

Inspired Impeachment
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Objectives

1. Learn what the most common methods of impeachment of a witness are, as well as the statutory and common law provisions that allow for that impeachment. This overview pays particular attention to impeachment by motive and bias.
2. Learn the mechanics of impeachment by prior inconsistent statement and omission.
3. Learn how to structure your prior inconsistent impeachments so that the jury actually understands and appreciates that you have undermined the witness's credibility.

Impeachment Overview

A. What is impeachment

Impeachment means to attack the credibility of a witness. We want all or a portion of the witness's testimony to be disbelieved and we accomplish that through impeachment.

B. How do we impeach

We typically impeach with the seven common areas of impeachment listed below.

1. Prior Inconsistent Statement
2. Omissions
3. Things Not Done
4. Reality
5. Motive / Bias
6. Reputation / Character
7. Conviction

C. Legal authority for each method of impeachment

Broadly, the right to cross examine a witness is a fundamental right. The confrontation clause of the sixth amendment and case law authorize cross.

- See Mattox v. United States, 156 U.S. 237 (1895)
“The substance of the constitutional protection is preserved to the prisoner in the advantage he has once had of seeing the witness face to face, and of subjecting him to the ordeal of a cross-examination.”
- See Alford v. US, 282 US 687, 691 (1931)

“Cross examination is a matter of right.”

Attacking a witness’s credibility is implicit in the concept of confrontation of the witness.

- Federal Rule of Evidence 607 establishes that any party may attack a witness’s credibility.
- Common law and other rules of evidence specifically allow for the seven methods listed above.

7. Convictions

Why can we impeach with prior convictions?

Rules of evidence and case law allow for impeachment with prior convictions.

Federal Rule of Evidence 609

a) In General. The following rules apply to attacking a witness’s character for truthfulness by evidence of a criminal conviction:

(1) for a crime that, in the convicting jurisdiction, was punishable by death or by imprisonment for more than one year, the evidence:

(A) must be admitted, subject to [Rule 403](#), in a civil case or in a criminal case in which the witness is not a defendant; and

(B) must be admitted in a criminal case in which the witness is a defendant, if the probative value of the evidence outweighs its prejudicial effect to that defendant; and

(2) for any crime regardless of the punishment, the evidence must be admitted if the court can readily determine that establishing the elements of the crime required proving — or the witness’s admitting — a dishonest act or false statement.

(b) Limit on Using the Evidence After 10 Years. This subdivision (b) applies if more than 10 years have passed since the witness’s conviction or release from confinement for it, whichever is later. Evidence of the conviction is admissible only if:

(1) its probative value, supported by specific facts and circumstances, substantially outweighs its prejudicial effect; and

(2) the proponent gives an adverse party reasonable written notice of the intent to use it so that the party has a fair opportunity to contest its use.

- (c) Effect of Pardon**
- (d) Juvenile Adjudication**
- (e) Pendency of Appeal**

Also look to local case law, which may predate the Federal Rules

- E.g. in Illinois
 - Rules of Evidence were codified in 2011 and parallels Federal Rule 609
 - Impeachment with priors was already authorized by People v. Montgomery, 48 Ill. 2d 510 (1971).

Think strategically about what you hope to accomplish with this sort of impeachment. It's likely more effective if you can tie prior conviction impeachment to other types of impeachment, like motive and bias.

6. Character

Why can we impeach with character?

Rules of evidence and case law allow for character impeachment

Federal Rule of Evidence 608

A Witness's Character for Truthfulness or Untruthfulness

(a) Reputation or Opinion Evidence. A witness's credibility may be attacked or supported by testimony about the witness's reputation for having a character for truthfulness or untruthfulness, or by testimony in the form of an opinion about that character. But evidence of truthful character is admissible only after the witness's character for truthfulness has been attacked.

(b) Specific Instances of Conduct.

Except for a criminal conviction under Rule 609, extrinsic evidence is not admissible to prove specific instances of a witness's conduct in order to attack or support the witness's character for truthfulness. But the court may, on cross-examination, allow them to be inquired into if they are probative of the character for truthfulness or untruthfulness of:

- (1) the witness; or
- (2) another witness whose character the witness being cross-examined has testified about.

By testifying on another matter, a witness does not waive any privilege against self-incrimination for testimony that relates only to the witness's character for truthfulness.

FRE 608 allows for impeachment through Reputation / Opinion

Also allows for impeachment with Specific Instances of Conduct

NOTE –you can't use extrinsic evidence to prove up specific instances, but a witness can talk about it if it is probative of truthfulness.

If practicing in state court, be aware that not every state has adopted FRE 608 in total.

- For example, Illinois Rule 608 is different than the Federal Rule
 - Only allows Opinion or Reputation evidence regarding character
 - So, you can call Witness B to say Witness A's reputation in the community is that he's a liar
 - You cannot call Witness B to say Witness A is untrustworthy because he stole her bike

5. Motive, Bias and Interest

Motive and Bias is the **good** stuff and not always utilized to its full extent.

Why can we impeach in this area?

Unlike most areas of impeachment, motive and bias is not expressly mentioned in the rules of evidence. Instead it's authorized by caselaw.

Origins of bias impeachment

The right to impeach on motive and bias dates back before the FRE to statute, rules and case law. Even when cross was allowed only by leave of the court, bias impeachment was mandated

- See Wills v. Russell, 100 U.S. 621, 625 – 6, 25 L. Ed. 607 (1879)
“Authorities of the highest character show that the established rule of practice in the Federal courts and in most other jurisdictions in this country is that a party has no right to cross-examine a witness, without leave of the court, as to any facts and circumstances not connected with matters stated in his direct examination, subject to two necessary exceptions. He may ask questions to show bias or prejudice in the witness, or to lay the foundation to admit evidence of prior contradictory statements.”

Bias after FRE

After the FRE were promulgated, case law still protected the right of bias impeachment

- See United States v. Abel, 469 U.S. 45 (1984) - Gives a summary of the history of bias impeachment in federal court
“This Court had held in Alford v. United States, 282 U.S. 687, 51 S.Ct. 218, 75 L.Ed. 624 (1931), that a trial court must allow some cross-examination of a witness to show bias. This holding was in accord with

the overwhelming weight of authority in the state courts as reflected in Wigmore's classic treatise on the law of evidence.” Abel at 50.

“We think the lesson to be drawn from all of this is that it is permissible to impeach a **469 witness by showing his bias under the Federal Rules of Evidence just as it was permissible to do so before their adoption.” Able at 51.

Bias in the States

Based on the fundamental nature of this type of impeachment, it is mandated everywhere.

- See Alford v. US, 282 US 687, 691 (1931)
“Cross examination is a matter of right.”
- See Davis v. Alaska, 415 US 308, 316 (1974)
“Exposure of a witness’ motivation in testifying is a proper and important function of the constitutionally protected right of cross examination”

Look to case law in your home jurisdictions which may provide even greater leeway than the Supreme Court.

- For example, in Illinois, People v. Triplett, 108 Ill.2d 463 (1985) has great language on bias impeachment.
“The evidence used must give rise to the inference that the witness has something to gain or lose by his testimony and therefore, the evidence used must not be remote or uncertain.”

“Reasonably tend to show that his testimony might be influenced by interest, bias or motive to testify falsely.”

Defense “need not show that promises have been made... entitled to inquire into ‘promises’ or ‘expectations’ whether based on fact or imaginary...”

- Triplett cites to Davis v. Alaska, 415 US 308 (1974)

Why should you care about motive and bias?

Because motive and bias are **NEVER COLARERAL**

Therefore, can be proven with extrinsic evidence

- “Bias is a term used in the “common law of evidence” to describe the relationship between a party and a witness which might lead the witness to slant, unconsciously or otherwise, his testimony in favor of or against a party. Bias may be induced by a witness' like, dislike,

or fear of a party, or by the witness' self-interest. Proof of bias is almost always relevant because the jury, as finder of fact and weigher of credibility, has historically been entitled to assess all evidence which might bear on the accuracy and truth of a witness' testimony. The “common law of evidence” **allowed the showing of bias by extrinsic evidence**, while requiring the cross-examiner to “take the answer of the witness” with respect to less favored forms of impeachment.” United States v. Abel, 469 U.S. 45, 52 (1984).

Here's how extrinsic evidence works.

Government witness previously wrote a bad check

- If they were convicted – you can impeach under 609 bringing in the fact of conviction and the sentence.
- If there is no conviction and the witness admits the conduct – you're done.
- If there was no conviction and the witness denies the conduct – you're also done.

You cannot call another witness to testify that they saw the forged check; can't produce forged check in court etc...

BUT

- Whether there is a conviction or not, if the witness denies the conduct AND it shows bias – you CAN bring in the extrinsic evidence, other witnesses, physical evidence of the check etc...

Examples of Bias

a. Relationship between parties and witness

- Olsen v Kentucky, 488 US 227 - Alleged rape victim in a relationship with the first outcry witness – motive to protect relationship

b. Related pending criminal charges

Unrelated pending criminal charges

Witness' custodial status

- Alford v. United States, 282 U.S. 687, 693 (1931)

“develop that his testimony was biased because given under promise or expectation of immunity, or under the coercive effect of his detention...”

“Even if the witness were charged with some other offense by the prosecuting authorities, petitioner was entitled to show by cross

examination that his testimony was affected by fear or favor growing out of his detention.”

- c. On probation
 - Davis v. Alaska, 415 U.S. 308, 320 (1974) – on probation in a juvenile case
- d. Financial reward for successful testimony
 - United States v. Bagley, 473 U.S. 667 (1985)
“The fact that the stake was not guaranteed through a promise or binding contract, but was expressly contingent on the Government's satisfaction with the end result, served only to strengthen any incentive to testify falsely in order to secure a conviction.” Bagley at 683.
- e. Witness’ membership in a gang and specific details about the tenets of the gang
 - United States v. Abel, 469 U.S. 45, 49 (1984) – witness member of Aryan Brotherhood
- f. Event that could have caused witness to change her story

The scope of motive impeachment is limited only by your imagination – The Sky is the Limit

Pending charges / arrests
Details of the case
Possible sentences
Prison conditions
Better facility
Closer to home
Money / food
Immigration assistance

Remember – you don’t need an actual promise. It’s all about hopes and dreams.

- **Hoping** for consideration
- **Hoping** for a better facility
- **Hoping** to be housed closer to home

4. Impeachment with reality

Poor opportunity to observe – no federal rule, but some states have adopted one

- See e.g. New York Pattern Jury Instructions on identification
https://www.nycourts.gov/judges/cji/5-SampleCharges/CJI2d.Final_Instructions.pdf

Considerations include:

- What were the lighting conditions under which the witness made his/her observation?
- What was the distance between the witness and the perpetrator?
- Did the witness have an unobstructed view of the perpetrator?
- Did the witness have an opportunity to see and remember the facial features, body size, hair, skin color, and clothing of the perpetrator?
- For what period of time did the witness actually observe the perpetrator?
- During that time, in what direction were the witness and the perpetrator facing, and where was the witness's attention directed?
- Did the witness have a particular reason to look at and remember the perpetrator?
- Did the perpetrator have distinctive features that a witness would be likely to notice and remember?
- Did the witness have an opportunity to give a description of the perpetrator? If so, to what extent did it match or not match the defendant, as you find the defendant's appearance to have been on the day in question? 6 What was the mental, physical, and emotional state of the witness before, during, and after the observation? To what extent, if any, did that condition affect the witness's ability to observe and accurately remember the perpetrator?

This list looks like classic fodder for traditional cross, but it's helpful to think of it as impeachment. You are confronting the witness with the things that would be present if their testimony was accurate.

You need to create **context** (discussed more below) so the jury understands the significance.

3. Things Not Done

This is a subset of impeachment with reality. We're establishing what could have and should have been done. The implication is that the witness, usually law enforcement, is so inept that they can't be believed. But we are also implying that the witness's account cannot be believed. If what they claimed on direct was actually true, they would have followed procedures/ taken extra steps / investigated more. Since they did not. Their direct testimony cannot be true.

- E.g. forensic testing, body camera, inventory procedures

Needs to have **context**

Unless you educate the jury about what could / should have happened it's not going to be impactful.

Police training – Accreditation

1 and 2. Omission and prior inconsistent statement

Why can we confront a witness with prior statements?

There is no direct federal rule stating that a witness may be confronted with self-contradictions.

but FRE 613 does discuss prior witness statements. 613 establishes that you need not show the witness the prior statement when questioning her about it.

Mechanics of Prior Inconsistent Impeachment

A. Formula for prior inconsistent impeachment

With **ARCS** or the **Three C's**

Accredit / build up
Recommit
Confront
Stop

Credit
Commit
Confront

****Accredit / buildup****

This is where you build up the circumstances under which the prior statement was made. The buildup serves two main purposes. It prevents the witness from making up excuses to explain away or minimize the contradiction. It also establishes why the prior statement was reliable and should be believed over the current statement.

- Under most circumstances the prior inconsistent statement is not actually admitted as substantive evidence, but we often still want the jury to interpret the prior statement as truth.
- Prior statement under oath and prior statements written by the witness

Recommit

This is where you have the witness repeat the statement from today's testimony that you plan to impeach. "Today you told us the car was **red**."

Confront

This is where you confront the witness with the prior statement that contradicts the current testimony. "In the past you said the car was **green**."

Stop

This is a crucial step. Once you confront the witness with the prior statement, you are DONE with this line of questioning.

1. If the witness, ADMITS that they made the prior statement, you are DONE. You can't repeat it again or circle back to more accrediting without muddying the impeachment and inviting comment and explanation from the witness.
2. If the witness DENIES that they made the prior statement, you are DONE. If the prior inconsistent statement was made to another person, you complete the impeachment by calling that witness to testify and verifying that the witness did in fact tell them the car was green.
 - FRE 613 (b) establishes that extrinsic evidence of a witnesses prior inconsistent may be used once a witness is given an opportunity to deny or explain the prior statement.
 - FRE 801 (d) establishes that a witnesses prior inconsistent statement is not hearsay and is the valid subject of cross.
3. If the witness does not remember or doesn't know, you could try to refresh, but you don't have to. You can still complete the impeachment by calling the person they made the statement to to testify.
4. If the witness tries explain away the contradiction, you are DONE. You must accredit thoroughly the first time so that the witness cannot escape. You can't go back and try to accredit more after a botched confrontation. It's too late and the horse has already escaped the barn.

Alternative order

RACS - Some people prefer to recommit / commit first. I prefer to accredit for two reasons. The first is that if recommit first there is a danger that the jury forgets about the recommitting by the time you're done accrediting. The second reason is that I think the impeachment is more impactful when the current statement and the prior inconsistent are juxtaposed.

Confront and Stop are always last.

B. Don't forget about theory

We don't cross, or impeach, just to have something to do. The impeachment must serve our theory of innocence.

If the witness said the car is **red** today and previously said **green**, the first step is to ask is the color of the car important to your theory of innocence?

Do you want it **Red**

Do you want it **Green**

Do you care

- If **red** is better for your theory, do not impeach.
- IF you want it to be **Green**
Want the Prior Inconsistent Statement to be the TRUTH
Must, Must, Must accredit or build up the circumstances surrounding the making of the prior statement

The Buildup is the most important part of impeachment

The buildup / accredit is the most important part of the impeachment. Without a good, thorough buildup the witness can escape and the impeachment has no meaning.

How NOT to Impeach

Commit “Today you told us that the car was red.”
Credit “That’s not what you told the police.”
Confront “You told the police the car was green.”

Why not

- The Jury missed it
- The witness can easily explain it away

“I was...

Confused

Tired

Scared

Mistaken

... when I spoke to the police.”

Your buildup section must anticipate each of these excuses and eliminate them before you confront the witness.

- a. Statement to the police was closer in time
- b. Police asked for details
- c. Witness was able to answer
- d. Was focused on the details that you care about
- e. Had enough time to formulate response
- f. Was honest / had no reason to lie

g. Had a chance to correct or add information

Example Buildup – Demo #1

- There was an accident
- A car accident
- You saw it
- Afterwards, you stayed on the scene
- Called police
- Waited for the police
- Because you had information
- You wanted to provide that information
- You saw the police arrive
- They walked up to you
- Told you who they were
- Told you why they were there
- They asked if you knew anything about the accident
- They asked you questions about what you saw
- You gave answers
- You answered all of their questions
- You knew that the police would rely on this information
- You were truthful when you spoke to the police
- You were accurate when you spoke to the police
- You were complete when you spoke to the police
- Told them everything you could remember
- Officer Friendly asked where you were
- Which way you were looking
- Asked if you could see the traffic light
- Asked if you could see what happened
- Asked if you saw the accident
- After speaking to the officer, he gave you his card
- Said to call if you remembered anything else
- You never called the officer back
- That day the officer asked specifically if you could describe the cars
- Asked if you could describe the color of the car that hit the other car
- You knew the description of the car was important
- You told him you could describe it
- You told him you knew the color
- Today you told us the car was **Red**
- On the day of the accident you told officer Friendly that the car was **Green**

Impeaching an officer with a report requires the same type of buildup.
Anticipate and shut the door on common law enforcement excuses

- “I left it out because
It’s just a summary

It's a mistake
I didn't notice it until later"

When impeaching from a report, start broad and then narrow to this case

Example, impeach from a police report, Demo #2

Start broad

- Before you became a police officer, you went to the academy
- You received training at the academy
- On various subjects
- Those subjects were about things you would need to know in order to do your job
- One of the topics you were trained on was writing reports
- Trained on the different types of report an officer might use
- You learned that many people rely on your reports
- Fellow officer might read and rely on your reports
- If further investigation is needed in a case a detective could be assigned
- That detective might read and rely on your reports
- Prosecutors make decisions about whether to charge someone with a crime
- In order to make that decision, a prosecutor might read and rely on your reports
- You might review your reports to refresh your recollection before a trial
- Reports are important
- Because the reports are important, you were trained on the meaning of each section of the report
- Trained on what information should be placed in each section
- Trained to fill out the report as soon after an event as you can
- So the information will be fresh in your mind
- Trained to be accurate when you write your reports
- Trained to be truthful when you write your reports
- Trained to be complete in your reports
- Trained to review the report after you fill it out
- Trained to signed it after you review it
- You also learned in your training that your supervisor would review and sign your report after it was finished
- You also were trained in the writing of supplemental reports
- You were trained that if you later discovered that a report had incorrect information, you could write a supplemental report
- To correct it
- If later discovered a report was missing information, you could also write a supplemental report

Then get more specific

- One type of report you learned about in your training was an arrest report
- Etc....
Go through the specific sections of your jurisdiction's arrest report

Not just academy training – you can have a section about using that training everyday in his 10 years on the job

- After you completed the academy, you began your career as an officer
- You used the training you received in your work as an officer
- You continued to learn from your hands on work as a police officer
- In your day to day work as an officer, you sometimes had to rely upon the reports of your fellow officers
- You saw for yourself in your 10 years as a patrolmen how important accurate reports could be
- In your 10 years as an officer, you did what they taught you to do, by being accurate in your reports
- Truthful
- Complete

Once you've done the general, then narrow to your specific case

- You wrote an arrest report in this case
- You were truthful when you wrote that arrest report
- You were accurate when you wrote that report
- You were complete when you wrote that report
- You reviewed it after you completed it
- You signed it after you reviewed it
- Your signature attests to the accuracy of your arrest report
- You never wrote a supplemental report correcting anything in your arrest report
- Your arrest report is your only official written account of this arrest

Now recommit

- Today you told us that the car was red

And confront

- In your official, written, signed arrest report, you said the car was green

If he denies, you *can* show him the report to complete the impeachment because he is the author.

NOTE – You should be accrediting other forms of impeachment too

Omission

The jury needs to know why the witness would have previously provided the information if it were true.

Things not done

The jury has to be educated about steps that could have been followed so that the failure to follow those steps is significant.

Example,

- I want to ask you some questions about your equipment
- As an officer you have to be familiar with police equipment
- You have to be able to use police equipment
- Your service weapon
- Your radio
- Your bodyworn camera
- You have received training about the bodyworn camera
- You were trained in how to use it
- There's one button to turn it on
- You were trained how to turn it in
- Practiced turning it on
- Practiced so you would be able to turn it on quickly
- You also trained on when to use the bodyworn camera
- There are some situations
- In a situation where there's a gun involved it's mandatory
- In a situation where you're responding to a call about a suspicious person its mandatory
- Turn it on in different situations where the activation of the camera is mandatory
- Where it's not up to you to decide to turn it on or not
- Police rules say you must turn it on
- There can be official discipline if you don't turn it on
- The bodyworn camera records what happens in front of you
- It records images
- It records sounds
- The footage from that camera can be shared with fellow officers
- It can be shared with the government
- It can be shared with defense attorneys
- It can be shown to a jury
- Then they could see exactly what happened
- They wouldn't have to take your word for it
- On the day you arrested Mr. XX you were wearing a bodyworn camera

- You were responding to a call of a man with a gun
- It was mandatory that you turn on the body worn camera for that type of call
- You didn't turn it on when you got out of the car
- You didn't turn it on when you approached Mr. XX
- You didn't turn it on when you claim he reached for his waistband
- You never turned it on that day at all

Motive and Bias

It can be helpful to think about motive and bias in the same way. You are trying to give context to the jury, so they understand why the witness would lie.

It's NOT enough to say

- Today you told us Mr. X was the shooter
- But you have a reason to lie
- You don't want to go to prison
- Therefore, you are lying

The specific detail about how awful prison is and about what the witnesses would be missing if he went to prison paints a picture for the jury and makes the motive real.

Style Points – Advance Techniques to Persuade and Hold Attention

A. Looping

Taking a useful word or phrase from the previous question and repeating it in the question or series of questions.

- Allows you to emphasize good facts – the street was dark, you parked your car on that dark street
- Allows you to vary the length of your statements and makes your cross sound more natural

B. Word choice

example– you were able to hear, could hear well enough to tell

C. Vocal Techniques

Volume : how loudly or softly you speak

- Speaking loudly adds energy and excitement to your delivery, while speaking softly increases intimacy.

Pace : how quickly or slowly you speak

- Fast pace can make the action in the chapter seem like it happened quickly.
- Makes a particular section seem more exciting
- Slow pace can allow for emphasis of a particular point

Pitch : how high or low your voice is

- Your voice will have a natural pitch and attempting to go too far outside that normal range will likely sound unnatural. But you can still use a little variation sparingly.
- In general voices tend to go higher than their natural pitch when you're nervous or excited and lower when you're relaxed

Tone and Emphasis

- I never said she stole my money

Silence – silence in the courtroom is powerful

- Highlights a key point if used immediately before or after
- Captures jury's attention
- Increases suspense or drama

More resources

- There are thousands of articles on effective public speaking, effective communication and linguistics
- <https://www.opencolleges.edu.au/informed/features/30-tricks-for-capturing-students-attention/>
- Article that discussed the linguistics study using "I never said she stole my money"
<https://www.wired.com/story/one-sentence-with-7-meanings-unlocks-a-mystery-of-human-speech/>
- Communication video
https://www.youtube.com/watch?v=5hvVjOqk_4o

D. Labels – give things a name and stick to it

The jury is just hearing about the case for the first time. They don't know it as well as you and can easily forget details or get confused. Use labels and shortcuts to help them understand key details.

- Unless a date is crucial don't use it or use it sparingly. You can say "on the night of the robbery" or "two weeks after the robbery" instead of bogging them down with "on September 12th" then on "September 21st."
- If fine detail like that is crucial, then use aids to help them remember – a map with the address **and** its significance
1113 Odgen
Johnny's House
- Think of what name you want to call each character and be consistent so that the jury remembers

Ms. Bridges
The robber
Carla
The man in the hat
Orville Wright
The detective
The store clerk

- Don't forget about the client. Will he be Johnny, John Smith, Mr. Smith or something else? Think the impact of each choice. For example, maybe you want the client to empathize with your young client, so you call him Johnny.

E. Physical Space

Don't forget that your body can be used as an aid to communication and so can the courtroom. Use gestures purposefully to emphasis a point or to help explain or describe. When using space in the courtroom, it can be helpful to be consistent. For example, if you point to the back wall when discussing the street corner where the crime occurred, point to the same wall each time you mention it.

F. Don't argue with the witness

If you use the techniques discussed above, you will be able to control the witness and get the answers that you want. But this only works if you are following the rules. If you ask a witness a convoluted question or ask them to agree to a conclusion, it doesn't matter how many times you repeat the question or how much

you argue, they will not agree with you. Arguing won't get you the answers you want and it's likely to alienate the jury.

Instead of arguing stay calm and focused and above all be disciplined.

Final Thoughts

- Pozner and Dodd
Cross-Examination : Science and Techniques
- Good resource for verisimilitude
 - police - general and special orders, police training manuals, patrol Guides
 - <https://www1.nyc.gov/site/nypd/about/about-nypd/patrol-guide.page>
 - Experts
 - DOJ ULTRA <https://www.justice.gov/olp/uniform-language-testimony-and-reports>
 - Scientific Working Groups <https://www.nist.gov/oles/scientific-working-groups>
 - PCAST report on forensics - https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf