**FRAMEWORK FOR CHALLENGING FORENSIC EVIDENCE**

**[ ]  1st: WHAT TESTIMONY ARE YOU CHALLENGING?**

**[ ]  Two Areas to Challenge:**

**[ ]  Foundational (scientific) Validity [forensic area as a whole or the improper extension of a forensic area]**

**[ ]  Limit the testimony? [to what is scientifically valid and reliable]**

**[ ]  Exclude all testimony?**

**[ ]  Note: this is unlikely to happen for the forensic areas that have been accepted by courts [e.g. fingerprints and firearm toolmark]**

**[ ]  Validity as Applied [How this examiner applied the method in this case]**

**Note: It can be difficult for the Court to follow an argument as to both in the same motion as a validity as applied challenge assumes the method is scientifically valid**

**[ ]  2nd: HOW ARE YOU CHALLENGING THE TESTIMONY?**

**[ ]  What Rules of Evidence applies to your challenge?**

**[ ]  Rule 402**

 **[ ]  Is the evidence relevant?**

 **Note: this is also a Rule 702 factor.**

 **[ ]  Rule 403**

 **[ ]  Even if relevant:**

**[ ]  Is probative value substantially outweighed by danger of unfair prejudice?**

**[ ]  Confuses the issues?**

**[ ]  Misleads the jury?**

**[ ]  Undue delay or waste of time or cumulative?**

**[ ]  Rule 702**

**[ ]  Does the examiner have scientific, technical or other specialized knowledge in the area they plan to testify?**

**[ ]  Relevance: Will the testimony assist the jury to:**

 **[ ]  understand the evidence**

 **[ ]  determine a fact in issue**

**[ ]  Is testimony based on sufficient facts or data?**

**[ ]  Is testimony the product of reliable principles and methods? [Scientific validity]**

 **[ ]  *Daubert* Factors**

**[ ]  Can the method [or theory or principle] be tested or has been tested?**

**[ ]  Has the method been subject to peer review and publication?**

**[ ]  Does the method have a known or potential error rate?**

**[ ]  Are there standards that are maintained that control the operation of the method?**

**[ ]  Has the method received widespread acceptance in the relevant scientific community?**

**[ ]  Anything else that suggests the testimony is not the product of a reliable principle or method?**

**[ ]  Has the witness applied the principles and methods reliably to facts in this case? [validity as applied]**

 **[ ]  What case law applies to your challenge?**

 **[ ]  Is there helpful civil caselaw?**

**[ ]  3rd: WHEN ARE YOU CHALLENGING THE TESTIMONY?**

 **[ ]  Pre-trial motion [motion in limine]?**

 **[ ]  Hearing?**

 **[ ]  What arguments do you make for a hearing?**

 **[ ]  written motion on why hearing necessary?**

 **[ ]  If granted hearing:**

**[ ]  Present defense evidence through expert(s)?**

 **[ ]  Rely on cross of State’s examiner?**

 **[ ]  Argue 2009 NAS and 2016 PCAST?**

 **[ ]  Object at trial and request voir dire of state’s examiner?**

 **[ ]  File written motion at this time?**

**[ ]  Rely on cross of State’s examiner [can’t present evidence in state’s case unless Court allows]**

 **[ ]  Argue 2009 NAS and 2016 PCAST?**

**[ ]  PREPARATION FOR CHALLENGE [so you can answer the above 3 questions]**

 **[ ]  For IDS cases, request a** [**Forensic Consult with Sarah Olson**](https://forensicresources.org/forensic-consultations/)

**[ ]  Understand [and know the problems with (if applicable)]:**

**[ ]  Forensic Area**

**[ ]  See:** [**Sarah Olson’s NC IDS Forensic Resources**](https://forensicresources.org/forensic-disciplines/)

**[ ]  Read** [**2009 National Academy of Sciences**](https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf)  **[NAS] and** [**2016 President’s Council of Advisor’s on Science and Technology**](https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf) **(PCAST) sections on the forensic area**

**[ ]  Understand** [**2021 DOJ PCAST response**](https://www.justice.gov/opa/pr/justice-department-publishes-statement-2016-presidents-council-advisors-science-and) **and problems with it**

**[ ]  What is the method for the forensic area and how does it work?**

**[ ]  Scientific Validity Challenge: Identify the *Daubert* factors that may apply in your case:**

 **[ ]  has the method been tested or can be?**

 **[ ]  by whom?**

 **[ ]  what are the studied the state relies on?**

 **[ ]  problems with prior testing?**

 **[ ]  Subject to peer review and publication?**

 **[ ]  by whom?**

 **[ ]  problems with publications and/or peer review?**

 **[ ]  Is there an established error rate or can there be one?**

**[ ]  If no, what steps, if any, are being taken to establish an error rate?**

**Note: Any error rate that an examiner purports for themselves [e.g. “I have a 0 error rate”], in no way establishes the error rate for the method**

 **[ ]  Standards that are maintained and control the method?**

 **[ ]  what are the standards?**

 **[ ]  Who maintains them?**

 **[ ]  Accepted by relevant scientific community?**

**[ ]  Who is the relevant scientific community?**

**[ ]  Validity as Applied**

**[ ]  Does the examiner have scientific, technical or other specialized knowledge?**

**[ ]  Has the examiner followed the accepted method?**

**[ ]  Has the examiner followed the Standard Operating Procedures [SOP’s] that were validated by the Crime Lab?**

**[ ]  Does the examiner’s testimony go beyond what is scientifically valid?**

**[ ]  Does the examiner’s conclusion go beyond what is currently accepted?**

**[ ]  Scientific Method**

**[ ]  Do the studies and testing relied on by the State follow the scientific method?**

 **[ ]  Studies relied on by the State to establish scientific validity**

 **[ ]  Are the studies scientifically valid?**

 **[ ]  Are the studies reliable?**

 **[ ]  Are the studies reproducible?**

**[ ]  PCAST: 2 proper empirical validation studies by 2 different authors required to show scientific validity**

 **[ ]  Proper study design?**

 **[ ]  Proper conditions of study?**

**[ ]  Precedent [and how to distinguish]**

**[ ]  Was the case prior to change of Rule 702 (2011) in NC and courts establishing NC as a *Daubert* state (2016 in *McGrady*)?**

 **[ ]  In prior case, was there a hearing?**

 **[ ]  What testimony was presented?**

 **[ ]  State’s examiner?**

 **[ ]  Defense witness(es)?**

 **[ ]  What was the Court’s ruling?**

 **[ ]  Is there civil case law that may be helpful?**

**Note: Just because something was admissible before, doesn’t mean it should be admissible now [e.g. hair analysis, comparative bullet-lead analysis]**

**[ ]  Retain Expert(s)**

 **[ ]  In forensic area?**

 **[ ]** [**NC Forensic Resource Expert Database**](https://forensicresources.org/browse-all-experts/)

**[ ]  Expert in scientific method and scientific studies?**

 **Note: likely need for scientific validity challenge**

 **[ ]  Discovery**

 **[ ]  Complete lab file and bench notes**

 **[ ]  Standard Operating Procedures [SOP’s] in place at time of examination**

 **[ ]  Current and prior SOP’s if it has changed**

**[ ]  Studies relied on by State to establish scientific validity of method**

 **[ ]  CV of Examiner**

 **[ ]  Trainings attended?**

 **[ ]  Corrective action reports for examiner**

 **[ ]  Proficiency Testing results of examiner**

**[ ]  Is Proficiency testing similar or different to the examination in this case?**

 **[ ]  Interview State’s examiner**

 **[ ]  What method did the examiner use?**

 **[ ]  How did they examine the evidence in this case?**

 **[ ]  Do they believe there are any limitations for the method they used?**

**[ ]  If there is no error rate for the method, what do they believe is their error rate [and why?]**

**[ ]  Are they aware of NAS/PCAST and the problems mentioned in NAS/PCAST?**

**[ ]  Anything you want to know that you don’t want to be surprised about the answer during testimony?**

 **[ ]  Prior trial transcripts of the examiner**

 **[ ]  Has the examiner changed their testimony over time?**

**[ ]  Write Motion that incorporates:**

 **[ ]  Why you should receive a hearing [or voir dire of expert]**

 **[ ]  What testimony you are seeking to exclude**

 **[ ]  Why the testimony should be excluded**

 **[ ]  How precedent can be distinguished**

**[ ]  IF RULE 702 CHALENGE FAILS AND TESTIMONY ALLOWED**

 **[ ]  Make the problems with the testimony as simple as possible for jury**

 **[ ]  Find analogies that fit why this allowed testimony isn’t reliable**

**[ ]  Jury Selection**

 **[ ]  Cross of Examiner**

**[ ]  Focus on the issues brought up in your motion that failed**

 **[ ]  Defense Evidence**

**[ ]  Introduce evidence through defense expert(s)?**

 **[ ]  Closing**