DNA Evidence Will Be Admissible if the Proper Foundation is Laid: Advice for a Forensic Medicine Expert

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The use and advance of DNA evidence in courts of law has mushroomed in the last few years to the point that it can almost be assumed that DNA evidence will be admitted if the proper foundation is laid. While a few basic principles are necessary for admissibility in all cases, each case stands on its own and depends upon its own fact situation and evidence to determine admissibility. The more advanced the science and specificity in each case, the easier for admissibility. To challenge admissibility, a lawyer has to challenge the foundation laid for the evidence. It only stands to reason that if you cannot attack the science, you have to attack the scientist, ie, the expert witness. This presentation is based upon the author’s six years as a prosecutor and almost 23 years as a judge. It will give attendees some helpful advice on the purpose of an expert witness, how to be qualified as an expert witness, and some dos and don’ts, as well as hints as to how to become a better expert witness.

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In the last ten to twelve years, much has been written and much has been litigated regarding the admissibility of DNA evidence in the American courts. (Unless otherwise indicated, this paper refers to the United States Justice System.) Beginning with Frye v. United States (1), and continuing with the Federal Rules of Evidence and Daubert v. Merrell Dow Pharmaceuticals, Inc. (2) and its progeny, the last one being Kumho Tire Co. v. Carmichael (3), much has been argued and decided. However, despite all the cases and arguments, it is safe to assume that DNA evidence will be admitted in United States courts of law if the proper foundation is laid.

Admissibility of Evidence

It is important to distinguish between admissibility of evidence and the weight to be given to the evidence. This means that the evidence will be admissible for consideration in the case by trier of fact, be it judge or jury. Admissibility is becoming easier as science and techniques advance. However, after the evidence is admitted, what is important is how much weight the trier of fact gives that evidence in reaching a decision. Obviously the better the evidence, the more impact or weight it will have.

Most people here are not lawyers and therefore do not have to concern themselves with the legal qualifications or standards, if you will, for the admissibility of evidence. Other than a few basic principles necessary for admissibility, each case stands on its own and depends on the fact situation and evidence in each case to determine admissibility.

For most of you, your involvement with the court system will be testifying as an expert witness to report investigations you have done, tests you have conducted, results of those tests and conclusions you have reached based upon those investigations, tests, and results. Put simply, you will be called upon to assist in making an identification based upon the results of your work. You will include or exclude someone, not necessarily a defendant.

We will leave the legal worries to the lawyers who will (hopefully) tell you what is needed for admissibility in your case, depending on the jurisdiction where the trial or hearing is being held. Suffice it to say that the more advanced the science and specificity in each case, the easier for admissibility. Therefore, if you cannot attack the science, you have to attack the scientist – that is most of you. And you can be the greatest scientist in the world, with the greatest results in the world, but if you cannot be qualified as an expert and explain it to the trier of fact, it does not make any difference how good a scientist you are or how good your results.

Therefore, I am going to write about being an expert witness. In my six years as a prosecutor and almost 23 years as a judge, I have picked up a few
points that may be helpful to you in being an expert witness.

**Being an Expert Witness**

First, what is an expert witness? An expert witness is nothing more than someone who can assist the trier of fact in understanding and evaluating the evidence. An expert can be anyone with specialized knowledge or experience in a particular area. By the training you have and the work that you do, most of you should be able to do that. However, before you can do that, you have to be qualified as an expert.

While many of you may work for a crime laboratory associated with a prosecuting agency, and many of you may be private consultants, we are all there for the truth. Or at least, you had better be! No matter by whom you are employed – private or public, prosecution or defense, plaintiff or defendant, or even if you are being called by the court as the court’s expert – you will have to be qualified as an expert.

The first step in this regard is have a current Curriculum Vitae (CV). There are many examples of how to prepare a good CV listing your education, employment, experience, certification, publications, organizations, etc. It is important to remember not to inflate your CV. Do not lie about any of your qualifications, because, believe me, at some time it will come back to haunt you – as well it should. I have seen some CVs as big as phone books and in many cases more interesting than the case, but a little hint, know your CV. Put anything in it you want or that your ego will bear, but know it and keep it up to date. If you have a number of publications, know which, if any, have to do with the case at hand. It is embarrassing to have to look through a number of publications to see if any have to do with the case at hand, and even more embarrassing if there are none. If there are none, it is better to admit it right away rather than to waste time looking and finding none. And if there are some, and you can go right to them; it shows you know what is going on. Either way, a quick response as to whether there are or are not relevant publications makes you look better. In legal terms, it enhances your credibility. Remember, if you cannot attack the science, you have to attack the scientist and this is one way lawyers can chip away at your credibility or how you come across to the trier of fact.

All of these things regarding your qualifications, as well as your other testimony, you will, or you should, go over with the lawyer who hired you in preparing your testimony for trial. And, you should always assume there will be a trial and thoroughly prepare each case. In reality, only about five percent of cases go to trial, but the ones in which you cut corners or fail to prepare properly will most certainly be one of those five percent.

**Prepare for the Trial**

You have to prepare for the trial or hearing. No matter what your involvement, you have to prepare. If you did tests on your own, go over them. If you reviewed others’ test results, go over them. Also remember that many times, months, or even years, will pass from the time you were first involved in a case before it goes to trial.

**Working with the Lawyer**

When the lawyer goes over your testimony with you, and by that, I do not mean telling you what to say, but to find out what you are going to say and to put it in the best light for the case. Never let anyone tell you what to say – you are the expert. It is also a good time for you to educate the lawyer if you have not already done so.

Even though DNA evidence has come a long way in the last ten years and many lawyers have great knowledge about the use of DNA evidence, unfortunately, many do not. Therefore, many times you will have to educate the lawyer as to what is going on. Many lawyers do not understand science and you have to train them. In addition, it is good to practice. If you cannot make the lawyer understand, how are you going to explain it to the trier of fact? Do not be afraid to question and suggest to the lawyer. Point out the possible problems and pitfalls of the case as you see them. Be a devil’s advocate, so to speak. Also, do not be afraid to offer on how to deal with the problems.

A trial is a lot like a puzzle with many pieces. Your role is to add a piece to the puzzle. Part of your pretrial preparation should be to determine your role and what piece you are to add to the puzzle. What you have to do and how you are going to do it. At some point, you are going to have to state your opinion because that is your purpose for being a witness. A big part of assisting the trier of fact in evaluating the evidence is giving your opinion as an expert.

**Sample Questions**

Another hint, especially after you gain experience, you may want to have a one or two page list of sample questions prepared for the lawyer to ask you for qualification as an expert, and your answers to those questions. That way the list assists the lawyer in qualifying you as an expert, and more importantly, you can spend more time on the substance of the case. The good and experienced lawyers will know what to do; the list is still a good aid. The higher profile the case, the better chance you are to having higher profile, experienced, and good lawyers on all sides.

**See the Courtroom**

Another helpful idea if you are able to do so is to see the courtroom before you testify so you can get a feel of where you are going to be and the general layout of the courtroom. This familiarity is beneficial especially if you will be using visual aids. This way you can see how everything will work and everyone’s place in the courtroom.

**Meeting with the Opposing Lawyers**

It may be possible in some jurisdictions or situations that you as the expert may meet with opposing lawyers and/or experts. If this should occur, the two best pieces of advice I can give you are:

1) Do not meet with them alone. It is preferable to have the attorney who hired you there also.
2) Always, and most importantly, tell the truth. We have gone away from trial by ambush. Many times, by getting all the experts and lawyers together, it is possible to settle or dispose of a case without the necessity of trial. If a case cannot be settled prior to trial, then there is probably going to be a trial in which you will probably have to testify.

**The Trial**

If you physically deal with any evidence, you are probably going to have to testify as to the chain of custody of that evidence. That is to assure that the evidence is in substantially the same condition when shown to you as when in court, ie, to assure that the evidence has not been tampered with from the time you reviewed it to your actual court testimony. Other witnesses, of course, will also have to testify that the evidence, from the chain of collection to introduction into evidence, is still the same evidence. This is always important but especially more so when dealing with DNA evidence that can have such a powerful impact on the outcome of a case.

As an aside, you know if the prosecuting authority determines the evidence will exclude someone, the case will probably not go forward as to that individual. The plot thickens when the experts cannot agree as to inclusion or exclusion. That is when qualifications, credibility, and testifying ability of the expert really come into play. Hopefully as the science and techniques and databases advance and evolve, there will be fewer situations of competing expert opinions.

Most likely you will take notes in addition to any report(s) you may write or read. A good rule of thumb in that regard is to assume that whatever you do or write will be seen at some time by everyone else involved in the case. It may not always happen, but you will probably be more careful and correct if you assume it will.

In conjunction with that, another good purpose of pretrial preparation is not only how to handle your direct testimony in court but also how to handle cross-examination as well as another area, which I believe is greatly overlooked but very important — redirect examination. The lawyer who first called you on direct examination gets to repair any damage caused by cross-examination of the opposing lawyer, ie, to rehabilitate your testimony and credibility.

**Jury**

Juries, and I suspect even some judges, have preconceived notions as to experts. It is important to know where you are going to testify and the idiosyncrasies of that jurisdiction. Check with the lawyers as to what to wear. Usually a well-groomed individual in conservative business attire is best, but this can depend on the jurisdiction. You want to fit in because you are conforming but because you want the trier of fact to pay attention to your testimony and not to you in a negative way. You are what you say and how you look to the trier of fact. If they do not really understand what you say, how you say it and how you look becomes even more important. Do not talk down to the trier of fact. Talk to him or her as in conversation. Be human. If something is funny, do not be afraid to laugh. If you do not know, say you do not know. If you do not recall, say you do not recall. But if something will refresh your recollection, say so. I am more skeptical of the witness who has all the answers than I am of one who does not know everything or cannot remember some things.

**Examinations**

As I am sure you are all aware, direct examination is when the lawyer who has first called you as a witness questions you regarding your work in the case and to get your expert opinion.

Cross-examination is when the opposing lawyer gets to question you regarding your direct testimony. You will probably be cross-examined as to your qualifications to see if you qualify as an expert before you give your substantive testimony. The judge, as the “gatekeeper”, will determine if you are qualified to testify as an expert. This preliminary examination may or may not be in the presence of the jury.

Remember, if your findings are positive and tightly developed against one side or the other, the only thing that side can do is to attack the expert — you. They want to create reasonable doubt in a criminal case and keep the evidence less than preponderance in a civil case. Not only can the opposing lawyer ask you about what you did and your findings and opinions, but also regarding any interest, bias or prejudice, or motive to fabricate that you may have had in order to test your credibility, thus impeaching or discrediting your testimony. This can be brutal, especially if your opinion about DNA can decide the case. Remember, as I have said before, and I cannot emphasize this enough, if you cannot attack the science, you have to attack the scientist. If you are prepared and are truthful, the easier it is for the lawyer first calling you to rehabilitate you during redirect examination after the opposing lawyer has finished cross-examination. After redirect examination, the opposing lawyer can conduct recross examination, but that is limited to the matter covered in redirect examination.

**Two Tough Questions**

There are two unpleasant questions that you may be asked, two of my personal favorites: 1) “Did you talk to the other lawyer about this case?” Of course you did and it is quite all right to do so, but make it clear that the lawyer did not influence your opinion or tell you what to say. 2) “Are you being paid for your opinions?” You are not being paid for your opinion; you are being paid for your time and the work that you did. Make it clear to all that your financial remuneration has nothing to do with the outcome of the case.

**Closing Advice**

In closing, I am going to suggest some dos and don’ts and more hints that will help make you a better expert witness.

1. Always tell the truth.
2. Know your limitations.
3. Do not let a lawyer attempt to extend the area of your expertise if you are not really an expert in that area.

4. Do not let anyone put words in your mouth.

5. Do not make up an answer you do not know.

6. If you made a mistake, say so. I hope that you have corrected it, and explained how, or if, it affected your opinion. But if you try to deny it or lie about it, it will only get worse.

7. Be familiar with the literature, especially if you wrote it, and especially if your have changed your mind since you wrote it. Be able to explain why you changed your mind.

8. Don’t chew gum.


10. Don’t put your hand over your mouth when you testify.

11. Turn off your beeper and cell phone.

12. There is nothing worse than a pompous expert.

So remember:

Don’t talk too much. Listen carefully to the question and answer that question, not another one. Some questions cannot be answered yes or no. So do not be afraid to say that you cannot answer yes or no, but be respectful while indicating that.

Do not get into an argument with the lawyers or the judge. You will lose. Do not forget, in the courtroom, you are on the lawyers’ home court and it is tough to win a fight that cannot be won or lost but can only make you look bad.

Don’t look at the lawyer who hired you before you give an answer.

Don’t let a lawyer give you something in court that you have never seen before and then ask you to analyze it right there. This is a good time for you to say something to the effect. “I would have to look at this in my lab. I have spent many hours in this case and can’t analyze this that quickly. If you had given it to me sooner, I would have been happy to spend as much time on it as the other material I have analyzed in this case and give you an opinion.”

Always keep in mind that just because someone hired you as an expert, you are not really there for one side or another but as an expert in search of the truth to see that justice is done.

References

1 Frye v. United States. 293 F. 1013 D. C. Cir (1923).