sexual abuse was a common occurrence. The state did not lay any foundation for scientific evidence required under *Brown/O’Key*. The defendant objected and argued that because this assertion was scientific evidence, the state was required to demonstrate that it was scientifically valid. The court in *Marrington* explained that trial courts “must determine whether the expert’s assertions ‘possess significantly increased potential to influence the trier of fact as scientific assertions.’”²⁹ Thus, the court concluded:

An expert * * * who has a background in behavioral sciences and who claims that her knowledge is based on studies, research, and the literature in the field, announces to the factfinder that the basis of her testimony is ‘scientific.’ * * * Because that is how the factfinder would understand it, a court has a duty to ensure that such information possesses the necessary indices of scientific validity.³⁰

The court reversed the trial court for failing to require that the state demonstrate that the expert’s opinion was scientifically valid.

4. The Three-Step Process

With any challenge to expert testimony, scientific or otherwise, trial courts must engage in a three-step process in determining whether expert evidence is admissible. First, the court determines whether the evidence is relevant under Rule 401.³¹ Next, the courts apply Rule 702 to determine whether the expert is qualified and whether the expert’s opinion will assist the fact finder (for scientific evidence, this includes application of the multifactor *Brown/O’Key* or *Daubert* tests). Finally, the court will apply the Rule 403 balancing test, and if the expert evidence is more prejudicial than probative, it will be excluded.³² The 702 factors are relevant to the Rule 403 balancing analysis. In one case, the defendant argued that the state did not lay a proper foundation for the evidence and therefore the probative value was outweighed by the prejudicial effect. The defendant, however, did not challenge the admissibility of evidence under Rule 702. Nonetheless, the Court of Appeals, although recognizing that a Rule 702 argument was not adequately raised, nonetheless agreed that the state did not lay a proper foundation for the evidence and

applied the *Brown/O’Key* factors to determine that the urinalysis test results were not scientifically valid and therefore were not probative. Because the test results appeared scientific, it was unduly prejudicial to admit them.³³

Although both the state and federal Rule 702 are rules of inclusion for expert testimony, the importance of the trial court’s gatekeeping function cannot be overemphasized. Experts may supplant the jury in its role as finder of fact. As one commentator notes, expert testimony poses a “paradox”:

when experts give an opinion they generally tell the trier of fact what meaning it should give to other evidence. But determining the meaning of the evidence is the central function of the trier of fact. If the trier of fact is unable or disinclined to question the expert’s opinion, it surrenders its central function to an expert whose testimony may be unreliable.³⁴

Or, as the Oregon Supreme Court aptly stated in *O’Key*: “Evidence perceived by lay jurors to be scientific in nature possesses an unusually high degree of persuasive power. The function of the court is to ensure that the persuasive appeal is legitimate. The value of proffered expert scientific testimony critically depends on the scientific validity of the general propositions utilized by the expert.”³⁵

II. Balancing the Trial Court’s Gatekeeper Function with the Jury’s Role

“If an expert says it can’t be done, get another expert.”

—David Ben-Gurion

It is, of course, more desirable for a questionable expert espousing questionable science to be excluded from the jury entirely—and that argument might be meritorious on appeal—but the so-called “battle of the experts” is at times inevitable. Ultimately, this is because the policy of Rule 702, and the Rules of Evidence more generally, favor the admission of relevant evidence and the bar for relevance is low.³⁶ Thus, some courts seem willing to admit doubtful evidence and let the jury sort it out, repeating the now-familiar refrain that challenges to the reliability of an expert’s opinion more often go to “weight, not

33 *State v. Jayne*, 173 Or App 533, 541-43 (2001).

34 Wright and Gold, *Federal Practice and Procedure* § 6262 at 179.

35 *O’Key*, 321 Or at 291.

36 Rule 401 provides that evidence is relevant if it has “any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.”

28 *State v. Marrington*, 335 Or 555, 561 (2003).

29 *Id.* at 562 (quoting *O’Key*, 321 Or at 292).

30 *Id.* at 563-64.

31 *Id.* at 297-98.

32 *Id.*

admissibility.”³⁷ Even the uniform jury instruction states: “You are not bound by the opinion. Give it the weight, if any, to which you consider it is entitled.”³⁸ But this policy favoring admissibility conflicts to some extent with the court’s “gatekeeper” function. Trial courts have a duty to ensure that expert testimony is reliable. This is because expert testimony, as discussed above, has several features that could interfere with the jury’s role. Experts can testify to ultimate conclusions under Rule 704. Experts necessarily testify to issues that are beyond everyday understanding. And experts, owing to their specialized training and experience, appear credible to a jury. Thus, the rules must strike a delicate balance between the role of the court and the role of the jury to ensure that the jury’s role is not supplanted by the expert.

A. Advocates Present the Basis of an Expert’s Opinion, and the Jury Assesses the Weight of that Opinion

“The public do not know enough to be experts but know enough to decide between them.”
—Samuel Butler

If the court admits the proffered expert evidence, the jury must then determine for itself what weight to give the opinion. Jurors then perform a similar task to the trial court in a Rule 104 hearing. For example, the criminal model jury instruction provides:

Even though expert witnesses may testify about their opinions, you are not required to accept those opinions. To determine the value, if any, you will give to an expert’s opinion, you should consider such things as the expert’s qualifications, the expert’s opportunity and ability to form the opinion, the expert’s believability, and how the

expert reached the opinion or conclusion.³⁹

Thus, if the evidence is admitted, it is incumbent on counsel to demonstrate for the jury the flaws of the opponent’s expert’s opinion. As the Oregon Supreme Court has explained, “the witness who testifies to an expert opinion is subject to cross-examination concerning how she arrived at that opinion, and the cross-examiner is given ‘great latitude’ in eliciting testimony to vitiate the opinion.”⁴⁰ Necessarily, trial courts provide advocates leeway to essentially re-litigate issues that arose in an unsuccessful challenge under Rule 104, or in those cases where there was no opportunity for a pretrial hearing, to litigate those issues for the first time. To be sure, in a Rule 104 hearing, the trial court and counsel are not constrained by the other rules of evidence.⁴¹ But if counsel is forced to discredit the opponent’s expert during trial, counsel must do so within the bounds of the rules of evidence.

Yet even when the Rules of Evidence apply to the particular proceeding, counsel can introduce evidence underlying the expert’s opinion. For example, Rule 705 provides that the expert may be required to disclose the underlying facts or data he or she relied upon during cross-examination. Under Rule 706, an expert may even be impeached with statements from a learned treatise.

Generally, if the opposing expert’s conclusions are flawed, you have an opportunity to challenge that expert for relying on an incomplete factual record in rendering the opinion. You can force the opposing expert, on cross-examination, to disclose the bases of her opinion, and, if it is based on inaccurate or incomplete information, then the jury should discount her opinion. Indeed, you have an opportunity to expose the weaknesses in the expert’s opinions, including poor quality control, lack of documentation, failure to

37 See e.g., *Jennings*, 331 Or at 309 (expert’s inability to explain mechanism causing plaintiff’s injury went to weight of the evidence, not admissibility); *Barrett v. Coast Range Plywood*, 294 Or 926, 931 (1983) (that an expert witness did not have a specialized degree in the subject-matter went to the weight accorded to testimony, not admissibility); see also, *Baughman v. Pina*, 200 Or App 15, 20 (2005) (expert’s failure to explain basis of opinion went to weight of testimony but not basis for directed verdict). The effect is the same in federal court. See generally, Wright & Gold, *Federal Practice and Procedure* § 6264 at 224 (“courts usually conclude that defects in the underlying logic or basis of expert testimony are jury questions that go to weight, not admissibility”).

38 Oregon UCJI No 10.06.

39 Oregon UCJI No 1034. The civil jury instruction is similar.

Oregon UCJI No 10.06 provides that “An expert witness may give an opinion on any matter in which that witness has special knowledge, skill, experience, training, or education. You should consider the qualifications and credibility of the expert witness and the reasons given for the opinion. You are not bound by the opinion. Give it the weight, if any, to which you consider it is entitled.”

The Ninth Circuit Criminal jury instruction, and its virtually identical civil counterpart, provides: “You have heard testimony from persons who, because of education or experience, were permitted to state opinions and the reasons for their opinions. Such opinion testimony should be judged like any other testimony. You may accept it or reject it, and give it as much weight as you think it deserves, considering the witness’s education and experience, the reasons given for the opinion, and all the other evidence in the case.”

40 *State v. Lyons*, 324 Or 256, 278-79 (1996) (quoting *Bales v. SAIF*, 294 Or 224, 235 n 4 (1982)).

41 During a Rule 104 hearing, counsel is not constrained by the other rules of evidence. Rule 104 provides “Preliminary questions concerning the qualification of a person to be a witness * * * be determined by the court. * * * In making its determination the court is not bound by the rules of evidence except those with respect to privileges.”

consider relevant information or facts, and opinions that have been soundly criticized in the scientific literature. Whether to introduce the underlying facts or data that informs the expert's opinion is a strategic choice. Conversely, it is beneficial for counsel to introduce the evidence that forms the basis of his own expert's opinion because through the expert, counsel can often introduce favorable evidence that is otherwise inadmissible.

For example, defense counsel used cross-examination to great effect in *Blake v. Cell Tech International, Inc.*,⁴² by drawing out the fact that the expert had used a new and untested method to determine whether there were toxins in the decedent's liver, and had also conducted three different rounds of that testing that contained false positives. Both the trial court and the Court of Appeals concluded that the opinion was not reliable, and therefore it was inadmissible.⁴³

B. Expert Testimony Is Inadmissible When it Intrudes on the Jury's Function to Determine the Credibility of Witnesses

"A fundamental premise of our criminal trial system is that 'the jury is the lie detector.'"
—*United States v. Scheffer*⁴⁴

Advocates also should be mindful that on the basis of Rule 403, courts have determined that there is some expert testimony that so thoroughly supplants the role of the jury that it is inadmissible. Even if the science behind the opinion is determined to be reliable, and the expert's opinion is sensible, as a matter of judicial doctrine, that evidence cannot come in. For example, in *State v. Southard*, the Oregon Supreme Court decided whether a diagnosis of sexual abuse was admissible.⁴⁵ In so deciding, the court followed the framework set forth in *Brown/O'Key*. First, it determined the evidence was relevant to the issue of whether the victim had been sexually abused. Significantly, it next decided that the evidence was scientifically valid and reliable under Rule 702. The court then looked at the methodology that the psychologist used in formulating the diagnosis of child sex abuse. Noting that the psychologist used standard, conventional, and accepted protocols, the court determined the proffered evidence has sufficient indicia of scientific validity. However, the court ultimately determined that, because the diagnosis did not tell the jury anything that it could not determine on its own—like whether the alleged sexual abuse occurred—it was of limited probative value, while, at the same time, it was very prejudicial. Therefore, the evidence was inadmissible.

For similar reasons, courts also disapprove of evidence that improperly comments on a witness's credibility. That is why no witness, expert or otherwise, may give an opinion that another witness is or is

42 228 Or App 388 (2009).

43 *Id.* at 401-02.

44 523 US 303, 313 (1998).

45 347 Or 127 (2009).

not telling the truth in his or her trial testimony.⁴⁶ In *Milbradt*, a psychologist called by the state testified that because of the victim's severe mental retardation, she lacked the capacity to fabricate a lie. The Oregon Supreme Court unequivocally held that "*no psychotherapist may render an opinion on whether a witness is credible in any trial conducted in this state.*" The assessment of credibility is for the trier of fact and not for psychotherapists.⁴⁷

Likewise, as discussed above, the court concluded that polygraph evidence is inadmissible for any purpose, even when parties stipulate to its admissibility.⁴⁸ Even though the court earlier had recognized that "under proper conditions polygraph evidence may possess some probative value and may, in some cases, be helpful to the trier of fact," any probative value was outweighed by the prejudicial effect.⁴⁹ Polygraph evidence, even if properly done, has a "potential for misuse and over-valuation * * * by the jury" that is, in fact, exacerbated by the parties' stipulation to its introduction and reliability—Oregon courts "will not permit this gamble."⁵⁰

However, evidence that relates to the capacity of a witness to testify is generally relevant.⁵¹ The cases cited above present different theories, and illustrate how important it is for counsel to hone the theory of relevance. In my case, where expert testimony regarding the witness's diagnosis of being a pathological liar was admitted, the witness had been diagnosed before the FBI chose to rely on him as an informant. The expert's testimony allowed me to challenge the government's reliance on a pathological liar to build its case and to interpret the facts. It was also admissible because it pertained to a mental illness that went directly to the witness's ability to perceive, recall, or recount. The psychologist rendered no opinion regarding the informant's truthfulness in court.

C. Experts Are Necessary to Prove Certain Facts

"Who's to say who's an expert?"
—*Paul Newman*

It is critical to know when an expert opinion is required and how to articulate the specific theory of admissibility. It is equally important to know how to mount challenges based on an adversary's failure to use

46 *State v. Middleton*, 294 Or 427, 438 (1983); *Milbradt*, 305 Or at 629-30.

47 305 Or at 629-30 (emphasis in original).

48 *State v. Lyon*, 304 Or 221, 233-34 (1987).

49 *Id.* at 230-31 (quoting *Brown*, 297 Or at 438).

50 *Id.* at 232-33.

51 See *State v. Longoria*, 17 Or App 1, 20-21 (1974) ("In a proper case, where there is an indication that a witness suffers mental impairment affecting his testimonial capacity, it may be proper to allow psychiatric or psychological evidence to assist the jury in assessing the ability of that witness to perceive, remember and relate."); see also *United States v. Palmer*, 536 F2d 1278 (9th Cir 1976) (citing 3A Wigmore, *Evidence* § 944 at 778 (Chadburn Rev 1970)) (range of evidence to discredit a witness on capacity to remember, observe, and recount is broad).

an expert when one is required. Thus, it is important for both the proponent and the opponent of an expert witness to understand how that witness will be put to use, in case you are able to challenge your opponent's failure to use an expert when one is necessary. Rule 702 is silent about when a party is required to put forth expert testimony; however, case law has held that expert testimony is required to prove certain facts. For example, expert testimony is often required to prove causation. "When the element of causation involves a complex medical question, as a matter of law, no rational juror can find that a plaintiff has established causation unless the plaintiff has presented expert testimony that there is a reasonable medical probability that the alleged negligence caused the plaintiff's injuries."⁵²

In professional malpractice cases, expert testimony is often required to establish whether the professional breached the profession's duty of care. In one medical malpractice case, the plaintiff did not call an expert and argued that the doctor should be held liable on a *res ipsa loquitur* theory. The court rejected that argument, stating that this was "precisely the type of case that the Supreme Court has said requires expert testimony."⁵³ Because there was no evidence presented that the doctor failed to perform according to the reasonable standards of the community without expert testimony, there was no way to establish that the doctor had been negligent.

In addition to the opinions required by law and "big picture" conclusions—such as causation—that are the purview of expert witnesses, the rules of evidence require expert testimony to prove certain facts because lay witnesses are not competent to testify to matters requiring specialized knowledge. Lay opinion testimony is limited by Rule 701, which is essentially identical in both Oregon and federal courts. That rule provides:

If the witness is not testifying as an expert, testimony of the witness in the form of opinions or inferences is limited to those opinions or inferences which are:

- (1) rationally based on the perception of the witness; and
- (2) helpful to a clear understanding of testimony of the witness or the determination of a fact in issue.

This rule is interpreted broadly in the sense that lay witnesses often express themselves through opinion based on perception as opposed to hard fact, for example when the witness testifies that, "the weather was cold," "he seemed angry," or "he was driving fast."⁵⁴

⁵² *Baughman*, 200 Or App at 18.

⁵³ *Jeffries v. Murdock*, 74 Or App 38, 43, *rev den* 299 Or 584 (1985).

⁵⁴ See *State v. Barnes*, 208 Or App 640, 650-51 (2006) (witness permitted to testify to opinion that victim was on methamphetamine).

Many opinions, of course, are outside of the competence of a lay witness. For example, in *State v. Hite*, the defendant tried to testify that his ability to communicate was impaired by the medication he was taking. The court did not permit the testimony because the defendant was not competent to testify about medical causation.⁵⁵ In another case, a post-conviction matter, the court held that expert testimony was required to explain the nature of the injuries sustained during an assault so the trier of fact had the information needed to decide whether the injury was significant.⁵⁶

III. Challenging your Opponent's Expert and Protecting your Own

"Make three correct guesses consecutively and you will establish a reputation as an expert."
—*Laurence J. Peter*

What is the threshold of reliability for the court to allow the evidence to be presented to the jury? There are two major tacks that an advocate can take to mount a challenge to an expert witness. The advocate can challenge the theory of admissibility, or the advocate can challenge the methodology or protocols used in reaching the expert opinion.

Following a challenge to the theory of admissibility, such as a claim that the theory is bogus or junk science, courts must determine whether the expert's opinion is reliable. A theory or technique is not unreliable just because it is novel. For example, in *Kennedy v. Eden Advanced Pest Technologies*,⁵⁷ the defendant brought a pretrial challenge to the plaintiff's treating physician, who was also testifying as an expert in chemical sensitivity.⁵⁸ The expert had diagnosed the plaintiff as suffering from "multiple chemical sensitivity." The defendant challenged that opinion as junk science and introduced testimony from its own expert that there was no such condition as "multiple chemical sensitivity" and then suggested that the plaintiff's expert's rate of error was 100%. The trial court excluded the plaintiff's expert but the Court of Appeals reversed. At most, the court concluded, there was a good faith disagreement in the scientific community and that both sides should be able to present evidence to the jury. In a case involving silicone breast implants, *Jennings v. Baxter Healthcare Corp.*, the defendant challenged the plaintiff's expert at trial and the trial court excluded the testimony. In his offer of proof, the plaintiff's expert testified regarding a potential syndrome caused by the leaking implants. In arriving at his conclusions, the expert had followed

⁵⁵ *State v. Hite*, 131 Or App 59, 62-63 (1994), *rev den* 320 Or 508 (1995).

⁵⁶ *Lambert v. Palmateer*, 187 Or App 528, 536, *rev den* 336 Or 125 (2003).

⁵⁷ 222 Or App 431 (2008).

⁵⁸ Although ordinarily there is no pretrial discovery of experts under the Rules of Civil Procedure, there is an exception in personal injury cases for the reports of physicians and psychologists who have examined the plaintiff. ORCP 44 C; *AG v. Guitron*, 351 Or 465, 467 (2011).

established clinical diagnostic techniques. The Supreme Court determined that the evidence should have been admitted because, even though the theory was novel, the protocols followed were not.⁵⁹

Even though novelty alone is insufficient to exclude scientific evidence, where there is a lack of traditional corroboration for reliability the court will exclude the evidence. For example, in *Blake v. Cell Tech Int'l Inc.*,⁶⁰ the plaintiff's expert testified in a pretrial hearing that the decedent died from a build-up of microcystin toxins in his liver.⁶¹ To reach that conclusion, the expert had employed a novel technique that had never before been used to test a human liver. After accepting the premise that novelty alone is not sufficient to exclude scientific testimony, the court concluded that the technique was not reliable for a number of reasons. First, the technique that the expert used was not accepted in the field to test for microcystins in a human liver. There was no known error rate nor was there any peer-reviewed publication regarding the accuracy of such procedures. Moreover, the tests conducted by the expert could not be easily duplicated or subjected to confirmatory tests through more established procedures. Finally, the probative significance was central to the plaintiff's claim because it would establish causation, and therefore, if admitted, the expert's testimony would be highly persuasive.⁶² The court concluded that the trial court had properly exercised its gatekeeper function.

The appellate and trial courts are more inclined to admit experts and let the jury consider the weight of their testimony rather than exclude experts where the theory, although novel, is still supported by solid scientific techniques and accepted procedures. This preference is clear from looking at the *Brown/O'Key* and *Daubert* factors. In those cases, the courts were clear that the focus of the multifactor inquiry was "solely on principles and methodology, not on the conclusions that they generate."⁶³ Although, in *Marcum*, the Oregon Supreme Court expanded the application of the *Brown/O'Key* test to reach the reliability of an expert's ultimate conclusions,⁶⁴ the fact remains that most of the factors pertain to the reliability of methods used to reach the conclusion.

For example, courts must focus on the techniques used and their acceptance in the field, the rate of error, and the extent to which the technique relies on subjective interpretation. Further, the existence of standards governing the use of the technique or safeguards in employing it is relevant and persuasive and weighs towards admissibility provided those standards and safeguards were applied in that particular case. If protocols and techniques are not followed, then the conclusion is not reliable and the

expert's opinion should be excluded.⁶⁵

A series of cases involving the drug recognition expert (DRE) protocol, which is designed to determine whether a person was under the influence of a controlled substance, demonstrates how a scientifically-valid theory can be undermined by insufficient adherence to proper methods and protocols. The Court of Appeals recognized the scientific validity of the 12-step DRE protocol in *State v. Sampson* following the test set forth in *Brown/O'Key*.⁶⁶ Thus, following *Sampson*, DRE protocol results are admissible in future cases. But, in subsequent cases, the courts have excluded DRE protocol results when the opponent of the evidence established that the results were unreliable because the protocol was improperly administered.⁶⁷ In *State v. Aman*, a qualified officer administered 11 of the 12 steps in the DRE protocol, but failed to complete the confirmatory urinalysis test. The court determined that because the confirmatory urinalysis "vitiat[e]d the problem of the DRE protocol's subjectivity" it was essential to the 12-step protocol's scientific validity under *Brown/O'Key*.⁶⁸ Similarly, the court found that in cases where the DRE protocol administrator was unqualified, like in *State v. McFarland*,⁶⁹ the opinion is unreliable and inadmissible.

IV. Conclusion

"An investment in knowledge pays the best interest."

—Benjamin Franklin

Understanding the validity of the scientific evidence of your opponent is not merely an academic exercise. As discussed above, challenges to experts may change the entire landscape of a case. Take the example I mentioned earlier, where the government, quite unexpectedly, dismissed an environmental case I was defending during the *Daubert* hearing process in federal district court.

When I litigated the *Daubert* hearing in my environmental case, our expert testified that the tests the government witness performed and the conclusions he drew were outdated. Further, our expert explained that other tests and equipment were available, and these modern tests showed that the nature of the substance in dispute was very different than what the government experts claimed. In short, our expert explained that the government's tests were no longer scientifically valid and were, in fact, unreliable. Before the court had an opportunity to decide whether the government's evidence would be admitted with the general instructions regarding the jury's duty to "weigh the evidence," the government dismissed the case because flaws in its expert's opinion made it very difficult to prove other issues in the case.

59 331 Or 285, 305 (2000).

60 228 Or App 388 (2009).

61 The opinion does not indicate how the defendants procured a pretrial hearing on this subject.

62 *Id.* at 401-02.

63 *O'Key*, 321 Or at 305 (quoting *Daubert*, 509 US at 595).

64 345 Or at 245-46 (expanding *Brown/O'Key* to reliability of opinion of medical causation).

65 See *Jayne*, 173 Or App at 544 (urinalysis techniques were error-prone and thus unreliable).

66 *Sampson*, 167 Or App 489.

67 See e.g., *State v. Aman*, 194 Or App 463 (2004), *rev allowed* 339 Or 488 (2005), *dismissed as improvidently allowed*, 339 Or 281 (2005).

68 *Id.* at 473 (quoting *Sampson*, 167 Or App at 510).

69 221 Or App 567 (2008).

There are several lessons learned from this and other experiences. First, even though they come with a host of issues for advocates, expert witnesses are a critical part of modern litigation. Litigants rely on experts to educate jurors on complex topics and to explain complicated information. Increasingly, sophisticated jurors will expect counsel to use modern science and technology to prove their points. Further, new science is constantly replacing older ideas. Savvy jurors will expect DNA evidence, where once blood analysis was sufficiently convincing. It is important to remember that at one point DNA evidence was frequently challenged but now is accepted without debate.⁷⁰ But at the same time, new technology is often unproven and subject to challenge by opponents. For example, litigators are now presenting powerful demonstrative evidence through computer-generated reenactments. But as the use of this technology becomes more common, so too will be the challenges to computer-generated demonstrations.⁷¹

There are countless examples of new science becoming standard practice, but likewise, there are examples of once valid protocols that are supplanted by more accurate testing methods. Thus, the methods, protocols, accuracy, and underlying assumptions of an expert's testimony will always present opportunities for challenges where even basic expert evidence is improperly relied upon.

70 See *State v. Lyons*, 324 Or 256 (1996) (determining that DNA evidence is scientifically valid).

71 See generally Mario Borelli, *The Computer as Advocate: An Approach to Computer-Generated Displays in the Courtroom*, 71 Ind L J 2 (1996); John Selbak, *Digital Litigation: The Prejudicial Effects of Computer-Generated Animation in the Courtroom*, 9 Berkeley Tech L J 2 (1994).