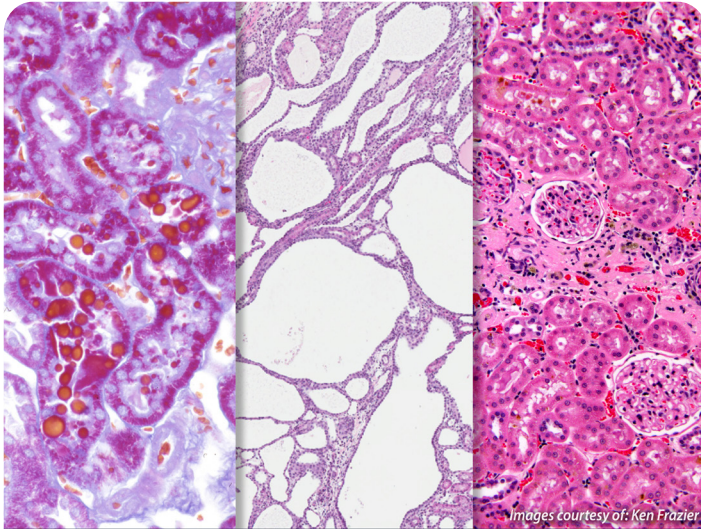




Society of Toxicologic Pathology



Images courtesy of: Ken Frazier

October 10–26, 2022

(Mondays and Wednesdays, 10:00 AM–1:30 PM EDT)

STP Virtual Modular Education Course: Toxicologic Pathology of the Renal System

Course Objective

The objective of this STP Modular Education Course “Toxicologic Pathology of the Renal System” is to educate individuals in the principles of toxicology and pathology of the renal system. Attendees will gain a thorough introduction to the anatomy and physiology of the renal system in laboratory animal species with an emphasis on INHAND nomenclature. Additionally, the course will cover recent advances in the understanding of biologic-associated immune mediated renal disease, biomarkers, emerging technologies (AI and organs-on-chips), and drug-induced injury.

Course Description

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

- Overview of the kidney and INHAND terminology
- Animal models of kidney injury and disease
- Using deep learning AI for the kidney
- COVID and the kidney
- 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 the renal system will also benefit from the course.

Questions and Special Accommodations

For any questions please contact STP Headquarters at stp@toxpath.org.

REGISTRATION OPEN

For more course information and registration, visit www.toxpath.org

Faculty

- **Course Chair:** Pankaj Kumar, BVSc, MVSc, PhD, DACVP (*AbbVie*)
- **Course Co-Chair:** Anantharaman Muthuswamy, DVM, MS, PhD, DACVP (*Genmab*)
- **Course Scientific Advisor:** Kathleen Heinz-Taheny, DVM, PhD, DABT, DACVP (*Eli Lilly and Company*)
- **Course Scientific Advisor:** Kendall S. Frazier, DVM, PhD, DACVP, DABT, FIATP (*Independent Consultant*)
- Timothy W. Carlson, DVM, MS, DACVP (*Charles River Laboratories*)
- Rachel Cianciolo, PhD, VMD (*Zoetis Reference Labs*)
- Samuel M. Cohen, MD, PhD (*University of Nebraska Medical Center*)
- Mary B. Nabity, DVM, PhD, DACVP (*Texas A&M University*)
- Carrie L. Phillips, MD (*Indiana University School of Medicine*)
- Ryan F. Relich, PhD (*Indiana University School of Medicine*)
- Michael A. Ringenberg, DVM, PhD, DACVP (*GlaxoSmithKline*)
- Daniel G. Rudmann, DVM, PhD, DACVP (*Charles River Laboratories*)
- Marshall Scicchitano, MS (*ProPharma Group*)
- John Curtis Seely, DVM, DACVP (*EPL Inc.*)

Course Registration

STP Member	\$795.00
Nonmember	\$995.00
Student*	\$95.00

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

Cancellation Policy

A written request for cancellation must be received by STP Headquarters no later than September 15, 2022. The registration fee will be refunded less a \$50 processing fee. No refunds will be issued after September 15, 2022. STP reserves the right to cancel the course, in which case all registrants will receive a full refund.

Week 1

Monday, October 10

- 10:00 AM–10:10 AM **Welcome and Introduction**
- 10:10 AM–12:00 Noon **Overview of the Kidney and INHAND, part 1**
Kendall S. Frazier, DVM, PhD, DACVP, DABT, FIATP, Independent Consultant
- 12:00 Noon–12:15 PM **Break**
- 12:15 PM–1:30 PM **Overview of the Kidney and INHAND, part 2**
Kendall S. Frazier, DVM, PhD, DACVP, DABT, FIATP, Independent Consultant

Wednesday, October 12

- 10:00 AM–11:30 AM **Overview of the Lower Urinary Tract**
Samuel M. Cohen, MD, PhD, University of Nebraska Medical Center
- 11:30 AM–11:45 AM **Break**
- 11:45 AM–1:30 PM **Mechanisms of Drug-Induced Kidney Injury**
Rachel Cianciolo, PhD, VMD, Zoetis Reference Labs

Week 2

Monday, October 17

- 10:00 AM–11:30 AM **Traditional Clinical Pathology and Biomarkers**
Mary B. Nabity, DVM, PhD, DACVP, Texas A&M University
- 11:30 AM–12:30 PM **Using Deep Learning AI for the Kidney to Support the Toxicologic Pathologist**
Daniel G. Rudmann, DVM, PhD, DACVP, Charles River Laboratories
- 12:30 PM–12:45 PM **Break**
- 12:45 PM–1:30 PM **Pathogenesis of Rodent Chronic Progressive Nephropathy**
Kendall S. Frazier, DVM, PhD, DACVP, DABT, FIATP, Independent Consultant

Wednesday, October 19

- 10:00 AM–11:00 AM **Investigative Nephrotoxicity**
Michael A. Ringenberg, DVM, PhD, DACVP, GlaxoSmithKline
- 11:00 AM–12:15 PM **Renal Carcinogenicity**
John Curtis Seely, DVM, DACVP, EPL Inc.
- 12:15 PM–12:30 PM **Break**
- 12:30 PM–1:30 PM **Biologics Associated Immune-Mediated Renal Disease**
Kendall S. Frazier, DVM, PhD, DACVP, DABT, FIATP, Independent Consultant

Week 3

Monday, October 24

- 10:00 AM–11:15 AM **Animal Models of Acute Kidney Injury and Chronic Kidney Disease**
Kathleen Heinz-Taheny, DVM, PhD, DABT, DACVP, Eli Lilly and Company
- 11:15 AM–12:15 PM **Nephrotoxicity: The Use of *In Vitro* Models/Methods**
Marshall Scicchitano, MS, ProPharma Group
- 12:15 PM–12:30 PM **Break**
- 12:30 PM–2:00 PM **Case Studies**
Kendall S. Frazier, DVM, PhD, DACVP, DABT, FIATP, Independent Consultant; and Kathleen Heinz-Taheny, DVM, PhD, DABT, DACVP, Eli Lilly and Company

Wednesday, October 26

- 10:00 AM–11:15 AM **Considerations in Comparative Anatomy Across Tox Species**
Timothy W. Carlson, DVM, MS, DACVP, Charles River Laboratories
- 11:15 AM–11:40 AM **The Biology and Pathogenesis of SARS-CoV-2 and Other High Consequence Betacoronaviruses**
Ryan F. Relich, PhD, Indiana University School of Medicine
- 11:40 AM–12:15 PM **COVID and the Kidney**
Carrie L. Phillips, MD, Indiana University School of Medicine
- 12:15 PM–12:30 PM **Break**
- 12:30 PM–1:30 PM **COVID and the Kidney: Case Studies**
Carrie L. Phillips, MD, Indiana University School of Medicine