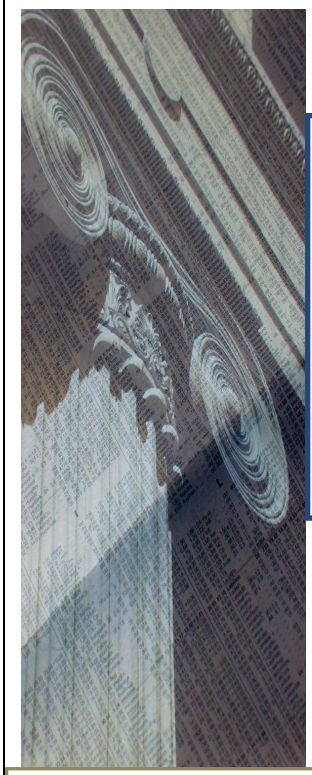

CONSORTIUM OF FORENSIC SCIENCE ORGANIZATIONS (CFSO)

FLASH BRIEF

NOVEMBER 2021

The mission of the CFSO is to speak with a single forensic science voice in matters of mutual interest to its member organizations, to influence public policy at the national level, and to make a compelling case for greater federal funding for public crime laboratories and medical examiner offices. The primary focus of the CFSO is local, state, and national policymakers, as well as the United States Congress.

CFSO
Consortium of Forensic Science Organizations

Legislative Corner

Washington has been focused almost solely on the Infrastructure Bill and the Build Back Better bill. Although the Senate has released drafts of their appropriations bills, negotiations have failed and the expiration of the December 3rd continuing resolution looms. We continue to work on the Justice for All Reauthorization and Medical Examiner legislation. Keep an eye out for a more detailed legislative newsletter in the next two weeks

DNAmix2021

DNAmix 2021 is a large-scale independent study being conducted to evaluate the extent of consistency and variation among forensic laboratories in interpretations and statistical analyses of DNA mixtures, and to assess the effects of various potential sources of variability.

Phases

The study will be composed of four phases:

1) Policies and Procedures (P&P) Questionnaire — Online questionnaire to assess laboratory policies and procedures relevant to DNA mixture interpretation (notably systems, types of statistics reported, and parameter settings used).

2) Casework Scenario Questionnaire — Online questionnaire presenting a number of casework-derived scenarios (without DNA data), asking participants to assess how they would conduct analysis for each scenario.

3) Number of Contributors (NoC) Subtest — Assessment of suitability and number of contributors, given electropherogram data for 14 mixtures.

4) Interpretation, Comparison, and Statistical Analysis (ICSA) Subtest — Interpretations and statistical analyses, given electropherogram data for 7 mixtures, each provided with DNA profiles of potential contributors.

Laboratories are encouraged to participate in the early phases even if they cannot commit to the later phases. The phases will be conducted throughout 2021. The samples will be selected to be representative of actual DNA mixture casework. All mixture samples and contributors provided in this study will be created using actual human DNA.

Participation

Participation is open to all forensic laboratories that conduct DNA mixture interpretation as part of their SOPs; non-U.S. laboratories are welcome to participate if they report interpretations in English. Participation in this study requires the participants to agree to use the same diligence in performing these analyses as used in operational casework, and to use their laboratory's SOPs in performing these analyses. Results will be confidential: anonymity of participants will be maintained and results will not be associated with specific participants; the results will not be aggregated in any way that compromises anonymity. A coding system will be used that will allow your laboratory to see its individual results after the study is published, if desired.

Benefits

The results, which will be published in a peer-reviewed journal, are intended to be used to assess the foundational validity of the analysis and interpretation of DNA mixtures, and to demonstrate the effectiveness of different approaches to mixture interpretation and statistical analysis. The study will serve the DNA community by providing data in response to issues raised in the NIST MIX13 study and the PCAST report. The results will be of value in Daubert/Frye challenges, and to laboratory managers in assessing policies, training, or quality assurance procedures.

The study is being conducted by Noblis and Bode Technology, under NIJ grant # 2020-R2-CX-0049

Interested? Register at https://dnamix.edgeaws.noblis.org
Questions? Contact DNAmix@noblis.org

NamUs

NIJ has been working with RTI and the University of North Texas to transition the overarching management of NamUs to RTI. In the coming months, the NamUs stakeholder community will see several changes. NIJ's Director of the Office of Investigative and Forensic Sciences discusses these changes in an open letter to the NamUs stakeholder community.

Read the letter here: https://namus.nij.ojp.gov/#dbcv3

CSAFE Report

The Year 6 Highlight Report summarizes the progress CSAFE has made towards achieving its mission and goals. This report highlights selected accomplishments from our research areas: probability and statistics for pattern and digital evidence, cross-cutting issues, and training and education. Each section includes a list of active projects, products, and project outcomes.

The Year 6 Impact Report summarizes the progress CSAFE has made towards achieving its mission and goals. It highlights key accomplishments from our research teams, a review of our partnerships and collaborations, and a rundown of our educational and training opportunities. This report focuses on our performance metrics, and each section includes detailed success and impact measurements.

Please find both Reports below:

- Year 6 Highlight Report
- Year 6 Impact Report

Proposed Amendments to Federal Rule of Evidence 702 & Federal Criminal Rule 16

The Federal Rules Process. The Federal Rules, which establish the procedures by which cases are litigated in Federal Court, are created and amended under the auspices of the Supreme Court, as set forth in the Rules Enabling Act, 28 U.S.C. § 2071-2077. The Chief Justice selects a mix of judges, academics, and private practitioners to serve on Advisory Committees, together with ex officio representatives from the Department of Justice and the Public Defender (as appropriate). The Advisory Committees recommend rules and amendments to a Standing Committee on Rules of Practice and Procedure, and after publication, public comment, and revision as necessary, the Standing Committee votes to send the proposals to the Judicial Conference, and then the Supreme Court for approval. Once approved, Congress has a period of time to review them before they go into effect. From conception to enactment, rulemaking typically takes three years, and often longer.

Federal Rule of Evidence 702. The Advisory Committee on the Federal Rules of Evidence, for a number of years, has been considering an amendment to Evidence Rule 702. The impetus for the committee's attention to Rule 702 was the President's Council of Advisors on Science and Technology (PCAST)'s 2016 report. That report suggested that source identification evidence (*i.e.*, fingerprint, ballistics, tire marks, etc.) was not "science," was not sufficiently validated with provable error rates, and was not sufficiently reliable to come into evidence under *Daubert* and *Kumho Tire*. A symposium was held in October 2017 to discuss available options, and a subcommittee considered possible rule changes, or other measures such as judicial training, to respond to these criticisms. After years of debate and work within the Department of Justice, a compromise was reached and approved for publication. The public comment period will end in February 2022. Comments will then be considered by the Evidence Committee at its spring 2022 meeting. The highlights of the rule change are as follows:

- Two textual changes will be made to Rule 702. The first is to incorporate into the rule the burden of proof standard (preponderance of the evidence) that is articulated in FRE 104(a), and which everyone agrees applies. The benefit to stating it expressly is to guide those judges who improperly delegate their gatekeeping role to the jury. The Department did not object to this change; the concern instead was opening the door to unfavorable language in the committee note. The committee and the Department worked through the proposed note and agreed to specific language.

- The second textual change is intended to address "overstatements" by expert witnesses, *i.e.*, feature comparison testimony that purports to express 100% certainty. The Department

actively has worked to address this issue by publishing Uniform Language for Testimony and Reports (ULTRs) for various disciplines and adopting a testimony monitoring program. Although the committee appreciated the Department's efforts, it still wanted a textual change in the Rule. The agreed-upon change simply puts subsection (d) into active voice, so that it reads: the "expert's opinion reflects a reliable application of the principles and methods to the facts of the case." The committee's hope is that the active voice, with the note changes, will signal to courts that they need to actively apply this element of the expert witness test.

- The note language was the product of much compromise, but eventually the Department agreed to a pared-down explanation of the "overstatement" issue. The committee agreed to remove all references to the PCAST report, which the science has now overtaken.

Federal Criminal Rule 16. Several years ago, Judges Jed Rakoff (SDNY) and Paul Grimm (D. MD) submitted separate proposals to the Criminal Rules Advisory Committee to amend Rule 16. The proposals (submitted about the same time as the proposals to amend Rule 702) were to make the disclosure requirements for cases involving forensic expert testimony more expansive and similar to those in Rule 26 of the Federal Rules of Civil Procedure. After many months of consideration, the Committee members came to the conclusion that pretrial disclosure related to expert witness reports and testimony – not just disclosure involving forensic experts – warranted review because of two problems with the current rule: (1) the lack of adequate specificity regarding what information must be disclosed; and (2) the lack of enforceable deadlines for disclosure.

In January 2017, prior to the proposals being sent to the Committee, the Department issued guidance directing prosecutors to provide more expansive discovery on cases involving forensic science experts. The guidance, however, was not identical to what the proposals asked for. At the Committee's fall 2018 meeting, the Department made a presentation covering the Department's development and implementation of new policies governing disclosure of forensic evidence, efforts to improve the quality of the Department's forensic analysis, and the Department's practices in cases involving forensic and non-forensic expert evidence. In April 2019, the Committee held a "mini-conference" that included experienced practitioners from both the Department and defense bar.

After a number of changes and compromises to accommodate the Department's concerns, the Department supported the proposed amendment, which was published for public comment in August 2020. The proposed amendment clarifies the scope and timing of parties' obligations to disclose expert testimony they intend to present at trial. It is intended to facilitate trial preparation by allowing the parties a fair opportunity to prepare to cross-examine expert witnesses and secure opposing expert testimony if needed. It was approved unanimously by the Standing Committee in June 2021, and goes before the Judicial Conference in its fall 2021 meeting.

Copies of both Rules 702 and 16, reflecting their changes, are attached as appendix A and B.

NIST Second Public Comment Period NISTIR-8351
DNA Mixture Interpretation: A NIST Scientific Foundation Review

NIST has opened a second comment period for feedback on their proposed STR Mixture Foundations report. Written comments and related material must be submitted to scientificfoundationreviews@nist.gov by 11:59 p.m. Eastern Standard Time on Nov. 19, 2021. Of note, NIST is asking for additional comments, new data, or information. Thus far we aware of comments submitted by ASCLD, SWGDAM, and several other prominent forensic science groups and individuals. The CFSO Board has asked the CFSO member boards if they would like to put forward a CFSO comment to NIST. Please contact your CFSO organization representative or your member organization board if you have an opinion you would like to share on this topic. The NIST Scientific Foundations Reviews webpage can be found at https://www.nist.gov/topics/forensic-science/interdisciplinary-topics/scientific-foundation-reviews

OSTP RFI on Biometric Technology

The Office of Science and Technology Policy (OSTP), which is part of the Executive Office of the President, has issued a first of its kind request for comments relating to the use of biometric technology. Comments are due by January 2022.
https://www.federalregister.gov/documents/2021/10/08/2021-21975/notice-of-request-for-information-rfi-on-public-and-private-sector-uses-of-biometric-technologies

National Center on Forensics

The Office of Justice Programs, U.S. Department of Justice, awarded George Mason University and its partners—the National Association of Attorneys General, the American Society for Clinical Pathology, and the Montana Forensic Science Division. The purpose of the NIJ National Center on Forensics is to:

- Provide medico-legal learning opportunities for medical students to train as deputy medical examiners/coroners in underserved rural areas;
- Provide forensic science and legal training to prosecutors, judges, and law enforcement; and
- Develop opportunities as appropriate amongst the designated partners to benefit current and future practitioners in the field

To ensure the NIJ National Center on Forensics meets the needs of these communities, they ask for a few minutes of your time to complete a survey, linked below. This survey will provide you with an opportunity to let them know about your training needs. By providing them with your input, you will help chart the course of the Center and ensure they effectively serve our community.

This survey will be open from November 3 through December 3, 2021

https://gmu.az1.qualtrics.com/jfe/form/SV_1YyPZ4PbZo3Hnts

Standards Implementation

CFSO as an organization and CFSO member organizations have long supported the development and advancement of standards in forensic science. CFSO affirms our commitment of support to the OSAC and Standards Development Organizations working in the forensic space. CFSO organization members are heavily represented on and contributory to OSAC and various SDO's. Here are a few recent publications and statements from our members on this topic:

- CFSO supports continued funding for OSAC and recommends funding in support of forensic SDO's. Download here
- The American Society of Crime Laboratory Directors (ASCLD) supports policies that support the ongoing development of standards with significant forensic practitioner involvement and leadership. In its 2020-2021 National Outreach Priorities & Agenda, ASCLD noted its support of OSAC and encourages forensic science service providers to evaluate and implement the standards on the Registry whenever possible.
- The Society of Forensic Toxicologists (SOFT) Board of Directors has written a statement of support for the OSAC Registry and encourages forensic toxicology laboratories to evaluate and implement the standards whenever possible.
- The National Association of Medical Examiners (NAME) endorses the development and adoption of strong standards for excellent practice in all areas of forensic science as noted in its recent policy statement.
- The American Academy of Forensic Sciences (AAFS) believes the future of forensic science is embodied in the development of consensus standards and best practices. As such, the AAFS has established an organization dedicated to developing documentary standards for forensics, the Academy Standards Board (ASB). The Academy works closely with the ASB and its subcommittees, which are dedicated to creating a national registry of forensic standards. The ASB works closely with the NIST OSAC to develop consensus standards through the ASB, which is an ANSI accredited standards development organization. As noted in a statement from the AAFS Board of Directors, AAFS supports the work of OSAC as it plays a critical role in ASB's and other SDO's standards development efforts.
- The International Association for Identification (IAI) has and continues to support the development and adoption of standards for the forensic community as detailed in its recent policy statement. The IAI, as with our fellow CFSO member organizations, continues to have many of our members serving at various levels of the OSAC assisting in the drafting of proposed standards.

NFLIS Drug Annual Report 2020

The Drug Enforcement Administration's (DEA's) National Forensic Laboratory Information System (NFLIS) is pleased to release the ***NFLIS-Drug 2020 Annual Report*** (here)

The ***NFLIS-Drug 2020 Annual Report*** presents results of drug cases submitted to State and local laboratories from January 1, 2020, through December 31, 2020, that were analyzed by March 31, 2021, including national and regional estimates and trends. In addition, the ***NFLIS-Drug 2020 Annual Report*** includes data from two Federal laboratory systems and geographic information system analyses of specific drugs. This report is available for download here.

Appendix A

PROPOSED AMENDMENTS TO THE FEDERAL RULES OF EVIDENCE[1]

Rule 702. Testimony by Expert Witnesses

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 the proponent has demonstrated by a preponderance of the evidence that:

(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~~expert's opinion reflects a reliable application of the

[1] New material is underlined in red; matter to be omitted is lined through.

principles and methods to the facts of the case.

Committee Note

Rule 702 has been amended in two respects. First, the rule has been amended to clarify and emphasize that the admissibility requirements set forth in the rule must be established to the court by a preponderance of the evidence. *See* Rule 104(a). Of course, the Rule 104(a) standard applies to most of the admissibility requirements set forth in the Evidence Rules. *See Bourjaily v. United States*, 483 U.S. 171 (1987). But many courts have held that the critical questions of the sufficiency of an expert's basis, and the application of the expert's methodology, are questions of weight and not admissibility. These rulings are an incorrect application of Rules 702 and 104(a).

There is no intent to raise any negative inference regarding the applicability of the Rule 104(a) standard of proof for other rules. The Committee concluded that emphasizing the preponderance standard in Rule 702 specifically was made necessary by the courts that have failed to apply correctly the reliability requirements of that rule.

The amendment clarifies that the preponderance standard applies to the three reliability-based requirements added in 2000—requirements that many courts have incorrectly determined to be governed by the more permissive Rule 104(b) standard. But of course other admissibility requirements in the rule (such as that the expert must be qualified and the expert's testimony must help the trier of fact) are governed by the Rule 104(a) standard as well.

Of course, some challenges to expert testimony will raise matters of weight rather than admissibility even under the Rule 104(a) standard. For example, if the court finds by a preponderance of the evidence that an expert has a sufficient basis to support an opinion, the fact that the expert has not read every single study that exists will raise a question of weight and not admissibility. But this does not mean, as certain courts have held, that arguments about the sufficiency of an expert's basis always go to weight and not admissibility. Rather it means that once the court has found the admissibility requirement to be met by a preponderance of the evidence, any attack by the opponent will go only to the weight of the evidence.

It will often occur that experts come to different conclusions based on contested sets of facts. Where that is so, the preponderance of the evidence standard does not necessarily require exclusion of either side's experts. Rather, by deciding the disputed facts, the jury can decide which side's experts to credit.

Rule 702 requires that the expert's knowledge "help" the trier of fact to understand the evidence or to determine a fact in issue. Unfortunately, some courts have required the expert's testimony to "appreciably help" the trier of fact. Applying a higher standard than helpfulness to otherwise reliable expert testimony is unnecessarily strict.

Rule 702(d) has also been amended to emphasize that a trial judge must exercise gatekeeping authority with respect to the opinion ultimately expressed by a testifying expert. A testifying expert's opinion must stay within the bounds of what can be concluded by a reliable application of the expert's basis and methodology. Judicial gatekeeping is essential because just as jurors may be unable to evaluate meaningfully the reliability of scientific and other methods

underlying expert opinion, jurors may also be unable to assess the conclusions of an expert that go beyond what the expert's basis and methodology may reliably support.

The amendment is especially pertinent to the testimony of forensic experts in both criminal and civilcases. Forensic experts should avoid assertions of absolute or one hundred percent certainty—or to a reasonable degree of scientific certainty—if the methodology is subjective and thus potentially subject to error. In deciding whether to admit forensic expert testimony, the judge should (where possible) receive an estimate of the known or potential rate of error of the methodology employed, based (where appropriate) on studies that reflect how often the method produces accurate results. Expert opinion testimony regarding the weight of feature comparison evidence (i.e., evidence that a set of features corresponds between two examined items) must be limited to those inferences that can reasonably be drawn from a reliable application of the principles and methods. This amendment does not, however, bar testimony that comports with substantive law requiring opinions to a particular degree of certainty.

Nothing in the amendment imposes any new, specific procedures. Rather, the amendment is simply intended to clarify that Rule 104(a)'s requirement that a court must determine admissibility by a preponderance applies to expert opinions under Rule 702. Similarly, nothing in the amendment requires the court to nitpick an expert's opinion in order to reach a perfect expression of what the basis and methodology can support. The Rule 104(a) standard does not require perfection. On the other hand, it does not permit the expert to make extravagant claims that are unsupported by the expert's basis and methodology.

The amendment's reference to "a preponderance of the evidence" is not meant to indicate that the information presented to the judge at a Rule 104(a) hearing must meet the rules of admissibility. It simply means that the judge must find, on the basis of the information presented, that the proponent has shown the requirements of the rule to be satisfied more likely than not.

Appendix B

PROPOSED AMENDMENTS TO THE FEDERAL RULES OF CRIMINAL PROCEDURE[1]

Rule 16. Discovery and Inspection

(a) Government's Disclosure.

(1) Information Subject to Disclosure

* * * * *

(G) Expert witnesses.

(i) Duty to Disclose. At the defendant's request, the government must ~~give~~ disclose to the defendant, in writing, the information required by (iii) for ~~a written summary of~~ any testimony that the government intends to use at trial under Federal Rule~~s~~ of Evidence 702, 703, or 705 ~~of the Federal Rules of Evidence~~ during its case-in-chief ~~at trial~~, or during its rebuttal to counter testimony that the

[1] New material is underlined in red; matter to be omitted is lined through.

defendant has timely disclosed under (b)(1)(C). If the government requests discovery under the second bullet point in ~~subdivision~~ (b)(1)(C)(ii~~)~~ and the defendant complies, the government must, at the defendant's request, ~~give~~ disclose to the defendant, in writing, the information required by (iii) for ~~a written summary of~~ testimony that the government intends to use at trial under Federal Rule~~s~~ of Evidence 702, 703, or 705 ~~of the Federal Rules of Evidence as evidence at trial~~ on the issue of the defendant's mental condition.

(ii) Time to Disclose. The court, by order or local rule, must set a time for the government to make its disclosures.

The time must be sufficiently before trial to provide a fair opportunity for the defendant to meet the government's evidence.

(iii) Contents of the Disclosure. The disclosure for each expert witness ~~summary provided under this subparagraph~~ must contain:

- a complete statement of all ~~describe the witness's~~ opinions~~,~~ that the government will elicit from the witness in its case-in-chief, or during its rebuttal to counter testimony that the defendant has timely disclosed under (b)(1)(C);

- the bases and reasons for ~~those opinions~~ them; ~~and~~
- the witness's qualifications, including a list of all publications authored in the previous 10 years; and
- a list of all other cases in which, during the previous 4 years, the witness has testified as an expert at trial or by deposition.

(iv) Information Previously Disclosed. If the government previously provided a report under (F) that contained information required by (iii), that information may be referred to, rather

than repeated, in the expert-witness disclosure.

(v) Signing the Disclosure. The witness must approve and sign the disclosure, unless the government:

- states in the disclosure why it could not obtain the witness's signature through reasonable efforts; or
- has previously provided under (F) a report, signed by the witness, that contains all the opinions and the bases and reasons for them required by (iii).

(vi) Supplementing and Correcting a Disclosure. The government must

supplement or correct its disclosures in accordance with (c).

* * * * *

(b) Defendant's Disclosure.

(1) Information Subject to Disclosure

* * * * *

(C) Expert witnesses.

(i) Duty to Disclose. At the government's request, ~~T~~the defendant must~~, at the government's request,~~ disclose ~~give~~ to the government, in writing, the information required by (iii) for ~~a written summary of~~ any testimony that the defendant intends to use under Federal Rule~~s~~ of Evidence 702, 703, or 705 ~~of the Federal Rules of Evidence as evidence~~ during the defendant's case-in-chief at trial, if~~—~~:

~~(i)~~ • the defendant requests disclosure under ~~subdivision~~ (a)(1)(G) and the government complies; or

~~(ii)~~ • the defendant has given notice under Rule 12.2(b) of an intent to present expert testimony on the defendant's mental condition.

(ii) Time to Disclose. The court, by order or local rule, must set a time for the defendant to make the defendant's disclosures. The time must be sufficiently before trial to provide a fair opportunity for the government to meet the defendant's evidence.

(iii) Contents of the Disclosure. The disclosure for each expert witness ~~This summary~~ must contain:

- a complete statement of all ~~describe the witness's~~ opinions~~,~~ that the defendant will elicit from the witness in the defendant's case-in-chief;
- the bases and reasons for them~~those opinions; and~~
- the witness's qualifications, including a list of all publications authored in the previous 10 years; and
- a list of all other cases in which, during the previous 4 years, the witness has testified as an expert at trial or by deposition.

(iv) Information Previously Disclosed. If the defendant previously provided a report under (B) that contained

information required by (iii), that information may be referred to, rather than repeated, in the expert-witness disclosure.

(v) Signing the Disclosure. The witness must approve and sign the disclosure, unless the defendant:

- states in the disclosure why the defendant could not obtain the witness's signature through reasonable efforts; or
- has previously provided under (F) a report, signed by the witness, that contains all the opinions and the bases and reasons for them required by (iii).

(vi) Supplementing and Correcting a Disclosure. The defendant must

supplement or correct the defendant's disclosures in accordance with (c).

* * * * *

Committee Note

The amendment addresses two shortcomings of the prior provisions on expert witness disclosure: the lack of adequate specificity regarding what information must be disclosed, and the lack of an enforceable deadline for disclosure. The amendment clarifies the scope and timing of the parties' obligations to disclose expert testimony they intend to present at trial. It is intended to facilitate trial preparation, allowing the parties a fair opportunity to prepare to cross-examine expert witnesses and secure opposing expert testimony if needed.

Like the existing provisions, amended subsections (a)(1)(G) (government's disclosure) and (b)(1)(C) (defendant's disclosure) generally mirror one another. The amendment to (b)(1)(C) includes the limiting phrase—now found in (a)(1)(G) and carried forward in the amendment—restricting the disclosure obligation to testimony the defendant will use in the defendant's "case-in-chief." Because the history of Rule 16 revealed no reason for the omission of this phrase from (b)(1)(C), this phrase was added to make (a) and (b) parallel as well as reciprocal. No change from current practice in this respect is intended.

The amendment to (a)(1)(G) also clarifies that the government's disclosure obligation includes not only the

testimony it intends to use in its case-in-chief, but also testimony it intends to use to rebut testimony timely disclosed by the defense under (b)(1)(C).

To ensure enforceable deadlines that the prior provisions lacked, items (a)(1)(G)(ii) and (b)(1)(C)(ii) provide that the court, by order or local rule, must set a time for the government to make its disclosures of expert testimony to the defendant, and for the defense to make its disclosures of expert testimony to the government. These disclosure times, the amendment mandates, must be sufficiently before trial to provide a fair opportunity for each party to meet the other side's expert evidence. Sometimes a party may need to secure its own expert to respond to expert testimony disclosed by the other party. Deadlines should accommodate the time that may take, including the time an appointed attorney may need to secure funding to hire an expert witness, or the time the government would need to find a witness to rebut an expert disclosed by the defense. Deadlines for disclosure must also be sensitive to the requirements of the Speedy Trial Act. Because caseloads vary from district to district, the amendment does not itself set a specific time for the disclosures by the government and the defense for every case. Instead, it allows courts to tailor disclosure deadlines to local conditions or specific cases by providing that the time for disclosure must be set either by local rule or court order.

Items (a)(1)(G)(ii) and (b)(1)(C)(ii) require the court to set a time for disclosure in each case if that time is not already set by local rule or other order, but leave to the court's discretion when it is most appropriate to announce those deadlines. The court also retains discretion under Rule

16(d) consistent with the provisions of the Speedy Trial Act to alter deadlines to ensure adequate trial preparation. In setting times for expert disclosures in individual cases, the court should consider the recommendations of the parties, who are required to "confer and try to agree on a timetable" for pretrial disclosures under Rule 16.1.

To ensure that parties receive adequate information about the content of the witness's testimony and potential impeachment, items (a)(1)(G)(i) and (iii)—and the parallel provisions in (b)(1)(C)(i) and (iii)—delete the phrase "written summary" and substitute specific requirements that the parties provide "a complete statement" of the witness's opinions, the bases and reasons for those opinions, the witness's qualifications, and a list of other cases in which the witness has testified in the past 4 years. The term "publications" does not include internal government documents. Although the language of some of these provisions is drawn from Civil Rule 26, the amendment is not intended to replicate all aspects of practice under the civil rule in criminal cases, which differ in many significant ways from civil cases. The amendment requires a complete statement of all opinions the expert will provide, but does not require a verbatim recitation of the testimony the expert will give at trial.

On occasion, an expert witness will have testified in a large number of cases, and developing the list of prior testimony may be unduly burdensome. Likewise, on occasion, with respect to an expert witness whose identity is not critical to the opposing party's ability to prepare for trial, the party who wishes to call the expert may be able to provide a complete statement of the expert's opinions, bases

and reasons for them, but may not be able to provide the witness's identity until a date closer to trial. In such circumstances, the party who wishes to call the expert may seek an order modifying discovery under Rule 16(d).

Items (a)(1)(G)(iv) and (b)(1)(C)(iv) also recognize that, in some situations, information that a party must disclose about opinions and the bases and reasons for those opinions may have been provided previously in a report (including accompanying documents) of an examination or test under subparagraph (a)(1)(F) or (b)(1)(B). Information previously provided need not be repeated in the expert disclosure, if the expert disclosure clearly identifies the information and the prior report in which it was provided.

Items (a)(1)(G)(v) and (b)(1)(C)(v) of the amended rule require that the expert witness approve and sign the disclosure. However, the amended provisions also recognize two exceptions to this requirement. First, the rule recognizes the possibility that a party may not be able to obtain a witness's approval and signature despite reasonable efforts to do so. This may occur, for example, when the party has not retained or specially employed the witness to present testimony, such as when a party calls a treating physician to testify. In that situation, the party is responsible for providing the required information, but may be unable to procure a witness's approval and signature following a request. An unsigned disclosure is acceptable so long as the party states why it was unable to procure the expert's signature following reasonable efforts. Second, the expert need not sign the disclosure if a complete statement of all of the opinions, as well as the bases and reasons for those opinions, were already set forth in a report, signed by the

witness, previously provided under subparagraph (a)(1)(F)—for government disclosures—or (b)(1)(B)—for defendant's disclosures. In that situation, the prior signed report and accompanying documents, combined with the attorney's representation of the expert's qualifications, publications, and prior testimony, provide the information and signature needed to prepare to meet the testimony.

Items (a)(1)(G)(vi) and (b)(1)(C)(vi) require the parties to supplement or correct each disclosure to the other party in accordance with Rule 16(c). This provision is intended to ensure that, if there is any modification of a party's expert testimony or change in the identity of an expert after the initial disclosure, the other party will receive prompt notice of that correction or modification.

Changes Made After Publication and Comment

Clarifying and stylistic changes were made. In (a)(1)(G)(i) the cross reference was corrected to refer to the second bullet point in (b)(1)(C)(i). The second sentence was revised slightly to parallel the first sentence more closely and to delete as redundant the phrase "as evidence," which referred to evidence to be introduced under Federal Rules of Evidence 702, 703, or 705. To avoid any possible confusion, references in (a)(1)(G)(ii), (iii), and (vi) and (b)(1)(C)(ii), (iii), and (vi) were rephrased slightly to clarify whether they referred collectively to all of each party's disclosures or to specific disclosures. Parallel changes were made in the note.