

Your First Expert Witness—Part II

by Ronald M. Sandgrund

Effective expert testimony boils down to one thing: a credible, prepared expert witness. This two-part article describes the essential principles a new lawyer should consider when retaining, preparing, deposing, and examining expert witnesses. Part I¹ discussed why expert testimony is useful, when expert testimony is advisable, who might qualify as an effective expert witness, how to locate and retain qualified experts, what needs to be done to prepare an expert for rendering opinions, and what qualities to look for in an expert witness. This second part examines defining the scope of the expert's assignment, providing the expert with case information, developing and disclosing the expert's opinions, and preparing your own and the opposition's expert witnesses for deposition and trial examination.

Nuts and Bolts

Following are some suggestions regarding the development of your expert's assignment and how and when to provide your expert with relevant facts and assumptions. Checklists are provided to assist attorneys and their experts in creating C.R.C.P. 26-compliant expert reports, as well as recommendations on how to mine the record before cross-examining an opposing expert.

Defining the Assignment

On the one hand, it may be important to narrowly define the assignment so that the expert does not run up a huge bill pursuing remote issues. On the other hand, it may be advisable to define the assignment broadly, so that if the scope of the expert's work later expands, this is not obvious to the opposing side when it reviews the expert's file. Opposing counsel might try to use such a change in course to argue that you and your expert had to alter theories because your case is weak and without merit. A proper balance between these considerations must be struck.

One way to begin defining the assignment is to review in lay terms with every expert the theory of your case and the admissi-

bility requirements for expert opinions. Describing the theory of your case helps the expert identify relevant technical issues and encourages a collaborative process. An expert who understands admissibility requirements can articulate his or her opinions and the basis for them in ways that satisfy applicable legal rules.

Under both the Federal and Colorado Rules of Evidence, expert opinion testimony must be relevant and reliable.² In short, the scientific or technical expert's testimony must be grounded in "the methods and procedures of science rather than subjective belief or unsupported speculation."³ In *People v. Ramirez*, the Colorado Supreme Court stated that

the method employed by the expert in reaching the conclusion [must be] scientifically sound and . . . the opinion [must be] based on facts which sufficiently satisfy Colorado Rule of Evidence 702's reliability requirements.⁴

Expert testimony that is based on experience and judgment and is not dependent on scientific explanation—such as regarding a party's standard of care or the substantial similarity between original and copyright-infringing work—is not subject to these criteria. Instead, the trial court "must consider whether the testimony will be helpful to the jury and whether the witness is qualified to render an expert opinion on the subject in question." If the testimony is admissible under C.R.E. 702, the court must "determine whether the probative value of that evidence is substantially outweighed by the danger of unfair prejudice."⁵

Throughout the course of a case, you will want to keep the expert apprised of the case's progress and important developments, including any setbacks, strategic changes, or the entry of any orders that might affect the expert's assignment.⁶ After every deposition, you should evaluate whether anything relevant to a particular expert's opinions was discussed. If so, a copy of the deposition should be provided to the expert, and the effect of the testimony on the opposing expert's opinions should be reviewed with your expert. Staff should keep experts apprised of changing disclosure, deposition, and trial deadlines.



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Providing the Data and Creation of the Expert's File

It is important to document all data supplied to an expert and the date it was provided. Each data transmittal should be accompanied by a confirming e-mail or letter. There are two main reasons for keeping track of data transmissions. First, C.R.C.P. 26(a)(2)(B)(I) requires disclosure of all data or other information the expert “considered” in formulating his or her opinions. Failure to comply with this disclosure requirement could, in extreme circumstances, result in an order striking or limiting the expert’s testimony.⁷ Second, it is poor form for an expert to formulate any opinions before having reviewed all of the reasonably available data. Experts often develop preliminary opinions as the data streams in; however, if the expert’s final opinions are generated before he or she receives all pertinent record evidence, a jury may infer that the expert is simply a hired gun with prepackaged opinions that ignore the evidence.

Experts should familiarize themselves with more than the “theory” of your case. For example, construction experts should see and touch the defectively built home. Product liability experts not only should physically examine the product, they also should visit the accident scene. It often is helpful and efficient for you to join the expert during a site visit.

All relevant, non-privileged information should be provided to the expert to guard against a charge that you filtered the evidence to influence the expert’s conclusions. The expert’s file contains the most important source material the opposition has to attack the expert’s credibility. This ammunition is summarized in Appendix I.

Generating the Expert Report or Summary

Most expert witness reports contain (1) a brief summary of the assignment described in neutral terms; (2) a recapitulation of the expert’s main opinions; and (3) a detailed restatement of the opinions, accompanied by a description of the expert’s investigation and work, supporting facts, and appendices. Some information that may seem standard or routine to the expert should be explained in the report. The greater the care taken to explain standard methodologies and industry practices, the less room there will be for challenges to the sufficiency of the disclosure later.

The best time to address problems with an expert’s report is during the expert’s investigation and report preparation, not after the report has been disclosed. The report should render opinions on all the issues on which you need your expert to opine. You should verify that the report discloses all material underlying facts and assumptions. If the report is deficient, you will want to work with the expert to incorporate any previously undisclosed matters into his or her deposition testimony; however, it is important to keep in mind that anything an attorney discusses with an expert may be discovered and that consequences may flow from untimely disclosed matters.

Appendix II delineates current expert witness disclosure requirements. In accordance with C.R.C.P. 26(a)(2)(B), the information listed must be disclosed. (Some differences exist between the disclosures required under Colorado and Federal Rules of Civil Procedure.) Appendix II also describes some traps the unwary practitioner should try to avoid.

You must ensure that the expert’s testimonial summary or report is accurate, complete, and up-to-date. A material failure to meet disclosure obligations may result in serious sanctions, including precluding the expert’s testimony in whole or significant part.⁸

Because compliance is relatively easy, and the perceived advantage to be gained from “hiding the ball” often is illusory (if not sanctionable), you should strive to meet, if not exceed, the rule’s disclosure requirements.

Experienced counsel know that there really is no such thing as an expert’s “final” opinion. Most experts reevaluate their opinions in light of disclosure and discovery that occurs after they have issued their reports—sometimes even in the midst of trial when there is unanticipated witness testimony. This often results in formal supplementation under C.R.C.P. 26(e). The duty to supplement also extends to information the expert provides during deposition.⁹

Although trial judges are sensitive to any last-minute changes to expert opinions or to the data on which those opinions are founded, they also recognize that discovery and trial are dynamic processes and opinions are shaped over time. All lawyers should formally supplement expert opinions by timely disclosing any material changes or additions to those opinions. Prompt disclosure of any new information the expert is considering and any changes to his or her opinions will minimize any resulting prejudice to the other side and maximize the chances the trial court will broadly exercise its discretion in favor of allowing such supplementation.¹⁰

Exhibits

C.R.C.P. 26(a)(2) requires disclosure of “any exhibits to be used as a summary of or support for” the expert’s opinions. Exhibits that are readily available when the expert report is produced should be identified and/or disclosed simultaneously with the report. However, many practitioners view C.R.C.P. 26’s disclosure directive as an onerous and somewhat unrealistic command with regard to complex demonstrative exhibits.¹¹

Demonstrative exhibits, such as models or animations, illustrate concepts described by an expert’s testimony to the jury. It often is cumbersome and expensive (and may be premature) to create such exhibits early in the case before all the facts are revealed during discovery. Moreover, generating some exhibits (such as computer-generated animations) involves a substantial monetary investment that most lawyers would prefer to defer until closer to trial and after settlement possibilities have been exhausted.

Because of the tension between Rule 26’s exhibit disclosure mandate and its practical application to complex demonstrative exhibits, you should discuss the creation and disclosure of demonstrative exhibits with the expert before the expert’s opinions are disclosed. Also consider seeking modification of the deadline for expert demonstrative exhibit disclosures in the Case Management Order to a date much closer to trial.¹²

Intermediate Drafts

Expert report writing has become one of the great litigation games. Few people, including experts, can create a perfect report in a single draft, so multiple drafts usually are generated. Because early drafts may contain factual errors, incomplete information, and premature or even incorrect conclusions, or simply may be poorly worded, lawyers may be extremely reluctant for these drafts to be disclosed, while opposing counsel may salivate at the thought.

This tension has fired lawyers’ creative energies across the nation to generate “final reports” that seemingly emerge from the ether without the benefit of any predecessor drafts. The means by which counsel accomplish this trick are many,¹³ and may push the

limits of professional responsibility and Colorado's expert disclosure requirements.

In recognition of this unseemly fact of life, the Federal Rules of Civil Procedure were revised effective December 1, 2010 to protect some of these intermediate drafts from disclosure.¹⁴ Perhaps the Colorado Rules will follow suit. Until then, efforts to avoid creating intermediate drafts will continue.

Deposition and Trial Testimony: Preparing the Expert and Examining the Opposing Expert

There are many similarities between preparing your own expert to give testimony and preparing for the opposing expert's testimony. The steps necessary to organize and execute such preparation are discussed below.

Reviewing Your Expert's Work File

When preparing to defend your own expert's deposition, you should review the expert's file to gauge and anticipate how opposing counsel might use its contents to challenge the expert, and then prepare the expert accordingly. In some rare cases, due to monetary constraints or your expert's lack of full cooperation, such as some treating health care providers in personal injury cases, preparing the expert to testify may not be feasible.¹⁵ For the most part, though, preparing to ask your own expert appropriate follow-up questions to minimize harm and to bolster the expert's credibility usually is prudent.

If your expert's file will be produced for inspection to opposing counsel, you must ensure that the integrity of the file's contents and order is preserved, that the expert is not deprived of access to the file during his or her own deposition or trial preparation, and that any materials added to the file since the date of its original production to opposing counsel are easily identified. If anything is missing or has been removed, it is up to you to find out why and consider whether to add the materials to the file.

Reviewing Your Expert's Résumé

Confirm with your expert that his or her résumé is accurate, complete, and up-to-date. Are there weaknesses in your expert's credentials that can be addressed simply by expanding on or rewording the expert's résumé without tampering with the truth? Trial court judges can be persnickety when asked to qualify expert witnesses to testify to the precise subject matter on which they were endorsed to testify.¹⁶ Following are examples of rulings that might reflect how a judge's broad discretion in qualifying an expert might affect the scope of the expert's actual trial testimony.

- A court accepts an elevator mechanic with twenty-five years' experience as an expert in how elevators and their safety mechanisms function, but not in what actually may have caused a particular elevator to operate as it did on the day of the plaintiff's alleged "free-fall" accident.
- A court accepts an architect and structural engineer as an expert on a home builder's standard of care, but not regarding the builder's subcontractors' standards of care.
- A court accepts a lawyer who did work for liability insurers and wrote insurance coverage books as an expert on an insurer's "bad faith" claims handling, but not regarding an individual claims adjuster's standard of care or what a particularly confusing policy provision meant.

- A court accepts a construction cost estimator as an expert regarding repair costs, but not regarding the need for the repair plan to comply with the building code.

There is no guarantee that an ample résumé will be sufficient for a trial court to qualify an expert in a particular field. A judge may be more likely to qualify an expert in a subject matter to which another judge previously has qualified the expert to testify.

Reviewing Your Expert's Report and Preparing the Expert for Deposition

When preparing your expert for deposition, view him or her through opposing counsel's critical eye and prepare accordingly. In addition, treat the expert as you would any witness being prepared for deposition¹⁷ and as your experience and training dictate. One commentator suggests "address[ing] any authorities within the same field who disagree with the expert's ultimate opinion," so that attacks based on these authorities—along with possible responses—can be explored.¹⁸

It is prudent to advise your expert to bring to the deposition only his or her file pertaining to the case and not extraneous materials that could lead to unanticipated inquiries by opposing counsel. Consider preparing your expert for opposing counsel's examination style to reduce your expert's anxiety. Caution your expert against submitting to deposition in his or her office, because the examining lawyer will scan the workplace for useful information and question the expert about it.¹⁹

Preparing Your Expert for Trial Examination

Encourage your expert to educate the jury by presenting his or her findings in an absorbing manner. However, do not allow an expert's cogent and far-ranging dissertation to cause you to forget to elicit the entire substance of the expert's opinions. Checking off a list of those opinions as they are expressed is one way to ensure all desired opinions have been presented. Remind your expert not to become combative or sarcastic; this could damage the expert's credibility. Leave the bad manners to opposing counsel. You should almost never accept opposing counsel's offer to stipulate to the qual-

fications of your expert to render opinion testimony, because this will eliminate the opportunity to start building your expert’s credibility with the jury by presenting his or her substantial credentials.

An expert may base his or her opinions on inadmissible evidence so long as such information is “reasonably relied upon” by other experts in his field.²⁰ An expert should bring his or her entire file to the courthouse, including all underlying data that was considered in developing his or her opinions, to avoid problems under the evidentiary rules, which may require disclosure of the data to the jury or during cross-examination.²¹ An inability to make this disclosure could result in a preclusion order. Make sure such information has already been timely disclosed under C.R.C.P. 26(a)(2)(C)(I) to (II).

It may be a good idea to have another lawyer from your office conduct an abbreviated mock examination of your expert, allowing you to focus on observing and listening to the expert testify, thereby allowing a better, more objective critique. It often is unwise to overly stage or rehearse your expert’s trial testimony, and it is almost always a bad idea to supply the expert with a list of questions in advance. Generally, counsel should resist the urge to videotape the expert, even if the witness might benefit from seeing himself or herself testifying, because the expert may be asked about this choreographed “rehearsal” on the stand, and the videotaped record may become discoverable. If the jury senses that the expert’s testimony has been scripted, the expert’s (and counsel’s) credibility is bound to suffer. The accompanying sidebar is a general checklist for preparing an expert for direct examination at trial.²²

Preparing for the Opposing Expert’s Deposition and Trial Testimony

The 2007 article “Your First Deposition”²³ provides a starting point for new lawyers who want to learn the basics of preparing for depositions, and includes guidelines for deposing expert witnesses and creating deposition question outlines. This section comple-

ments material presented in that article, although it is not a comprehensive discussion of expert witness cross-examination.

If opinions helpful to your case are obtained from the opposing expert during deposition and these opinions extend beyond the scope of the expert’s endorsement and disclosure, the other side must be supplied with a supplemental disclosure of the testimony to be offered at trial.²⁴ Most attorneys delay deposing experts until close to trial, after the discovery record is substantially complete. Unless agreement to the contrary is reached, no expert may be deposed until the after all expert disclosures required by the rules are completed.²⁵

Reviewing the Opposing Expert’s Work File

Arrangements should be made to examine and, if desired, to obtain a copy of the opposing expert’s entire file long before he or she is deposed. This can be accomplished by mutual agreement, a provision in the Case Management Order, or subpoena. Access to all digitized information, photos, real evidence samples, and even computer modeling software also should be arranged. Sometimes, it may be necessary to have your own or a consulting expert examine, interpret, and comment on the file contents. At deposition, any additions to the file since the date its contents were first produced for inspection should be identified and examined.

Reviewing the Opposing Expert’s Résumé

The opposing expert’s *curriculum vitae* will reflect both the areas of the expert’s expertise and areas in which necessary specialized knowledge may be lacking. If there are aspects of the case that require specialized knowledge the expert does not have but that are necessary to render the opinions, these areas should be identified and explored. Any opinions that exceed the scope of his or her expertise should be examined during deposition and the introduction of such opinions during trial vigorously resisted.

Expert Direct Examination: What to Discuss With Your Expert Before Trial

- Talk about issues to be addressed and potential problems that may need to be resolved during the expert’s examination, including the method and manner of presentation (*e.g.*, use of blowups, charts, or summaries).
- Review the courtroom layout, and the trial participants (including the bailiff and jury) and their roles.
- Discuss the purposes and limits of direct and cross-examination, and consider walking the expert through an abbreviated mock examination, eliciting the expert’s qualifications, scope of investigation, and opinions.
- Remind the expert to look at and address the jury often, to ensure he or she understands the question before answering, to admit not knowing an answer to a question if that is the case, and never to argue with opposing counsel or the judge.
- Prompt the expert to explain to the jury that he or she has been paid for his or her time, but has not been paid to formulate particular opinions.
- Discuss objections and the effect of those objections being sustained and overruled, as well as the meaning and effect of any pretrial evidentiary rulings or preclusion orders.
- Review prospective hypothetical questions.
- Suggest that the expert avoid answering any hypothetical questions posed by opposing counsel that omit necessary facts; instead, the expert should explain why the hypothetical is inapplicable to the case or not feasible to answer.
- Discuss the advisability of the expert qualifying an acknowledgement that a particular treatise is “authoritative” by noting that he or she does not agree with all of its contents, if that is the case, because such an unqualified acknowledgement may subject him or her to cross-examination with any portions of the treatise that undermine the expert’s opinions.
- Review all evidence relied on by the expert and ensure it is either admissible or properly may be relied on under C.R.E. 703 and 705. Review C.R.E. 104(b), which allows a court to conditionally admit evidence (such as an expert’s opinion) dependent on other evidence being admitted later during the trial.
- Caution the expert to respond to the question asked, to ask for clarification if he or she does not understand the question, and not to volunteer testimony beyond the question asked.

Reviewing the Opposing Expert's Prior Testimony and Reports

Because an expert's opinions often are fact-specific, reviewing prior testimony and reports in dissimilar cases rarely uncovers significant inconsistencies. Such review will, however, help identify potential biases due to concentrated work for a particular law firm, insurer, or industry, or due to philosophical orientation, such as traditionalist versus "new school" approaches in a particular field. Perhaps the greatest benefit of reviewing earlier deposition and trial testimony is to see how the expert skirts the difficult questions so you can anticipate and neutralize these strategies. It may be helpful to spend extra time examining an expert on somewhat tangential knowledge and beliefs if you might face that expert again later in other, similar cases, so as to develop future lines of cross-examination where such knowledge and beliefs have greater relevance.

Reviewing the Opposing Expert's Report and Reading Between the Lines

When reviewing an opposing expert's report, there are several actions you will want to take. Among them are the following:

- Identify all of the expert's discrete opinions—that is, every conclusion the expert describes.
- Determine whether there are specific matters on which the expert should have opined but failed to do so. Later, you must decide whether to steer clear of these unstated opinions during deposition, in hopes that the trial court will preclude trial testimony on these matters. This may turn into a game of brinkmanship. In pursuing this strategy, there is a risk that opposing counsel will raise these omitted opinions during his or her deposition examination and that you will have to rely on the trial court to strike them as untimely and prejudicial. Otherwise, you might end up having to examine the witness on these newly disclosed opinions without an adequate opportunity to prepare for that examination. If you elect to examine the expert, however, be sure to note on the record that you are not waiving your right to move for sanctions due to the untimely disclosure. Under these circumstances, trial courts sometimes preclude the testimony; other times, they allow the late disclosure, but will permit you the opportunity to reopen the expert's deposition and to supplement your own expert disclosures and rebuttal evidence.
- Identify the factual and scientific assumptions on which the expert is relying, with an eye toward having the expert acknowledge that the jury may view the facts differently and why this would erode or invalidate the expert's opinions in whole or in part.
- Determine whether any drafts of the expert's report were generated in any form and what happened to them. As noted above, most experts have developed their own report-drafting process. If drafts were created but no longer exist, it will be necessary to determine whether the expert's conduct was proper and, if it was not proper, whether the conduct justifies sanctions. Curiously, one reason many lawyers do not pursue such inquiry or sanctions is that they or their own experts may engage in similar conduct. If early drafts can be found, they may contain interesting edits or omissions when compared to the final draft.

- Identify the common-sense limits of the expert's opinions. A hired gun who fails to recognize that his or her unconditional testimony, when taken to its logical limit, may seem unreasonable to a jury, undermining his or her own credibility.

Preparing the Opposing Expert's Deposition Question Outline

In addition to preparing a deposition question outline, many attorneys annotate the opposing expert's report, *curriculum vitae*, and list of testimony with questions they wish to explore. Also, key portions of the expert's file may be tabbed with real or electronic sticky notes, and the tabbed pages similarly annotated. If possible, clean copies of the expert's disclosures and file should be marked ahead of time as deposition exhibits.²⁶ For ease of reference on the record, each exhibit page may need to be hand-numbered. Sometimes, counsel will affix numbered sticky notes to pages within voluminous exhibits to which he or she wants to draw the expert's attention.

In many cases, you may want to meet with your own testifying expert or to hire a consulting expert to help interpret and attack the opposing expert's report. Even though it is impossible for a lawyer to develop the depth of knowledge equal to that of the expert sitting across the table, if you are armed with advance knowledge of the subject matter and you ask pointed, technically accurate questions, such cross-examination often induces the witness to be less evasive and easier to control.

If resources allow, it might be helpful to have your expert attend the deposition of the opposing party's expert,²⁷ particularly if your expert has been designated as a rebuttal expert. In the right case, your expert could prove helpful by suggesting questions beyond your knowledge base.

Inevitable Surprises and Necessary Follow Up

Expert depositions rarely go completely as planned. Often, stray pages, studies, and photos may first turn up during deposition, and other materials may be identified for the first time but have never been produced. As noted above, testimony regarding new or pre-

viously undisclosed opinions may occur. Difficult decisions may have to be made on the spot regarding (1) how to react, including whether to lodge a detailed objection on the record; (2) whether to question the witness about the newly disclosed opinions or information (and thereby, perhaps, implicitly waive any objections to their untimely disclosure); (3) whether to refrain from questioning the witness about the newly disclosed opinions or information and instead seek a remedial preclusion order, knowing that the order could be denied; and (4) whether to suspend rather than terminate the deposition until after the court rules on a remedial preclusion motion.

Preparing for the Opposing Expert's Trial Examination

Counsel must use every available investigatory, discovery, and procedural tool to unearth ammunition for cross-examination long before the expert takes the stand at trial. In appropriate cases, this should include filing pretrial *Daubert/Schreck*²⁸ motions *in limine* and obtaining preclusion orders.

For many lawyers, seven hours²⁹ spent deposing the opposing expert might translate into less than an hour of efficient, if not devastating, cross-examination. Other lawyers try to undermine the expert with a thousand cuts involving six hours of tedious trial cross-examination, highlighting every blemish, assumption, and uncertainty. The latter tactic may be ineffective because, unless the lawyer is exceptionally skilled and the jury remarkably attendant, such an approach risks boring or alienating the jury. The lawyer may even enhance the expert's credibility simply by giving the expert a chance to show off his or her depth of knowledge and willingness to field every question with a disarming smile.

Effective expert witness cross-examination should have a singular goal: to diminish, if not destroy, the expert's credibility. A few skilled cross-examiners will experience the "dialing-for-dollars" moment, when the defendant's insurance claims or corporate representative sitting in the gallery reaches for his or her cell phone to

call for additional settlement authority. For most attorneys, though, just making solid inroads against the opposing expert's credibility will bring its own substantial reward.

The best way for a new attorney to develop his or her cross-examination technique is to watch skilled practitioners exercise their craft and to conduct as many mock and actual cross-examinations as possible. Expert cross-examination is more art than science, equal parts intuition and preparation, and more creative choreography than bland adherence to procedural and evidentiary rules. If you do not know the science, if you do not prepare, and if you do not master the rules of evidence and procedure, an effective, credibility-destroying cross-examination will remain an elusive goal. The accompanying sidebar is a checklist for a typical cross-examination of the opposing expert.³⁰

Closing the Expert's Case File— Never Say Goodbye!

When closing a case file, you should consider scanning and retaining for later reference an electronic copy of all of the opposing experts' reports and deposition testimony, including copies of all deposition exhibits. If confidentiality agreements or protective orders apply to materials supplied to an expert, you should review and comply with them. It may be helpful to take the time to identify problems that arose and constructively critique your expert's performance with your expert, and brainstorm on how to improve the presentation of the expert's opinions in the future.

A Final Caveat

Remember that most requests for discovery sanctions and evidentiary objections will be subject to the trial court's discretion. Establishing a solid record for the requested relief and conferring in good faith before moving for that relief will greatly help your cause. You may be tempted to assert every conceivable technical objec-

Cross-Examining the Opposing Expert: What to Establish	
<ul style="list-style-type: none"> ➤ that the expert's qualifications are questionable and that the expert is biased ➤ that the expert's opinions or assumptions conflict with authoritative treatises on which he or she relies, or generally accepted standards, protocols, formulas, or codes used within the expert's discipline, or the expert's own previous testimony, statements, writings, or reports ➤ that the opinion is dominated by reliance on materials that cannot be relied on as a matter of fact or law due to their irrelevance or lack of trustworthiness ➤ that the expert's assertions are unreasonable, unsupported, speculative, or demonstrably incorrect ➤ that the materials on which the expert relied are not within his or her sphere of expertise or are not of a kind customarily relied on by experts in his or her field in forming opinions or inferences on that subject ➤ that the expert acknowledges the questionable reliability of the underlying information in general or in light of the particular circumstances of the case 	<ul style="list-style-type: none"> ➤ that some of the expert's findings are based on the subjective reports of others and that those reports may be incorrect, distorted, or exaggerated ➤ that, if the expert is relying primarily on scientific or technical evidence, as opposed to professional judgment, experience, and discretion <ul style="list-style-type: none"> — the theory or technique has not been tested — the theory or technique has not been the subject of peer review and publication — the potential rate of error of the method used and the existence and maintenance of standards controlling the operation of the techniques that were used are unknown — the theory or method has not been generally accepted by the scientific community — the expert's testimony and theory were developed primarily for litigation rather than developed from the expert's research — the expert did not consider possible alternative explanations and rule them out

tion to an expert's testimony. If well-founded in law and fact, you are entitled to do so; however, judges and juries are interested in seeing justice done, and they are well aware that our legal system is imperfect, expensive, and time-consuming—an impression that may be strengthened after seeing a new lawyer's first expert cross-examination. Be aware that if you appear overbearing, if your objections are trivial, and if your conduct is obstructionist, subtle but adverse consequences may flow, including incurring the trial judge's ire and losing credibility in the jury's eyes.

Conclusion

Part I of this article showed that your collaboration with expert witnesses usually begins shortly after a new matter is entrusted to you. It established the importance of determining early whether expert testimony will be useful or necessary, and discussed locating and retaining only qualified experts; confirming whether a prospective expert has the characteristics that will make him or her an effective witness; and devoting the resources necessary to ensuring that the expert renders relevant, factually supported and persuasive opinions. Part II of the article urges that careful preparation, attention to details, and playing the devil's advocate with your own expert, while at the same time treating him or her as a collaborator, without unnecessary deference, will help develop a constructive relationship and allow the presentation of persuasive expert testimony. Similarly careful preparation when dealing with the opposing expert, coupled with maintaining respect for the expert and a healthy skepticism, will pay dividends in every case.

Notes

1. See Sandgrund, "Your First Expert Witness—Part I," 40 *The Colorado Lawyer* 93 (May 2011), available at www.cobar.org/tcl/tcl_articles.cfm?articleid=7027.
2. See F.R.E. 702; *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 590 (1993); C.R.E. 702; *People v. Shreck*, 22 P.3d 68, 70 (Colo. 2001). *Shreck* held that in deciding whether scientific evidence is admissible, a trial court should consider whether (1) the scientific principles underlying the testimony are reasonably reliable; (2) the expert is qualified to render opinions on such matters; (3) the expert testimony would be helpful to the jury; and (4) the evidence satisfies C.R.E. 403. The trial court also must confirm that the evidence's probative value is not substantially outweighed by unfair prejudice.
3. *People v. Ramirez*, 155 P.3d 371, 378 (Colo. 2007).
4. *Id.*
5. *Meier v. McCoy*, 119 P.3d 519, 521 (Colo.App. 2004).
6. This might include protective orders regarding the confidentiality of information supplied to the expert and rulings on motions *in limine* precluding testimony concerning certain subject matters.
7. See C.R.C.P. 37(a)(2) ("appropriate sanctions" available for failure to make required disclosures). See also *Trattler v. Citron*, 182 P.3d 674 (Colo. 2008) (describing extent of court's discretion and proportionality requirement when levying sanctions).
8. See C.R.C.P. 26(g), 37(a)(4), and 37. See also *Trattler*, *supra* note 7 (discussing sanctions for failure to make required disclosures, including preclusion of testimony).
9. See C.R.C.P. 26(e).
10. See C.R.C.P. 26(e) (describing obligation to supplement disclosures).
11. Whether an illustrative exhibit that is neither a "summary" of nor offered "in support for" an expert's opinions must be disclosed is an unresolved question in Colorado, but federal case law suggests that lawyers

should err on the side of early disclosure or face the possible sanction of preclusion. See *U.S. v. City of New York*, No. 07CV2067, 2010 WL 2838386 at *3 (E.D.N.Y. July 19, 2010).

12. In some cases, you may wish to question an opposing expert regarding exhibits he or she may rely on to explain opinions at trial.
13. See Hirsch *et al.*, "Living in a World of Expertise: The Perils of Innocence—Guidelines for Trial Counsel's Careful Handling of Expert Witnesses," 26 *The Advocate (Texas)* 61, 66 (Spring 2004) for one suggested means of avoiding the creation—or at least the preservation—of intermediate draft reports ("A good practice is for the expert to transfer his notes to the computer and allow the attorney to review the notes on screen."). It is not altogether clear whether the commentator's suggested methodology might constitute evidence spoliation. See *Aloi v. Union Pac. R.R. Corp.*, 129 P.3d 999, 1002 (Colo. 2006) (trial court has the inherent power to provide civil jury with an adverse inference instruction as a sanction for the spoliation of evidence); *Pfantz v. Kmart Corp.*, 85 P.3d 564, 568-69 (Colo.App. 2003) (sanction may be imposed for negligent spoliation).
14. See generally Easton, "2010 Changes in Disclosure and Discovery Regarding Expert Witnesses," 33 *Wyoming Lawyer* 26, 27 (June 2010) (changes "provide work product protection to drafts of expert witness reports and to most communications between an expert witness and the attorney"). See also Stempel, "Refocusing Away From Rules Reform and Devoting More Attention to the Deciders," 87 *Denver U.L.Rev.* 335, 376 (2010) (discussing "likely advantages of revising the expert discovery rules, which have led to considerable waste and gamesmanship").
15. Cf. *Samms v. District Court*, 908 P.2d 520 (Colo. 1995) (opposing party may interview treating physicians *ex parte* but must give other side advance notice of and opportunity to participate in interview).
16. Cf. C.R.E. 702; CRS § 13-64-401 (court shall not permit an expert in one medical subspecialty to testify against a physician in another medical subspecialty unless, in addition to such a showing of substantial familiarity, there is a showing that the standards of care and practice in the two fields are similar).
17. See, e.g., Sandgrund, "Your First Deposition," 36 *The Colorado Lawyer* 119 (Nov. 2007), available at www.cobar.org/tcl/tcl_articles.cfm?articleid=5327.
18. McGuane, Jr. *et al.*, 19 *Colorado Family Law and Practice* § 18:10 (West, 2010 Supp.).
19. It is very difficult to heed this warning in the case of busy treating physicians.
20. See C.R.E. 703.
21. See C.R.E. 703 and 705.
22. Derived in part from Benson, "The Care and Feeding of an Expert Witness," 70 *Florida B.J.* 44, 46-47 (July/Aug. 1996).
23. Sandgrund, *supra* note 17.
24. *Freedman v. Kaiser Found. Health Plan of Colo.*, 849 P.2d 811, 814-15 (Colo.App. 1992).
25. See C.R.C.P. 26(b)(4)(A).
26. Sometimes, the original subpoenaed file will be marked but retained by the expert and a copy substituted in its place by stipulation.
27. The attendance of consulting experts is permitted by the rules. See C.R.E. 615(3) (witness sequestration rule does not authorize exclusion of "a person whose presence is shown by a party to be essential to the presentation of his cause"); C.R.C.P. 26(c)(5) and 30(c).
28. These are the leading Colorado and federal cases concerning expert testimony admissibility. See *Daubert*, *supra* note 2; *Schreck*, *supra* note 2.
29. Depositions are presumptively limited to a maximum of "one day of seven hours." See C.R.C.P. 30(d)(2).
30. Derived in part from Benson, *supra* note 22 at 46-47; and Bates *et al.*, "Cross-Examination of an Expert Witness," 57 *Fed. Law.* 49, 51 (May 2010). ■

See Appendices on following pages. ➡

Appendix I

How an Expert's File Can be Used Against the Expert	
File Contents	Possible Use During Cross-Examination
<i>Retainer agreement</i>	➤ Does the agreement reflect an improper relationship with counsel or improper testimonial incentives?
<i>Time records</i>	➤ Has the expert spent (1) too little time properly investigating the matter and forming well-founded opinions; or (2) too much time on the matter, turning a simple assignment into a junket? ➤ Is the expert's time poorly logged and explained? Bad record-keeping may suggest poor attention to detail or an attempt to hide something.
<i>Fees charged</i>	➤ Are the fees too great, reflecting mercenary tendencies or exaggeration?
<i>Assumptions made</i>	➤ What assumptions has the expert made? Are they unfounded or unreasonable? Do they reflect careless thinking or work habits?
<i>Authoritative publications</i>	➤ Are these publications useful for later cross-examination per C.R.E. 703 and 705 (expert may be cross-examined on certain matters not in evidence) and 803(18) (if such material is called to an expert's attention during cross-examination or relied on by expert in direct examination, statements contained in certain published materials and established as reliable authority by the witness or otherwise may be read into evidence and may be received as exhibits, as the court permits)?
<i>Other cases, other testimony, previous work</i>	➤ Can the expert be impeached with inconsistent statements made in other cases or in previously published work pursuant to C.R.E. 613, 801(d)(1), 804(b)(1), and 806?
<i>Communications with counsel/party</i>	➤ Can the expert be impeached or have his or her credibility attacked with previous communications between the expert and a party or the party's counsel, pursuant to C.R.E. 801(d)(1), 804(b)(1), 806, 401, 607 (bias or prejudice), 612 (refreshed recollection), or 801(d)(2) (statements against a party's interest)? <i>See also</i> C.J.I. Civ. 3:17 (4th ed. 2010) (witness credibility).
<i>Tests performed</i>	➤ Are the tests accurate and reliable? ➤ Was any evidence destroyed during testing and, if so, was advance notice of an opportunity to attend the test given? ➤ Is there a spoliation claim?
<i>Computer analyses</i>	➤ Are the analyses accurate and reliable? ➤ Do erroneous or unreasonable assumptions underlie any computer models or programs?
<i>Factual and technical mistakes and changes in opinions</i>	➤ Do these reflect a lack of thoroughness or competency, or evident bias?
<i>Earlier report drafts</i>	➤ What has changed and why? Were changes made at someone else's suggestion? In federal court, report drafts and related communications no longer are freely discoverable; however, communications relating to facts provided to and considered by the expert and assumptions provided to and relied on by the expert are discoverable pursuant to F.R.C.P. 26(b)(4)(B) and (C).
<i>Missing information</i>	➤ If there is adverse, material information missing from the file, could and should this information have been made available to the expert by counsel, and does its absence undercut the expert's opinions? If you fail to establish the existence of this omission on the record before the missing evidence is brought to the expert's attention, the expert may have an opportunity to justify his or her failure to consider the missing information. ➤ How will a jury view the omission of this information? Sometimes, you can establish that material information originally was in an opposing expert's file but now is not there. This could support a jury inference that the missing information is particularly injurious to the expert's opinions. If the information (test results, photos, calculations, notes, etc.) can no longer be located, counsel may be able to obtain a preclusion order or an adverse inference instruction. <i>See Aloï v. Union Pac. R.R. Corp.</i> , 129 P.3d 999, 1002 (Colo. 2006) (trial court has inherent power to provide civil jury with adverse inference instruction as sanction for spoliation of evidence); <i>Pfantz v. Kmart Corp.</i> , 85 P.3d 564, 568-69 (Colo.App. 2003) (sanction may be imposed for negligent spoliation).

Appendix II

Meeting C.R.C.P. 26(a)(2)(B)'s Expert Witness Disclosure Requirements	
Disclosure	Considerations
A written report or summary must be submitted for each retained witness, as well as for every individual who is specially employed to provide expert testimony or whose duties as an employee of the party regularly involve giving expert testimony.	<ul style="list-style-type: none"> ➤ Must the expert sign the report or summary? In federal court, only a signed report is permitted pursuant to F.R.C.P. 26(a)(2)(B). ➤ Are some experts required to stamp their report with a professional seal to comply with a professional code or state statute? ➤ In contrast to the Colorado rules, F.R.C.P. 26(a)(2)(B) does not distinguish between specially retained or in-house experts and other experts, such as treating physicians; required disclosures are necessary for any individual who may be used at trial to present evidence under F.R.E. 702, 703, or 705.
A complete statement of all opinions to be expressed, along with the basis and reasons for the opinions must be submitted as part of the written report or summary.	<ul style="list-style-type: none"> ➤ Have all opinions been disclosed, including those implicit in the expressed opinions? ➤ Must every assumption that supports an opinion be disclosed, no matter how obvious (e.g., that defectively installed home siding will leak and cause damage because the expert has assumed it will rain and snow sometime in the future)? ➤ Is it prudent simply to produce a complete copy of the expert's file to opposing counsel as part of the C.R.C.P. 26(a)(2)(B)(I) and (II) report to help ensure full disclosure of as much information as possible relating to the expert's opinions? ➤ As to witnesses not retained or specially employed to provide expert testimony, or whose duties as an employee of the party regularly involve giving expert testimony, the report or summary must contain the qualifications of the witness and a complete statement describing the substance of all opinions to be expressed and the basis and reasons therefore. In federal court, pursuant to F.R.C.P. 26(a)(2)(C)(i), the subject matter of the witness's testimony must be described if the witness is not required to provide a report.
Data or other information considered by the witness in forming the opinions must be included with the written report or summary.	<ul style="list-style-type: none"> ➤ What is meant by "data"? ➤ Must every subordinate or immaterial fact and assumption that supports an opinion be disclosed (e.g., that the laws of physics and thermodynamics are expected to apply in the future)? ➤ If the expert observes a site, examines a product or goods, or interviews a third-party or witness, must the expert videotape the observation, examination, or interview to comply with the Rule? Cf. <i>Garrigan v. Bowen</i>, 243 P.3d 231, 235 (Colo. 2010) (an expert "considers" information in forming opinions for purposes of Rule 26 disclosures, if the expert reviews the information with the purpose of forming opinions about the particular case at issue; actual reliance on the information is not necessary—it is enough if the expert simply reviews the information).
The expert's qualifications must be included in the written report or summary.	<ul style="list-style-type: none"> ➤ Is the expert's <i>curriculum vitae</i> complete and adequate to qualify him or her to testify to all matters about which the expert has been endorsed to render opinions? ➤ If the expert's qualifications are challenged at trial, can other qualifications be put forth in response to the challenge if not previously disclosed?
A list of all publications authored by the witness within the preceding ten years must be included in the written report or summary.	<ul style="list-style-type: none"> ➤ What is a "publication"? Do blog entries count? ➤ What if some publications are inadvertently omitted?
The compensation for the study and testimony must be included in the written report or summary.	<ul style="list-style-type: none"> ➤ What is meant by "study"? ➤ Must the retainer agreement itself be disclosed? ➤ Must day-to-day and summary billing records be disclosed?
A listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years must be included in the written report or summary.	<ul style="list-style-type: none"> ➤ Does this include arbitrations? ➤ Must the case list include, as some case law suggests, the name of the court or agency where the testimony occurred, the attorneys' names, and whether the testimony was at deposition or trial? See <i>Svendensen v. Robinson</i>, 94 P.3d 1204, 1206 (Colo.App. 2004) (disapproved on other grounds by <i>Trattler v. Citron</i>, 182 P.3d 674 (Colo. 2008)). ➤ What if some matters are inadvertently omitted?