

Notre Dame Law School

## NDLScholarship

---

Indiana Continuing Legal Education Forum  
2023

Indiana Continuing Legal Education Forum

---

1-1-2023

### Blood & Chemical Testing\_ What You Need to Know and Why You Need to Know It

Indiana Continuing Legal Education Forum (ICLEF)

Follow this and additional works at: [https://scholarship.law.nd.edu/iclef\\_2023](https://scholarship.law.nd.edu/iclef_2023)

---

#### Recommended Citation

Indiana Continuing Legal Education Forum (ICLEF), "Blood & Chemical Testing\_ What You Need to Know and Why You Need to Know It" (2023). *Indiana Continuing Legal Education Forum 2023*. 26.  
[https://scholarship.law.nd.edu/iclef\\_2023/26](https://scholarship.law.nd.edu/iclef_2023/26)

This Article is brought to you for free and open access by the Indiana Continuing Legal Education Forum at NDLScholarship. It has been accepted for inclusion in Indiana Continuing Legal Education Forum 2023 by an authorized administrator of NDLScholarship. For more information, please contact [lawdr@nd.edu](mailto:lawdr@nd.edu).



# **BLOOD & CHEMICAL TESTING:**

**What you Need to Know  
and Why You Need to Know It**

August 24 - 25, 2023

[www.ICLEF.ORG](http://www.ICLEF.ORG)

*Copyright 2023 by Indiana Continuing Legal Education Forum*

## **DISCLAIMER**

The information and procedures set forth in this practice manual are subject to constant change and therefore should serve only as a foundation for further investigation and study of the current law and procedures related to the subject matter covered herein. Further, the forms contained within this manual are samples only and were designed for use in a particular situation involving parties which had certain needs which these documents met. All information, procedures and forms contained herein should be very carefully reviewed and should serve only as a guide for use in specific situations.

The Indiana Continuing Legal Education Forum and contributing authors hereby disclaim any and all responsibility or liability, which may be asserted or claimed arising from or claimed to have arisen from reliance upon the procedures and information or utilization of the forms set forth in this manual, by the attorney or non-attorney.

Attendance of ICLEF presentations does not qualify a registrant as an expert or specialist in any discipline of the practice of law. The ICLEF logo is a registered trademark and use of the trademark without ICLEF's express written permission is prohibited. ICLEF does not certify its registrants as specialists or expert practitioners of law. ICLEF is an equal opportunity provider of continuing legal education that does not discriminate on the basis of gender, race, age, creed, handicap, color or national origin. ICLEF reserves the right to refuse to admit any person or to eject any person, whose conduct is perceived to be physically or emotionally threatening, disruptive or disrespectful of ICLEF registrants, faculty or staff.

# INDIANA CONTINUING LEGAL EDUCATION FORUM

## OFFICERS

**LYNNETTE GRAY**

President

**HON. ANDREW R. BLOCH**

Vice President

**SARAH L. BLAKE**

Secretary

**HON. THOMAS A. MASSEY**

Treasurer

**ALAN M. HUX**

Appointed Member

**LINDA K. MEIER**

Appointed Member

## DIRECTORS

John B. Bishop

Jean M. Blanton

Sarah L. Blake

Hon. Andrew R. Bloch

Melanie M. Dunajeski

Lynnette Gray

Alan M. Hux

Dr. Michael J. Jenuwine

Jana M. Lange

Shaunda Lynch

Hon. Thomas A. Massey

Mark W. McNeely

Linda K. Meier

Amy K Nowaczyk

F. Anthony Paganelli

Richard S. Pitts

Jeffrey P. Smith

Teresa L. Todd

## ICLEF

**SCOTT E. KING**

Executive Director

James R. Whitesell  
Senior Program Director

Jeffrey A. Lawson  
Program Director

## BLOOD & CHEMICAL TESTING:

What you Need to Know and  
Why You Need to Know It



### Agenda – Day 1

**8:30 A.M. Registration & Coffee**

**8:50 A.M. Overview & Welcome**  
*Charles J. Rathburn, Jr & Janine Arvizu - Co-Chairs*

**9:00 A.M. One Man's Forensic Journey**  
*Frederic W. Whitehurst*

**10:00 A.M. In the beginning: The information you need on-board to handle DUI forensics**  
*Janine Arvizu & Charles J. Rathburn, Jr*  
- SFSTs & DREs; Breath, Blood, and Urine  
- Case-specific details - Intake Checklist  
- How to obtain discovery from law enforcement; government labs; commercial labs and hospitals: MTC, SDT, FOIA, Order, Polite Requests and Back-Channels  
- What discovery to request

**11:00 A.M. Coffee Break**

**11:15 A.M. The Analytical Process: the sometimes-winding path to a reported result**  
- Timing  
- Risks during each stage  
- Special circumstances - multiple reports and re-tests  
- Special circumstances – commercial labs  
- Special circumstances – hospital assays

**11:45 A.M. Lunch and Learn Transition**

**12:00 P.M. Voire Dire - Lunch and Learn with *Robert B. Hirschhorn***

Lunch provided for in-person participants by



**1:15 P.M. The Specimen and Discovery**  
*Janine Arvizu & Charles J. Rathburn, Jr*  
- Demonstration!  
- Collection and Storage  
- Clinical vs Forensic Practice  
- Issue: Syringe vs Evacuated Tube Methods  
- Issue: Non-aseptic Collection  
- Issue: Wrong Tube (how to tell)  
- Issue: Expired Tubes (how to tell)  
- Issue: Underfilled Tubes (how to tell)  
- Issue: Clotted Blood (how to tell)  
- Issue: Unrefrigerated for >48 hours  
- Issue: GO SEE THE EVIDENCE

August 24 - 25, 2023

WWW.ICLEF.ORG

## **BLOOD & CHEMICAL TESTING:**

**What you Need to Know and  
Why You Need to Know It**



### **Agenda – Day 1 Continued**

**2:15 P.M. Coffee Break**

**2:30 P.M. Gas Chromatography**  
- Chromatography Theory  
- GC Hardware  
- Headspace theory  
- Headspace hardware  
- Instrument Operation/Control

**3:00 P.M. Headspace Sample Prep and Discovery**  
- Analytical samples  
- Handheld Pipettes  
- Diluters

**3:30 P.M. Batches and Discovery - A Day in the life of a toxicology analyst...**

**4:30 P.M. Adjourn – Day 1**

August 24 - 25, 2023

[WWW.ICLEF.ORG](http://WWW.ICLEF.ORG)

## **BLOOD & CHEMICAL TESTING:**

**What you Need to Know and  
Why You Need to Know It**



### **Agenda – Day 2**

- 9:00 A.M. Corruption of forensic drug testing: Delta-8 and Delta-9 THC  
*Frederic W. Whitehurst*
- 10:00 A.M. Method Calibration and Discovery  
*Janine Arvizu & Charles J. Rathburn, Jr*
- CRMs
  - Internal standard
  - Frequency; dos and don'ts
- 11:00 A.M. **Coffee Break**
- 11:15 A.M. Metrology and Discovery
- Equipment Calibration
  - Uncertainty
  - Traceability
- 12:15 P.M. **Lunch Break** (on your own)
- 1:15 P.M. Method Validation and Discovery
- Scope
  - When to validate/revalidate
- 2:30 P.M. **Coffee Break**
- 2:45 P.M. Quality Assurance and Discovery
- Accreditation – what it does and doesn't mean?
  - Audits, Objectivity, and Facility Controls
  - Corrective Actions/NCRs
  - Personnel Competence
  - Meeting Minutes
- 3:45 P.M. Ethical Considerations working with Blood and Chemical Evidence
- 4:15 P.M. **Adjournment**

August 24 - 25, 2023

[www.ICLEF.ORG](http://www.ICLEF.ORG)

## **BLOOD & CHEMICAL TESTING:**

**What you Need to Know and  
Why You Need to Know It**



### **Faculty**

**Charles J. Rathburn, Jr. - Co-Chair**

Rathburn Law Office  
7901 Blue Jay Lane "F"  
Indianapolis, IN 46260  
P: 260.433.2881  
E: [Chuck@rathburnlaw.com](mailto:Chuck@rathburnlaw.com)

**Janine Arvizu - Co-Chair**

Quality Auditor, Independent Consultant  
161 Kuhn Drive  
Tijeras, NM 87059  
P: 505.281.8349  
E: [Arvizujs@aol.com](mailto:Arvizujs@aol.com)

---

**Robert B. Hirschhorn**

Cathy E. Bennett & Associates  
2300 Highland Village Road, Suite 470  
Highland Village, TX 75077  
P: 972.434.5879  
E: [rbh@cebjury.com](mailto:rbh@cebjury.com)

**Dr. Frederic W. Whitehurst**

Law Office of Frederic Whitehurst  
PO Box 820  
Bethel, NC 27812  
P: 252.825.1123  
E: [cfwhiteh@aol.com](mailto:cfwhiteh@aol.com)

August 24 - 25, 2023

[www.ICLEF.ORG](http://www.ICLEF.ORG)



**Charles J. Rathburn**, Rathburn Law Office, Indianapolis



*Charles James Rathburn Jr.* is one of the most highly trained attorneys in the United States and specifically in the State of Indiana in this highly specific area of law. Mr. Rathburn is one of a few attorneys in the United States who is been qualified as an expert on breath testing, the standardized field sobriety tests, and alcohol's effects on the human body. He has countless hours of training in these areas and has been invited to speak nationally on these topics. In addition, Mr. Rathburn trains attorneys and judges about how a breath testing machine accepts a sample, analyzes a sample and provides a result from each breath delivery.

**Janine S. Arvizu**, Quality Auditor/Independent Consultant, Tijeras, NM



*Janine Arvizu* is an ASQ Certified Quality Auditor with more than 30 years of experience in laboratory quality assurance. Besides being a trained ISO Lead Auditor, she established and managed a full service analytical laboratory at one of the National Laboratories for the Department of Energy, managed the United States Navy's nationwide laboratory audit program, and audited dozens of government as well as commercial laboratories. For more than 15 years, she has conducted independent quality assessments of forensic results, helped lawyers understand laboratory testing, and testified as a laboratory quality expert about the reliability of forensic results including toxicology, controlled substances, DNA, gunshot residue, trace, firearms and fingerprints in state, federal, and international courts. She holds a Bachelor of Science (B.S.) in Biochemistry from California Polytechnic State University-San Luis Obispo where she graduated with honors and an ABD (Ph.D. candidate) in Chemistry from the University of New Mexico.

**Robert B. Hirschhorn**, Cathy E. Bennett & Associates, Highland Village, TX



*Robert Hirschhorn* of Cathy E. Bennett & Associates, Inc., is an attorney and a nationally recognized expert in jury and trial consultation. He is a co-author of *Blue's Guide to Jury Selection*, which is currently available from Thompson-West Publishing. A jury consultant since 1985, Robert has selected juries that have returned more than \$35 Billion in verdicts. Those cases include: Johnson & Johnson Talc (\$5 Billion); VirnetX v. Apple (\$502.6 Million); Hopper v. JP Morgan Chase (\$8 Billion); Pinnacle Hip Implant Litigation (\$1.041 Billion and \$505 Million); Lexar v. Toshiba (breach of fiduciary duty; \$461 Million) and Ernst v. Merck (1st Vioxx litigation; \$253 Million). He has also assisted lawyers in many high-profile criminal cases including State of Florida v. William Kennedy Smith (sexual assault charges, not guilty verdict), State of Texas v. U.S. Senator Kay Bailey Hutchison (ethics charges, not-guilty verdict), and State of Texas v. Robert Durst (acquitted of murder charges). Mr. Hirschhorn has appeared on Good Morning America, MSNBC, Court TV, CNN, HLN, Dateline NBC, 48 Hours, Nightline, and many national radio programs. He lectures nationwide to lawyers and judges on the art of jury selection.

**Dr. Frederic Whitehurst**, *Law Office of Frederic Whitehurst, Bethel, NC*



*Dr. Frederic Whitehurst* - Law Office of Frederic Whitehurst, Bethel, NC