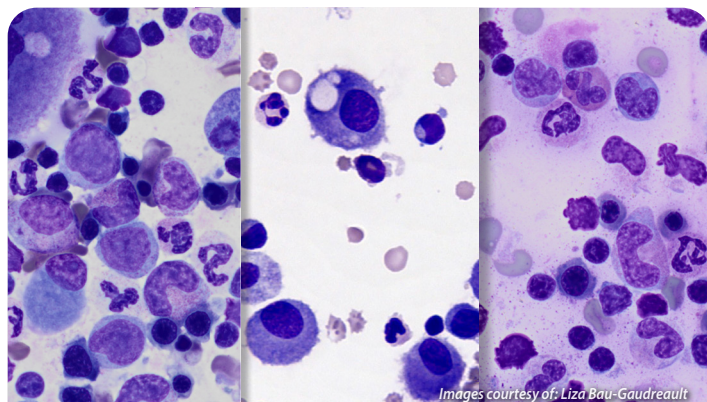




# Society of Toxicologic Pathology



Images courtesy of Liza Bau-Gaudreault

**October 13–29, 2025**

(Mondays and Wednesdays, 10:00 AM–1:45 PM EDT)

## STP Virtual Modular Education Course: Fundamentals and Applications of Clinical Pathology in Nonclinical Toxicology Studies

### Course Objective

The objective of the STP Modular Education Course “Fundamentals and Applications of Clinical Pathology in Nonclinical Toxicology Studies” is to educate individuals in the principles of clinical pathology in the context of toxicologic research. Attendees will gain a deeper understanding of basic and advanced clinical pathology methods, including hematology and clinical chemistry, coagulation, urinalysis, serum and fluid biomarkers, and cytology. Special emphasis will be placed on strategic design of clinical pathology endpoints and the integration of clinical pathology with adversity determinations and holistic animal data.

### Course Description

The course will be a mixture of didactic lectures and case studies. Topics covered include:

- Best practices for clinical pathology endpoint design in nonclinical studies
- Standard, advanced, and emerging hematology and clinical chemistry assays and biomarkers
- Important considerations in clinical pathology reporting and adversity determination
- Case studies demonstrating holistic animal data integration
- Plus, many more!

### Who Should Attend

The STP Modular Education courses are designed with the novice toxicologic pathologist in mind; however, pathology residents/graduate students with an interest in toxicologic pathology or experienced pathologists who desire a more in-depth review of clinical pathology will also benefit from the course. Additionally, this course will be of interest to toxicologists, PK/PD scientists, regulatory personnel, and anyone involved in nonclinical safety studies.

### Questions and Special Accommodations

For any questions, please contact STP Headquarters at [stp@toxpath.org](mailto:stp@toxpath.org).

### REGISTRATION OPEN

For more course information and registration, visit [www.toxpath.org](http://www.toxpath.org)

### Faculty

- **Course Chair:**  
Dharani K. Ajithdoss, BVSc, MVSc, PhD, DACVP, DACVM (Regeneron)
- **Course Co-Chair:**  
Katherine A.B. Knostman, BS, DVM, PhD, DACVP (Battelle Memorial Institute)
- **Course Scientific Advisor:**  
Kirstin Barnhart, DVM, PhD, DACVP (MBrace Therapeutics)
- **Course Scientific Advisor:**  
Liza Bau-Gaudreault, DVM, MSc, DES, DACVP (Charles River Laboratories)
- **Course Scientific Advisor:**  
Nancy Everds, DVM, DACVP (ABBM Consulting LLC)
- **Course Scientific Advisor:**  
Armando Irizarry, DVM, PhD, DACVP (Eli Lilly and Company)
- Adeyemi Adedeji, DVM, PhD, DACVP, Genentech
- Lennart Anger, ERT, Genentech
- Tara Arndt, DVM, DACVP, Altasciences
- Adam Aulbach, DVM, DABT, DACVP, Inotiv
- Laura Boone, DVM, PhD, DACVP, DABT, Labcorp Drug Development
- Marjory Brooks, DVM, DACVIM, Cornell University-College of Veterinary Medicine
- Michelle Cora, DVM, DACVP
- Laura Cregar, DVM, DACVP, Amgen
- Martin Guillot, DVM, MSc, PhD, Charles River Laboratories
- Natalie Hoepp, DVM, MS, DACVP, Merck & Co.
- Agata Miller, DVM, DACVP, AbbVie
- Samuel Neal, BS, The Ohio State University
- Florence Poitout, DVM, DACVP, DECVCP, Charles River Laboratories
- Klaudia Polak, VMD, MS, DACVP, Labcorp
- Anne Provencher, DVM, MSc, DACVP, DECVCP, FIATP, Charles River Laboratories
- Lila Ramaiah, DVM, PhD, DACVP, Johnson & Johnson Innovative Medicine
- Eric Schultze, DVM, PhD, DACVP, FIATP, Eli Lilly and Company
- Cory Sims, DVM, DACVP, Altasciences
- Craig Thompson, DVM, DACVP, Purdue University College of Veterinary Medicine
- Niraj Tripathi, BVSc, MVSc, PhD, DACVP, Labcorp Drug Development

### Course Registration

STP Member	<b>\$795.00</b>
Nonmember	<b>\$995.00</b>
Student*	<b>\$95.00</b>
STP Member Group Rate <sup>§</sup>	<b>\$695.00</b>
Nonmember Group Rate <sup>§</sup>	<b>\$895.00</b>

\*A letter of verification from a department chair must accompany student registration.

<sup>§</sup>Three or more from the same company.

### Cancellation Policy

A written request for cancellation must be received by STP Headquarters no later than September 15, 2025. The registration fee will be refunded less a \$50 processing fee. No refunds will be issued after September 15, 2025. STP reserves the right to cancel the course, in which case all registrants will receive a full refund.

### Virtual Attendance

Presentations will be offered virtually from 10:00 AM–1:45 PM EDT on Mondays and Wednesdays.

Access to the downloadable course materials and Zoom login information for the live sessions will be provided in advance.

Course presentations will be recorded and made available to registrants for 30 days.

## Week 1

### Monday, October 13

- 10:00 AM–10:10 AM **Welcome and Introduction**
- 10:10 AM–11:00 AM **Study Design in Clinical Pathology: Sampling Strategies, Parameters, and the Importance of Controls**  
Tara Arndt, DVM, DACVP, Altasciences
- 11:00 AM–11:50 AM **Pre-Analytical Considerations for Nonclinical Studies**  
Laura Cregar, DVM, DACVP, Amgen
- 11:50 AM–12:10 PM **Laboratory Quality Management**  
Cory Sims, DVM, DACVP, Altasciences
- 12:10 PM–12:25 PM **Break**
- 12:25 PM–1:15 PM **Best Practices in Reporting Clinical Pathology Findings**  
Adam Aulbach, DVM, DABT, DACVP, Inotiv
- 1:15 PM–1:45 PM **Statistics—When to Use and When to Ignore**  
Kirstin Barnhart, DVM, PhD, DACVP, MBrace Therapeutics

### Wednesday, October 15

- 10:00 AM–11:00 AM **CBC and Blood Smear Interpretation**  
Michelle Cora, DVM, DACVP
- 11:00 AM–11:45 AM **Platelet Testing: Beyond Simple Quantification**  
Florence Poitout, DVM, DACVP, DECVCP, Charles River Laboratories
- 11:45 AM–12:00 Noon **Break**
- 12:00 Noon–12:50 PM **Bone Marrow Analysis: When and Why?**  
Anne Provencher, DVM, MSc, DACVP, DECVCP, FIATP, Charles River Laboratories
- 12:50 PM–1:20 PM **Decreases in RBC Mass and Adversity Considerations**  
Agata Miller, DVM, DACVP, AbbVie
- 1:20 PM–2:00 PM **Why Does Blood Clot—or Not?**  
Marjory Brooks, DVM, DACVIM, Cornell University–College of Veterinary Medicine

## Week 2

### Monday, October 20

- 10:00 AM–10:20 AM **Overview of Clinical Chemistry in a Tolerability, DRF, or GLP Study**  
Niraj Tripathi, BVSc, MVSc, PhD, DACVP, Labcorp Drug Development
- 10:20 AM–11:20 AM **Interpretation of Liver Enzymes and Liver Function Tests**  
Laura Boone, DVM, PhD, DACVP, DABT, Labcorp Drug Development
- 11:20 AM–12:00 Noon **Translatability, Species Differences, and Spurious Values in Liver Tests**  
Laura Boone, DVM, PhD, DACVP, DABT, Labcorp Drug Development
- 12:00 Noon–12:15 PM **Break**
- 12:15 PM–12:45 PM **Cardiac Biomarkers: Challenges and Paths Forward**  
Eric Schultze, DVM, PhD, DACVP, FIATP, Eli Lilly and Company
- 12:45 PM–2:00 PM **Fundamentals of Urinalysis and Novel Urinary Biomarkers for Toxicology Studies**  
Adeyemi Adedeji, DVM, PhD, DACVP, Genentech

### Wednesday, October 22

- 10:00 AM–10:45 AM **The Acute Phase Response in Laboratory Animal Species**  
Natalie Hoeppe, DVM, MS, DACVP, Merck & Co.
- 10:45 AM–11:30 AM **Iron 101 for Toxicologic Pathologists: From Hemoglobin to Hcpidin**  
Klaudia Polak, VMD, MS, DACVP, Labcorp
- 11:30 AM–12:00 Noon **The Use of Musculoskeletal Biomarkers in Preclinical Safety Assessment**  
Martin Guillot, DVM, MSc, PhD, Charles River Laboratories
- 12:00 Noon–12:15 PM **Break**
- 12:15 PM–1:00 PM **Metabolic Evaluation- Lipids, Glucose and Pancreatic Function**  
Kirstin Barnhart, DVM, PhD, DACVP, MBrace Therapeutics
- 1:00 PM–2:00 PM **Electrolytes and Minerals**  
Craig Thompson, DVM, DACVP, Purdue University College of Veterinary Medicine

## Week 3

### Monday, October 27

- 10:00 AM–11:15 AM **Complement and Cytokines**  
Cory Sims, DVM, DACVP, Altasciences
- 11:15 AM–12:15 PM **CSF Fluid Analysis and Biomarkers Evaluation in Toxicology Studies**  
Liza Bau-Gaudreault, DVM, MSc, DES, DACVP, Charles River Laboratories
- 12:15 PM–12:30 PM **Break**
- 12:30 PM–1:00 PM **Bronchoalveolar Fluid Analysis in Nonclinical Studies : When, Why and How?**  
Liza Bau-Gaudreault, DVM, MSc, DES, DACVP, Charles River Laboratories
- 1:00 PM–1:30 PM **Techniques and Applications for Other Body Fluids: Synovial, Ocular, Pleural, and Peritoneal**  
Liza Bau-Gaudreault, DVM, MSc, DES, DACVP, Charles River Laboratories

### Wednesday, October 29

- 10:00 AM–10:45 AM **Digital Clinical Pathology and Artificial Intelligence in Clinical Pathology—An Overview**  
Liza Bau-Gaudreault, DVM, MSc, DES, DACVP, Charles River Laboratories; and Samuel Neal, BS, The Ohio State University
- 10:45 AM–11:30 AM **Virtual Control Groups in Preclinical Safety Studies: Decreasing Animal Use While Maintaining *In Vivo* Study Interpretability**  
Adeyemi Adedeji, DVM, PhD, DACVP, Genentech; and Lennart Anger, ERT, Genentech
- 11:30 AM–12:00 Noon **Clinical Pathology and Holistic Animal Data Integration**  
Lila Ramaiah, DVM, PhD, DACVP, Johnson & Johnson Innovative Medicine
- 12:00 Noon–12:15 PM **Break**
- 12:15 PM–12:45 PM **Assessing Adversity in Clinical Pathology**  
Lila Ramaiah, DVM, PhD, DACVP, Johnson & Johnson Innovative Medicine
- 12:45 PM–1:45 PM **Putting the Numbers to Work: Clinical Pathology Case Challenges**  
Laura Cregar, DVM, DACVP, Amgen