### Saturday, November 8

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 a.m.-7:30 p.m.</td>
<td>Registration</td>
</tr>
<tr>
<td>8:00 a.m.-5:00 p.m.</td>
<td>(available for an additional fee)</td>
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<tr>
<td><strong>ASIP / ACVP Pre-Meeting Workshop</strong></td>
<td><strong>Image Science in the 21st Century: Opportunities for Pathology Investigation and Diagnostics</strong></td>
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<tr>
<td>Session Chair:</td>
<td>John Tomaszewski, MD+</td>
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<td><strong><a href="http://www.acvp.org/meeting/2014/workshops.cfm">http://www.acvp.org/meeting/2014/workshops.cfm</a></strong></td>
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<tr>
<td>8:00 a.m.-8:10 a.m.</td>
<td>Introduction to Image Science in the 21st Century</td>
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<tr>
<td>John E. Tomaszewski, MD</td>
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<tr>
<td>8:10 a.m.-9:00 a.m.</td>
<td>Cellular Imaging Basics</td>
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<tr>
<td>Ulysses J. Balis, MD</td>
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<td>9:00 a.m.-9:50 a.m.</td>
<td>Whole Slide Imaging</td>
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<tr>
<td>Stephen M. Hewitt, MD, PhD</td>
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<tr>
<td>9:50 a.m.-10:10 a.m.</td>
<td>Refreshment Break</td>
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<tr>
<td>10:10 a.m.-10:50 a.m.</td>
<td>Registration, Segmentation, and Feature Extraction</td>
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<tr>
<td>Rob Toth, PhD</td>
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<tr>
<td>10:50 a.m.-11:30 a.m.</td>
<td>The Role of the Pathologist in an Image Analysis Team</td>
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<td>Famke Aeffner, DVM, PhD</td>
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<tr>
<td>11:30 a.m.-12:00 noon</td>
<td>Panel Discussion: The State of Computational Image Technology and Its Future</td>
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<tr>
<td>12:00 noon-1:15 p.m.</td>
<td>Lunch (on your own)</td>
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<tr>
<td>1:15 p.m.-2:05 p.m.</td>
<td>The Quantitative Analysis of Labels</td>
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<td>Richard Levenson, MD</td>
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<tr>
<td>2:05 p.m.-3:00 p.m.</td>
<td>Novel Optical Imaging Methods</td>
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<td>Robert Hard, PhD</td>
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<td>3:00 p.m.-3:20 p.m.</td>
<td>Refreshment Break</td>
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<tr>
<td>3:20 p.m.-4:00 p.m.</td>
<td>HistoCAD in the Predictive Modeling of Outcomes</td>
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<td>Scott Doyle, PhD</td>
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<td>4:00 p.m.-4:40 p.m.</td>
<td>Integrated Diagnostics and Data Fusion Across Scale</td>
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<td>John E. Tomaszewski, MD</td>
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<tr>
<td>4:40 p.m.-5:00 p.m.</td>
<td>Panel Discussion</td>
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<td>8:00 a.m.-5:00 p.m.</td>
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<tr>
<td><strong>Pre-Meeting Workshop</strong></td>
<td><strong>Understanding the Mouse</strong></td>
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<tr>
<td><strong>Immune System: Relevance for Study of Human Disease</strong></td>
<td><strong>Session Chairs:</strong> David K. Meyerholz, DVM, PhD, DACVM*+ Katherine N. Gibson-Corley, DVM, PhD*+ Alicia K. Olivier, DVM, PhD*+</td>
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<td>8:00 a.m.-8:30 a.m.</td>
<td>Relevance of the Mouse for Immunologic Studies of Human Disease</td>
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<td>David K. Meyerholz, DVM, PhD, DACVM*+</td>
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<tr>
<td>8:30 a.m.-9:00 a.m.</td>
<td>Murine Strain Dependent Variations for Immunologic Study</td>
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<td>Katherine N. Gibson-Corley, DVM, PhD*+</td>
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<tr>
<td>9:00 a.m.-10:00 a.m.</td>
<td>Introduction to the Anatomy and Histology of Immune System Organs I</td>
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<tr>
<td>Susan A. Elmore, DVM, MS*</td>
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<td>10:00 a.m.-10:30 a.m.</td>
<td>Refreshment Break</td>
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<td>10:30 a.m.-11:30 a.m.</td>
<td>Introduction to the Anatomy and Histology of Immune System Organs II</td>
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<tr>
<td>Susan A. Elmore, DVM, MS*</td>
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<tr>
<td>11:30 a.m.-12:00 noon</td>
<td>Clinical Pathology Approaches to Assessing the Immune System in the Mouse</td>
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<td>Ellen W. Evans, DVM, PhD*</td>
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8:00 a.m.-12:00 noon
ASVCP Education Symposium
Advances in Diagnostic Testing:
New Modalities, Quality Assurance and Ethical Considerations
Session Chair:
Jennifer Neel, DVM*
8:00 a.m. -8:10 a.m.
Introduction
Jennifer Neel, DVM*
8:10 a.m.-9:00 a.m.
Applications of MALDI-TOF Mass Spectrometry in a ‘One Health’ Microbiology Laboratory Practice
Thomas R. Fritsche, MD, PhD, DABCP, DABMM
9:00 a.m.-9:50 a.m.
Distinguishing Assessment of Analytical and Diagnostic Performance with an Emphasis on Bias
Bente Flatland, DVM, MS, DACVIM*
9:50 a.m.-10:20 a.m.
Refreshment Break
10:20 a.m.-11:10 a.m.
Development and Field Evaluation of Dried Plasmodium falciparum Samples for Quality Control of Malaria Rapid Diagnostics Tests and as Proficiency Testing Panels
Michael Aidoo, PhD
11:10 a.m.-12:00 noon
Ethical Issues in Testing and Test Development: What is the Role of the Pathologist
Matthew McQueen, MBChB, PhD, FRCPC, HonFRCPath

3:45 p.m.-4:45 p.m.
Uroliths
TBA
4:45 p.m.-5:30 p.m.
Urine QC POCT/Tabletop Instrument Panel
Harold Twedten, DVM, PhD, DECVCP*
Bente Flatland, DVM, MS, DACVIM*
Nicole K. Rosen, MT(ASCP)*
Melinda S. Camus, DVM*
Lynne T. Shanahan, MT(ASCP)

12:00 noon-7:00 p.m.
Speaker Ready Room
1:00 p.m.-8:30 p.m.
Internet Station
1:00 p.m.-8:30 p.m.
Career Center
5:15 p.m.- 6:15 p.m.
ACVP Editors Workshop
Session Chair:
Jeff Caswell, DVM, DVSc, PhD*
Editor, Veterinary Pathology
6:00 p.m.- 8:00 p.m.
ASVCP Teaching Clinical Pathology: Use of the Flipped Classroom Model for Teaching Veterinary Clinical Pathology in a Large Class Setting
Session Chair:
Jed A. Overmann, DVM*
6:15 p.m. – 7:15 p.m.
Panel Discussion: What Should I Expect During the Interview Process? Sponsored by IDEXX
7:00 p.m.-8:30 p.m.
Opening Reception
All attendees are welcome! (cash bar and light hors d’oeuvres)

8:00 a.m.-12:00 noon
Concurrent Session I: Comparative Mouse Pathology
Session Chair:
Kelli Boyd, DVM, PhD*
Session Co-Chairs:
Piper M. Treuting, DVM, MS*+
Robert Cardiff, MD, PhD
8:00 a.m. -8:15 a.m.
Introduction
Kelli Boyd, DVM PhD*
8:15 a.m. – 9:15 a.m.
One Medicine and Genomic Pathology: How the Mouse has Advanced Human Oncology
Robert Cardiff, MD, PhD
3:30 p.m.-3:45 p.m.
Refreshment Break

Sunday, November 9
7:00 a.m.-5:00 p.m.
Registration
7:00 a.m.-6:00 p.m.
Speaker Ready Room
7:00 a.m.-7:30 p.m.
Internet Station
8:00 a.m.-5:00 p.m.
Student and Guest Hospitality Room
2:00 p.m. - 3:00 p.m.
Thromboelastography for Assessment of Coagulation
Christine S. Oliver, DVM, PhD*

3:00 p.m. - 3:30 p.m.
Refreshment Break

3:30 p.m. - 4:30 p.m.
Preliminary Evaluation of a Quantitative Ethylene Glycol Test in Dogs and Cats
Nancy Collicutt, DVM, MS

1:30 p.m. - 4:30 p.m.
Clinical Pathology Focused Scientific Session I
Session Chair:
Jeffrey McCartney, DVM, MSc, DABT*+
Invited Speaker
The Elusive Hypercoagulable Patient
Ben Brainard, VMD, DACVAA, DACVECC

9:05 a.m. - 10:00 a.m.
Comparative Histology of Mice and Humans: Misinterpretation of Normal
Piper M. Treuting, DVM, MS*+

10:00 a.m. - 10:30 a.m.
Refreshment Break

10:30 a.m. - 11:15 a.m.
Its All Phenotyping: Resources for Lots of Research
Cory Brayton, DVM*

11:15 a.m. - 11:55 a.m.
All Things Considered: How Strain, “Normal Pathology” and Other External Factors Impact Results in Mouse Experiments
Kelli Boyd, DVM, PhD*

11:55 a.m. - 12:00 noon
Questions and Discussion

8:00 a.m. - 12:00 noon
Industrial and Toxicologic Pathology Focused Scientific Session I
Session Chair:
Michael W. Conner, DVM*+
Invited Speakers
Integrating Pathology and Toxicology with Genetics Using MAGIC Mice
John E. French, PhD

Background Findings that Confound Study Interpretation: Rodents and Dogs
Peter C. Mann, DVM, FIATP*

8:00 a.m. - 12:00 noon
Natural Disease Focused Scientific Session I
Session Chair:
Ingeborg M. Langohr, DVM, PhD*
Invited Speaker
9:15 a.m. - 10:00 a.m.
New Concepts of Vascular and Vasogenic CNS Diseases
Kaspar Matlasek, DVM, DrMedVet, FTA Pathol & Neuropath

8:00 a.m. - 12:00 noon
Career Development
Brand Recognition: Professional and Personal Branding for Your Career
Session Chair:
Erin Brannick, DVM, MS*
Session Co-Chair:
Michael D. Lairmore, DVM, PhD*

8:00 a.m. - 9:05 a.m.
Professional Branding: Redefining Veterinary Pathology
Michael D. Lairmore, DVM, PhD*
**Monday, November 10**

7:00 a.m.-6:00 p.m.  
**Speaker Ready Room**

7:00 a.m.-5:00 p.m.  
**Internet Station**

7:30 a.m.-1:00 p.m.  
**Registration**

8:00 a.m.-5:00 p.m.  
**Student and Guest Hospitality Room**

8:00 a.m.-12:00 noon  
**ACVP / ASVCP / ASIP Joint Plenary Session: Systems Biology**

**Session Chair:**  
Mark Sobel, MD, PhD+

**Session Co-Chair:**  
Tim LaBranche, DVM, PhD*

8:00 a.m.-8:15 a.m.  
**Introduction**  
Mark Sobel, MD, PhD+

8:15 a.m.-9:05 a.m.  
**Overview of Systems Biology**  
Eric Schadt, PhD

9:05 a.m.-10:00 a.m.  
**Finding Genes and Pathways for Canine Cancers**  
Ingegerd Eilers, PhD

10:00 a.m.-10:30 a.m.  
**Refreshment Break**

10:30 a.m.-11:15 a.m.  
**Systems Biology of Cancer: from Cause to Therapy**  
Donald Ingebr, MD, PhD+

11:15 a.m.-12:00 noon  
**Systems Biology of Regenerating Liver**  
Ursula Klingmuller, PhD

8:00 a.m.-12:00 noon  
**ASVCP Veterinary Laboratory Professionals Session II**

**Session Chair:**  
Nicole K. Rosen, MT(ASCP)

8:00 a.m.-9:00 a.m.  
**Challenges in Laboratory Testing of Small-Volume Samples**  
Jennifer L. Johns, DVM, PhD*

9:00 a.m.-10:00 a.m.  
**Elasmobranch Field Studies: Sample Collection, Processing and Analysis**  
Tonia Clauss, DVM, MS

10:00 a.m.-11:00 a.m.  
**Refreshment Break**

11:00 a.m.-12:00 noon  
**The Veterinary In-Clinic Laboratory: Quality Challenges and Possible Solutions**  
Bente Flatland, DVM, MS, DACVIM*

7:00 a.m.-6:00 p.m.  
**ACVP Town Hall Business Meeting**

7:30 a.m.-9:30 a.m.  
**Mystery Slide Session: Comparative Oncology**

**Session Chair:**  
Debra Kamstock, DVM, PhD*

**Session Co-Chair:**  
Stephen M. Hewitt, MD, PhD+

12:15 p.m.-1:15 p.m.  
**ACVP Gross and Microscopic Examination Slide Review**

12:15 p.m.-2:00 p.m.  
**Latin Comparative Pathology Group Presents**

1:30 p.m.-4:30 p.m.  
**Community Service Project**

1:30 p.m.-3:30 p.m.  
**ASVCP Case Discussion Session**

**Session Chair:**  
Tracy Stokol, BVSc, PhD*

3:30 p.m.-5:00 p.m.  
**Veterinary Student and Resident Forum**

5:15 p.m.-6:45 p.m.  
**ASVCP Reception**  
(Open to ASVCP members)

7:00 p.m.-9:00 p.m.  
**Mystery Slide Review and Case Presentations: Neuropathology**

**Session Chair:**  
Jey Koehler, DVM, PhD*

8:00 a.m.-5:00 p.m.  
**Career Center**

7:30 a.m.-5:00 p.m.  
**Exhibits and Poster Session**

8:00 a.m.-5:00 p.m.  
**Student and Guest Hospitality Room**

8:00 a.m.-12:00 noon  
**Concurrent Session III: Pathogenesis of Septic Shock, SIRS, and MODS**

**Session Chair:**  
Michelle Henry Barton, DVM, PhD, DACVIM

**Session Co-Chair:**  
Jonathan Sevransky, MD, MHS

8:00 a.m.-8:50 a.m.  
**Immunopathology of Sepsis**  
Daniel Remick, MD, DABP+
1:30 p.m.-5:00 p.m.
Diagnostic Pathology Focused Scientific Session II
Session Chair:
Barbara Lewis, DVM*

2013 AAVLD / ACVP Award Recipient Presentation
Veronaea botryosa: A Potentially Zoonotic, Emerging Fungal Pathogen in Farmed White Sturgeon (Acipenser transmontanus)
Mai Yee Mok

1:30 p.m.-5:00 p.m.
Industrial and Toxicologic Pathology Focused Scientific Session II
Session Chair:
Michael W. Conner, DVM*+

Invited Speakers
Antibody-Drug Conjugates: Key Challenges in Safety Assessment
Melissa M. Schutten, DVM, PhD*+
The Animal Rule: Study Design and Execution in High Containment (Biosafety Levels 3 and 4)
Nancy A. Twenhafel, DVM*

5:15 p.m.-6:45 p.m.
ACVP Awards and Recognition Event

7:00 p.m.-9:30 p.m.
ACVP Presidential Reception
All attendees are welcome!

Wednesday, November 12

7:00 a.m.-11:30 a.m.
Speaker Ready Room

8:00 a.m.-1:00 p.m.
Student and Guest Hospitality Room
Registration

8:00 a.m.-12:00 noon
Young Investigator Award Poster Session
8:00 a.m.-12:00 noon
Concurrent Session V:
Pathogenesis of Osteoarthritis
Session Chair:
  Cathy S. Carlson, DVM, PhD*
Session Co-Chair:
  Elizabeth Uhl, DVM, PhD*
8:00 a.m.-8:10 a.m.
Introduction
  Cathy S. Carlson, DVM, PhD*
8:10 a.m.-9:00 a.m.
Biology of Osteoarthritis
  Richard F. Loeser, Jr, MD
9:00 a.m.-9:50 a.m.
Assessment of Osteoarthritis Severity in Animal Models
  Cathy S. Carlson, DVM, PhD*
9:50 a.m.-10:10 a.m.
Refreshment Break
10:10 a.m.-11:00 a.m.
Imaging Equine Osteoarthritis Reveals New Insights
  Sheila Laverty, MVB, MRCVS, DACVS, DECVS
11:00 a.m.-11:50 a.m.
Canine Osteoarthritis and Cartilage Repair
  James L. Cook, DVM, PhD, DACVS, DACVSMR
11:50 a.m.-12:00 noon
Questions and Discussion
8:00 a.m.-12:00 noon
Mini-Symposium: Iron Biology and Anemia
Session Chair:
  Tara Arvedson, PhD
Session Co-Chair:
  Elizabeta Nemeth, PhD
8:00 a.m.-8:50 a.m.
Iron Metabolism Overview: Proteins, Pathways and General Pathology
  Paul J. Schmidt, PhD
8:50 a.m.-9:40 a.m.
Iron Restriction, Associated Pathology and Points of Therapeutic Intervention
  Tomas Ganz, MD, PhD
9:40 a.m.-10:10 a.m.
Refreshment Break
10:10 a.m.-11:00 a.m.
Iron Maldistribution and Infection
  Hal Drakesmith PhD
11:00 a.m.-11:50 a.m.
Iron Overload, Toxicity and Treatments
  Elizabeta Nemeth, PhD
11:50 a.m.-12:00 noon
Questions and Discussion
1:00 p.m.-5:00 p.m.
(available for an additional fee)
Post-Meeting Workshop I: Renal Pathology
Session Chair:
  Rachel E. Cianciolo, VMD, PhD*
http://www.acvp.org/meeting/2014/workshops.cfm
1:00 p.m.-1:30 p.m.
Introduction: Specialty Services for the Evaluation of Renal Biopsies
  Rachel E. Cianciolo, VMD, PhD*
1:30 p.m.-2:00 p.m.
Clinical Evaluation and Treatment of Veterinary Patients with Kidney Disease
  David Polzin, DVM, PhD, DACVIM
2:00 p.m.-3:00 p.m.
Best Practices for the Evaluation of Renal Tissue
  Rachel E. Cianciolo, VMD, PhD*
  Cathy A. Brown, VMD, PhD*
  F. Charles Mohr, DVM, PhD*
  Jaco van der Lugt, BVSc, PhD, DECVP
3:00 p.m.-3:30 p.m.
Refreshment Break
3:30 p.m.-4:00 p.m.
Panel Discussion

3:30 p.m.-7:00 p.m.
(available for an additional fee)
Primate Pathology Post-Meeting Workshop II: Immuno-Oncology: Lessons from Comparative Studies in Human and Nonhuman Primates
http://www.acvp.org/meeting/2014/workshops.cfm
1:00 p.m. - 2:00 p.m.
Chemoimmunotherapy: Reengineering Tumor Immunity
  Leisha Emens, MD, PhD
2:00 p.m. - 2:45 p.m.
Tumor Models in NHP: A Limited Choice
  Francois Villinger, DVM, PhD
2:45 p.m. - 3:30 p.m.
Development of Nonhuman Primate Cancer Models: Success, Failure, and Opportunity
  J. Mark Cline DVM, PhD*

3:30 p.m.-4:00 p.m.
Refreshment Break
4:00 p.m. - 7:00 p.m.
Case Presentations
  12 Cases, 15 minutes per case
  10 minutes for presentation, 5 for discussion

8:00 a.m.
Tour of the Yerkes National Primate Research Center Tentative

Thursday, November 13