


**Presenting Forensic Evidence**  
*Edward A. Andrews*  
*Deputy District Attorney*



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**FORENSIC EVIDENCE IN A DUI CASE:**

- ❖ Evidence from Percipient Witnesses
- ❖ Expert Testimony
- ❖ Arguing Forensic Evidence



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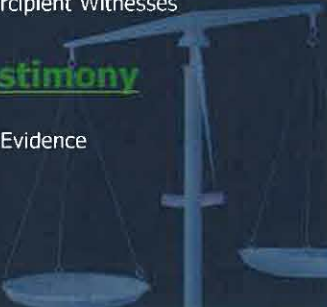
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**FORENSIC EVIDENCE IN A DUI CASE:**

- ❖ Evidence from Percipient Witnesses
- ❖ **Expert Testimony**
- ❖ Arguing Forensic Evidence



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**THE EXPERT**



1. Qualifying Expert to Testify (EC § 720.)
2. Basis for the Opinion
3. Eliciting the Opinion
4. Explaining the Opinion (*If Needed*)

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**PERCIPIENT WITNESSES**




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**THE EXPERT**




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 **THE EXPERT**



**Opportunity:**  
A Focused Retelling of Peripient Witnesses' Testimony,  
*with a Conclusion*

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**CLOSING ARGUMENT**



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**A UNIVERSE OF EXPERTS**



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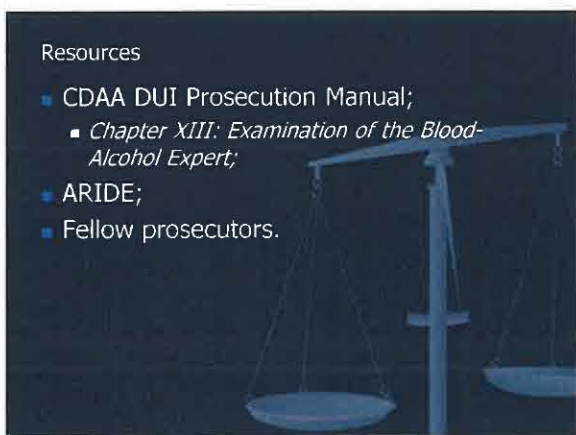
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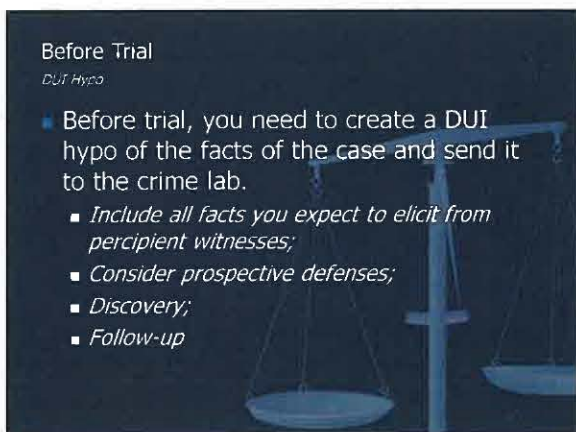
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### Before Trial

#### Expert CV

- When you learn who your expert is, obtain their CV & immediately discover it.
  - DUI: Crime Lab analyst;
  - H&S § 11550 (UI): DRE for UI opinion, Crime Lab analyst for tox., perhaps recent use theory;
  - H&S § 11350, 11377 (Poss.): Crime Lab analyst for drugs, perhaps DRE for usable amount.
- *Read CV for basis of experience (e.g., lab v. street), follow-up & hero questions*

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### Percipient Witnesses

#### Observations of Defendant

- Any witness' observations (EC § 702, 800):
  - *Civilians;*
  - *Victims;*
  - *Officers;*
  - *Medical personnel & EMTs*
- Prepare for speculation objections
  - (But see, e.g., *People v. Ruiz* (1968) 265 Cal.App.2d 766, 773 ["a non-expert witness may give his opinion as to the intoxication or sobriety of a defendant."].)

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### Percipient Witnesses

#### Tests of Defendant

- Officer or medical personnel
  - *Blood Tests*
  - *Breath Tests*
  - *DIR*
- *Remember to prepare examination of percipient witnesses to include all facts for expert's opinion(s)*

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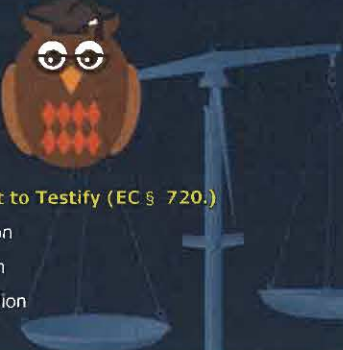
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**THE EXPERT**



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The Expert Witness 

*Establishing Expertise: Scientific Background*

- *Current occupation & employer?*
- *Qualifications: Education; Certifications; Associations; Papers; Research; Awards;*
- *What do you do;*
- *How long have you done that;*
- *Prior testimony;*
- *Testimony for defense (no bias);*
- *Additional compensation? (No bias)*

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**COMMON OUTLINE FOR DUI EXPERT**

TOPIC	QUAL/QUANT?	Δ/GEN'L
I. Effects of Alcohol	Qualitative	General
II. FSTs	Both	Defendant
III. Science of Alcohol	Quantitative	General
IV. BAC Sample	Quantitative	Defendant
V. Retrograde Extrapolation	Quantitative	Defendant
VI. Ultimate DUI Opinion	Both	Defendant

- Use the order that matters in your case;
- Opinions every step of the way . . .

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The Expert Witness 

*Effects of Alcohol: Mental vs. Physical Impairment*

- **Effects of alcohol, mental and physical;**
- *Establish mental impairment occurs before physical impairment;*
- *First opinions;*
- *Not "drunk" before impaired;*




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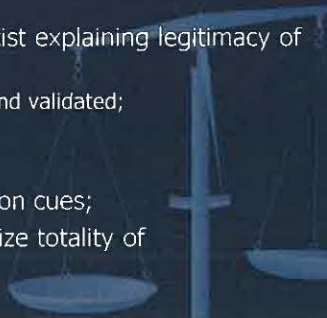
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The Expert Witness 

*FSTs*

- Unbiased scientist explaining legitimacy of FSTs to jury;
  - Standardized and validated;
  - NHTSA;
  - Cues/clues;
- Initial opinions on cues;
- Always emphasize totality of circumstances.




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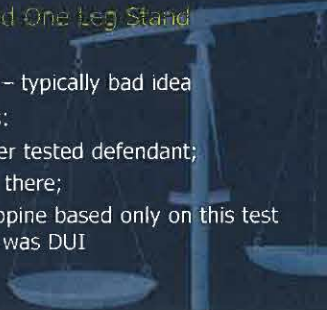
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The Expert Witness 

*FSTs*

- **Walk & Turn and One Leg Stand**
  - Cues/clues;
  - Demonstration – typically bad idea
- Anticipate cross:
  - Expert has never tested defendant;
  - Expert was not there;
  - Expert cannot opine based only on this test that defendant was DUI




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### The Expert Witness



FSTs

- **HGN**
  - Cues/clues;
- Anticipate cross:
  - Expert has never tested defendant;
    - Rare reasons someone would have HGN without being UI-Alcohol
- HGN can be very effective evidence;
  - Explain lack of control over HGN

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### The Expert Witness



FSTs

- **Romberg and Finger-to-Nose**
  - Standardized but not validated FSTs;
- Questions:
  - How helpful;
  - How used in DUI investigation;
- Anticipate cross and argument:
  - Do not include in ultimate hypothetical;
  - Argue to jury Def. UI-Alcohol even discounting these tests.

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### The Expert Witness



Science of Alcohol: Elimination Rate

- How the body absorbs alcohol;
- Typical length of absorptive phase;
- Elimination conceptually;
- Elimination rate
  - E.g., 0.018% avg.; Conservatively, 0.015%
  - Explanation of conservative rate;
- Widmark curve

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The Expert Witness 

Science of Alcohol: Widmark Curve



Conceptual likely better, as defendant/circumstances differ

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The Expert Witness 

0.08 percent = Impairment

- Opinion as to whether correlation between amount of alcohol in person's system and degree of impairment for purposes of driving?
- Everyone is impaired at 0.08 BAC or higher.

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The Expert Witness 

Testing: Reliability of Sample

- Breath
  - Crime lab often maintains PAS and EPAS, usually same device. If CHP or old, another agency may maintain PAS and/or EPAS;
  - Approved device;
  - Instrument maintained, checked for accuracy, calibrated if needed;
  - Instrument safeguards;
  - Instrument properly functioning;
  - Expect breath tests to be valid and accurate.

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The Expert Witness 

Testing: Reliability of Sample

- **Blood**
  - Rely on percipient witnesses.
  - Blood draw reliability (*People v. Cuevas* (2013) 218 Cal.App.4th 1278, 1285-1286)




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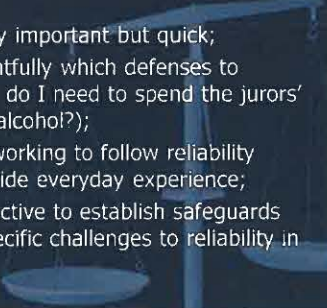
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The Expert Witness 

Testing: Reliability of Sample

- **Defenses**
  - Chain of custody important but quick;
  - Consider thoughtfully which defenses to anticipate (e.g., do I need to spend the jurors' time on mouth alcohol?);
  - Jurors already working to follow reliability safeguards outside everyday experience;
  - Often more effective to establish safeguards and address specific challenges to reliability in redirect.




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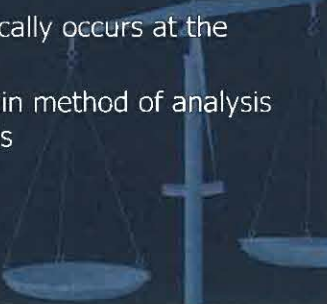
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The Expert Witness 

Testing: Forensic Alcohol Analysis

- If **breath**, basically occurs at the scene;
- If **blood**, explain method of analysis and safeguards




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**The Expert Witness** 

*The Idea of a Standard Drink*

- What a **standard drink** is;
  - Jurors often think a "drink" is more than a standard drink;
- Number of standard drinks acting on system at given BAC;
- If factor in burn-off, standard drinks would be higher.




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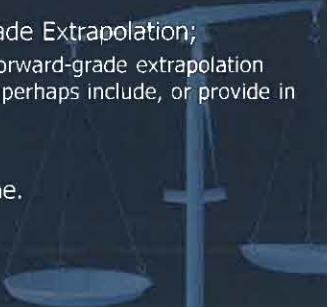
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**The Expert Witness** 

*Retrograde Extrapolation – Applying Science the Jury Has Learned*

- Explain Retrograde Extrapolation;
  - If anticipating forward-grade extrapolation based defense, perhaps include, or provide in rebuttal;
- Hypothetical;
- BAC at drive time.




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The Expert Witness 

*Ultimate DUI Opinion*

- Provide all information in hypothetical;
  - Opportunity to list all evidence that supports ultimate conclusion;
  - Even information on which expert may not rely, emphasizing expert opinion is conservative and correct;
- Opinion for each count – (a) and (b);
  - Expert opinion can go to "ultimate issue" for trier of fact (EC § 805).

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### THE EXPERT



1. Qualifying Expert to Testify (EC § 720.)
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*... If needed. Often better to provide explanations, so that ultimate opinion is less subject to questions.*

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### A UNIVERSE OF EXPERTS




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### THE H&S 11550 (UI) EXPERTS



DRE:

- More field tests and field information go into opinion;
- Supports that Def. UI of something;
- Supports that Def. UI of substance within specific category (e.g., CNS Stimulant, not Cannabis)

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### THE H&S 11550 (UI) EXPERTS



Crime Lab Analyst:

- Toxicology;
- Chain of custody;
- Recent use, depending on substance, depending on case.

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### THE H&S 11350, 11377 (POSS.) EXPERT



Crime Lab Analyst:

- Analysis of drugs;
  - typically "dry drugs";
- Chain of custody.

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### THE H&S 11350, 11377 (POSS.) EXPERT(S)



DRE:

- Perhaps, for usable amount;

On usable amount: *People v. Rubalcaba* (1993) 6 Cal.4th 62  
(Id. at p. 66) ("Usable-quantity rule prohibits convictions only when the substance possessed simply cannot be used, such as when it is a blackened residue or a useless trace. It does not extend to a substance containing contraband, even if not pure, if the substance is in a form and quantity that can be used. No particular purity or narcotic effect need be proven.")

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The Expert Witness 

*Example Common Legal Issues*

- Always be prepared with business records exception & public records exception (EC § 1271, 1280);
- Anticipate Confrontation Clause issues;
- Prepare for issues under *People v. Lopez* (2012) 55 Cal.4th 569.




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**QUESTIONS?**





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## ACTIVITY EVALUATION FORM FOR CALIFORNIA MCLE

**Please complete and return to Provider (Please Print)**

Provider Name: Ventura County District Attorney's Office Provider Number: 1130

Title of Activity: Presenting Forensic Evidence in DUI cases

Date(s) of Activity: November 2, 2016

Time of Activity: 3:00 - 4:30 pm

Location of Activity: HOJ: Room 308 Ventura, CA

**Please indicate your evaluation of this course by completing the table below**

Question	Yes	No	Comments
Did this program meet your educational objectives?	<input type="checkbox"/>	<input type="checkbox"/>	
Were you provided with substantive written materials?	<input type="checkbox"/>	<input type="checkbox"/>	
Did the course update or keep you informed of your legal responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>	
Did the activity contain significant professional content?	<input type="checkbox"/>	<input type="checkbox"/>	
Was the environment suitable for learning (e.g., temperature, noise, lighting, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	

**Please rate the instructor(s) of the course below**

Instructor's Name and Subject Taught	On a scale of 1 to 5, with 1 being Poor and 5 being Excellent, please rate the items below	Rate 1 – 5
Edward Andrews, DDA	Overall Teaching Effectiveness	—
	Knowledge of Subject Matter	—

Instructor's Name and Subject Taught	On a scale of 1 to 5, with 1 being Poor and 5 being Excellent, please rate the items below	Rate 1 – 5
	Overall Teaching Effectiveness	—
	Knowledge of Subject Matter	—

Instructor's Name and Subject Taught	On a scale of 1 to 5, with 1 being Poor and 5 being Excellent, please rate the items below	Rate 1 – 5
	Overall Teaching Effectiveness	—
	Knowledge of Subject Matter	—

## CERTIFICATE OF ATTENDANCE FOR CALIFORNIA MCLE

*Top portion of form to be completed by the MCLE Provider*

Provider Name: Ventura County District Attorney's Office

Provider Number: 1130

Title of Activity: Presenting Forensic Evidence in DUI cases

Date(s) of Activity: November 2, 2016

Time of Activity: 3:00 - 4:30 pm

Location of Activity (City, State): HOJ: Room 308 Ventura, CA

Total California MCLE Credit Hours for the above activity are 1.50, including the following sub-field credits:

- Legal Ethics \_\_\_\_\_
- Elimination of Bias in the Legal Profession \_\_\_\_\_
- Prevention, Detection and Treatment of Substance Abuse/Mental Illness that Impairs Professional Competence \_\_\_\_\_

*Bottom portion of form to be completed by the Attorney after participation in the above-referenced activity*

By signing below, I certify that I participated in all, or some\*, of the activity described above and am therefore entitled to the following MCLE credit hours -

Total California MCLE Credit Hours 1.50, including the following sub-field credits

Legal Ethics \_\_\_\_\_

Elimination of Bias in the Legal Profession \_\_\_\_\_

Prevention, Detection and Treatment of Substance Abuse / Mental Illness that Impairs Professional Competence \_\_\_\_\_

(You may not claim credit for sub-fields unless the Provider is granting credit in those areas and you participated in those portions of the activity)

Print Your Name \_\_\_\_\_

Your California State Bar Number \_\_\_\_\_

Signature \_\_\_\_\_

\* partial participation hours must be pro-rated