

2019 FINAL PROGRAM

SAN ANTONIO MARRIOTT RIVERCENTER HOTEL | SAN ANTONIO, TEXAS, USA
NOVEMBER 9-13, 2019

ACVP - & - ASVCP

2019 CONCURRENT
ANNUAL MEETING

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Registration

Registration will be located in the Third Floor Foyer.

Registration Hours:

Friday, November 8 5:00 p.m.-7:00 p.m.
Saturday, November 9 7:00 a.m.-7:30 p.m.
Sunday, November 10 7:30 a.m.-5:00 p.m.
Monday, November 11. 7:30 a.m.-1:00 p.m.
Tuesday, November 12 7:30 a.m.-3:30 p.m.
Wednesday, November 13 8:00 a.m.-12:30 p.m.

Wireless Internet Access

Complimentary basic wireless internet service is available at the Marriott Rivercenter Hotel. Access the wireless internet in the meeting rooms:

Network: Marriott_Conference
Passcode: ACVP19

However, the strength of the bandwidth cannot be guaranteed.

Mobile App

Download the free 2019 ACVP and ASVCP Combined Annual Meeting mobile app through the iTunes store or Google Play. Select your personal favorites--abstracts, program, proceedings, and more information about the Annual Meeting. Search for the "Attendify" app, download it, click into the app and search for 2019 ACVP, then join.

Be sure to share your photos through the activity stream section of the mobile app. We like to see what attendees are up to during the Meeting!

If you are traveling from another country, please check your cell phone plan for international rates.

Proceedings

You can access the Proceedings through the mobile app and online during the Meeting.

ACVP RACE Credits

This program (35-38424) is approved by the AAVSB RACE to offer a total of 114.00 CE Credits (39.00 max) being available to any one veterinarian, and/or 114.00 veterinary technician CE Credits (39.00 max). This RACE approval is for the subject matter categories of:

- Category One: Scientific using the delivery method of Seminar/Lecture.

This approval is valid in jurisdictions which recognize AAVSB RACE; however, participants are responsible for ascertaining each board's CE requirements. RACE does not "accredit", or "endorse", or "certify" any program or person, nor does RACE approval validate the content of the program.

ACVP is now an approved sponsor of continuing education in New York State. Those ACVP members in New York who need RACE credits will now be able to receive them at the upcoming Annual Meeting.

After the 2019 Annual Meeting, a RACE credit verification will be sent by email to each individual registering for those credits.

Speaker Ready Room

Conference Room 2

Speakers (oral presenters) are required to download their presentations in the Speaker Ready Room prior to their sessions.

Speaker Ready Room Hours:

Friday, November 8 5:00 p.m.-8:00 p.m.
Saturday, November 9 7:00 a.m.-7:00 p.m.
Sunday, November 10 7:00 a.m.-6:00 p.m.
Monday, November 11 7:00 a.m.-6:00 p.m.
Tuesday, November 12 7:00 a.m.-6:00 p.m.
Wednesday, November 13 7:00 a.m.-10:30 a.m.

You can always download your slides earlier than the dates and times in the chart below. Leave plenty of time to visit the Speaker Ready Room before your presentation.

If Your Presentation Date/Time is	Then Your Scheduled Check-In Time is...
Between 8:00 a.m.-12:00 noon on Saturday, November 9	Report prior to 8:00 p.m. on Friday, November 8
Between 1:30 p.m.-5:00 p.m. on Saturday, November 9	Report prior to 11:00 a.m. on Saturday, November 9
Between 8:00 a.m.-12:00 noon on Sunday, November 10	Report prior to 7:00 p.m. on Saturday, November 9
Between 1:30 p.m.-5:00 p.m. on Sunday, November 10	Report prior to 11:00 a.m. on Sunday, November 10
Between 8:00 a.m.-12:00 noon on Monday, November 11	Report prior to 6:00 p.m. on Sunday, November 10
Between 1:30 p.m.-5:00 p.m. on Monday, November 11	Report prior to 11:00 a.m. on Monday, November 11

Between 8:00 a.m.-12:00 noon on
Tuesday, November 12

Report prior to 6:00 p.m. on
Monday, November 11

Between 1:30 p.m.-5:00 p.m. on
Tuesday, November 12

Report prior to 11:00 a.m. on
Tuesday, November 12

Between 8:00 a.m.-12:00 noon on
Wednesday, November 13

Report prior to 6:00 p.m. on
Tuesday, November 12

Poster Session Schedules

Veterinary Student Poster Session

Saturday, November 9, 2019

Poster Setup 5:30 p.m.-6:30 p.m.

Awards Judging 6:30 p.m.-7:30 p.m.
(no authors present)

Authors Present 7:30 p.m.-9:00 p.m.

Teardown 9:00 p.m.-9:30 p.m.

Young Investigator Award Poster Sessions

There has been a change to the Young Investigator Award poster assignments. Please review the information below if you are presenting a YIA poster. **All YIA posters will be on display during Poster Session B.**

Young Investigator Award Poster Session A and Poster Session B

Poster Setup:

Sunday, November 10, 2019 8:30 a.m.-9:30 a.m.

Poster Dismantle:

Monday, November 11, 2019 4:30 p.m.-5:00 p.m.
(late tear-down to allow for afternoon judging)

This includes the following Young Investigator Award Poster Presentations:

Diagnostic Pathology: DY-01 - DY-21

Experimental Disease: EY-44 - EY-52

Industrial & Toxicologic Pathology: TY-63 - TY-64

Natural Disease: NY-68 - NY-80

Young Investigator Award Poster Session B and Poster Session C

Poster Setup:

Monday, November 11, 2019 8:30 a.m.-9:30 a.m.

Poster Dismantle:

Tuesday, November 12, 2019 3:30 p.m.-4:00 p.m.

This includes the following Young Investigator Award Poster Presentations:

Diagnostic Pathology: DY-22 - DY-42

Experimental Disease: EY-53 - EY-61

Industrial & Toxicologic Pathology: TY-65 - TY-66

Natural Disease: NY-81 - NY-93

Focused Scientific Poster Sessions

Poster Session A

Sunday, November 10, 2019

Poster Setup 8:30 a.m.-9:30 a.m.

Poster Viewing 9:30 a.m.-4:30 p.m.

Authors Present for Discussion Based on Poster Session Assignment:

Clinical Pathology: Mid-afternoon refreshment break

Diagnostic Pathology: Mid-afternoon refreshment break

Education: Mid-morning refreshment break

Experimental Disease: Mid-afternoon refreshment break

Industrial and Toxicologic Pathology: Mid-morning
refreshment break

Natural Disease: Mid-morning refreshment breaks

Poster Dismantle 4:30 p.m.-5:00 p.m.

Poster Session B

Late-Breaking Poster Session

Monday, November 11, 2019

Poster Setup 8:30 a.m.-9:30 a.m.

Poster Viewing 9:30 a.m.-1:00 p.m.

Authors Present 9:45 a.m.-10:15 a.m.

Poster Dismantle 1:00 p.m.-1:30 p.m.

Poster Session C

Tuesday, November 12, 2019

Poster Setup 8:30 a.m.-9:30 a.m.

Poster Viewing 9:30 a.m.-3:30 p.m.

Authors Present for Discussion:

Clinical Pathology: Mid-afternoon refreshment break

Diagnostic Pathology: Mid-afternoon refreshment break

Education: Mid-morning refreshment break

Experimental Disease: Mid-afternoon refreshment break

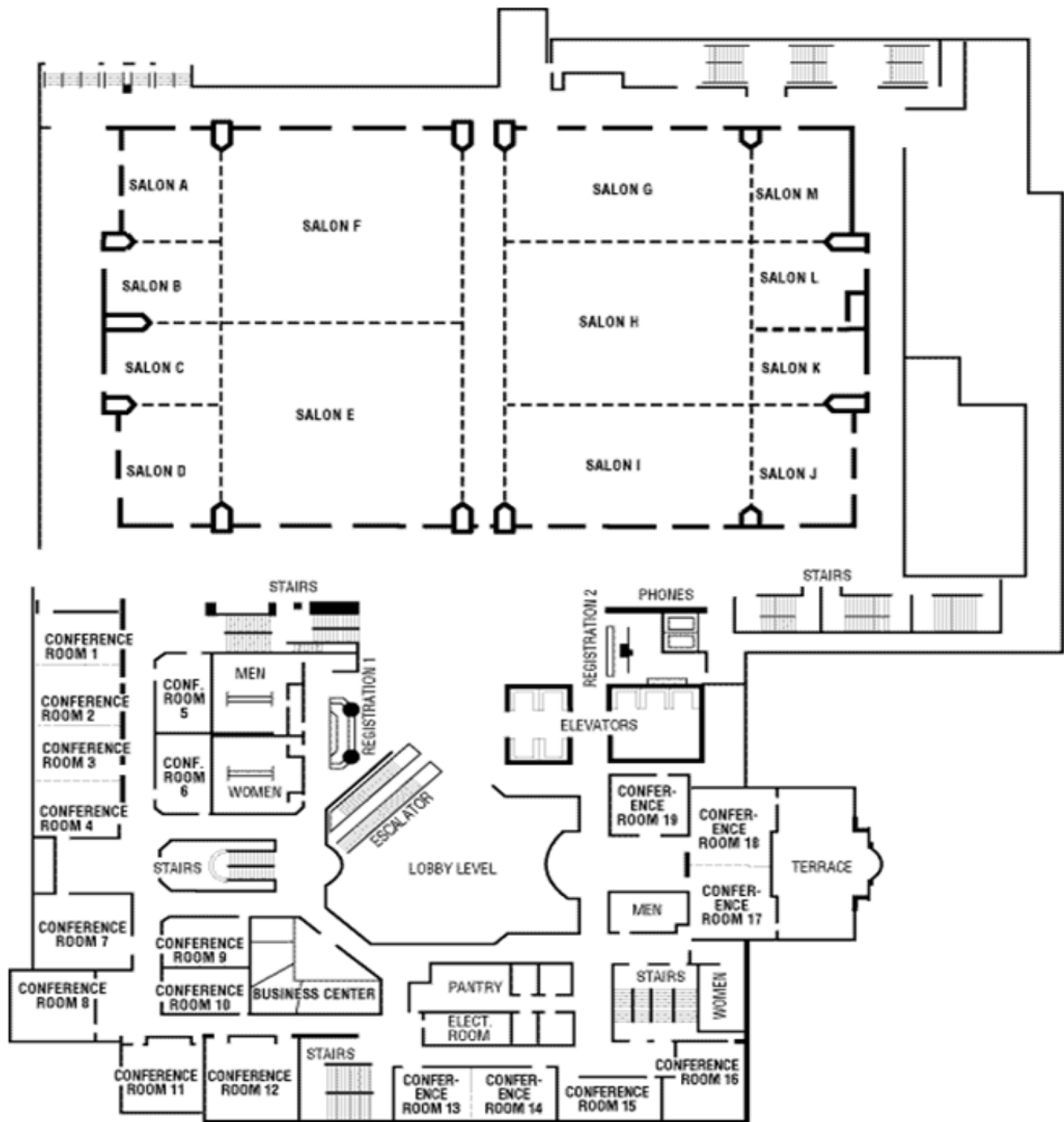
Industrial and Toxicologic Pathology: Mid-afternoon
refreshment break

Natural Disease: Mid-morning refreshment break

Poster Dismantle 3:30 p.m.-4:00 p.m.

Personal interaction with meeting attendees is an optional but important part of your poster presentation. If possible, please make yourself available at your poster during the morning and/or afternoon refreshment breaks, corresponding with the schedule above, to answer questions and interact with your colleagues.

San Antonio Marriott Rivercenter Hotel - Third Floor



If you are concerned about proprietary information in our world of social media, consider advising attendees by placing 'DO NOT POST' on your poster.

Lactation Room

A lactation room is available at the Annual Meeting. Stop by the registration desk to pickup a key to the room.

Future Annual Meetings

2020 Annual Meeting

Saturday, October 31-Tuesday, November 3, 2020
Chicago Marriott Downtown Magnificent Mile, Chicago, IL

2021 Annual Meeting

Saturday, October 30-Tuesday, November 2, 2021
Hyatt Regency Seattle, Seattle, Washington

2022

Saturday, November 12-Tuesday, November 15, 2022
Westin Boston Waterfront Hotel, Boston, Massachusetts

2023

Joint Annual Meeting with the American Association of
Veterinary Laboratory Diagnosticians (AAVLD)
Site and dates to be determined

ACVP Policies

Last year, ACVP adopted policies in regards to:

Code of Professional Ethics
Code of Conduct
Anti-Harrassment and Discrimination

You can find and review these three policies at www.acvp.org under the "About" category.

Friday, November 8, 2019

10:00 a.m.-6:00 p.m.

Conference Room 12

ACVP Council

5:00 p.m.-7:00 p.m.

Third Floor Foyer

Registration Open

Don't forget to download the ACVP and ASVCP mobile app!

5:00 p.m.-7:00 p.m.

Conference Room 5

ASVCP Executive Board

5:00 p.m.-8:00 p.m.

Conference Room 2

Speaker Ready Room

Presenting an oral presentation? Be sure to download your presentation in the Speaker Ready Room.

Saturday, November 9, 2019

7:00 a.m.-7:30 p.m.

Third Floor Foyer

Registration and Information Desk

7:00 a.m.-7:00 p.m.

Conference Room 2

Speaker Ready Room

8:00 a.m.-4:00 p.m.

Conference Room 5

ASVCP Executive Board

8:00 a.m.-5:00 p.m.

Salon B

ACVP Pre-Meeting Workshop (available at an additional fee)

Comparative Pathologists Special Interest Group

***Mouse Models of Immunobiology and Immunotherapy:
Emerging Topics and Trends***

Organizers: Jessica M. Snyder, DVM, DACVP
University of Washington, Seattle, WA

Hibret Adissu-Amare, DVSc, DVM, PhD, DACVP
National Cancer Institute, Bethesda, MD

Susan Knoblaugh, DVM, DACVP
The Ohio State University, Columbus, OH

Heather Tillman, DVM, PhD, DACVP
St. Jude Children's Research Hospital, Memphis, TN

This one-day workshop will provide four unique sessions that cover aspects of the emerging field of immune-centered approaches to treating human diseases as modeled in the laboratory mouse. Sessions include: 1) background

lesions relevant to basic and preclinical investigations using immunodeficient mouse strains; 2) mouse models for understanding cancer immunity and testing immunotherapies; 3) mouse models of autoimmune diseases; and 4) mouse models of infectious diseases. Comparative pathologists from both academia and industry will give 20-to-25-minute presentations on topics including background lesions arising in the NSG stock strain as well as other severely immunodeficient, humanized, and germ-free mouse strains. Additional disease-focused talks will include the development and characterization of critical model systems in mice to study non-lymphoid leukemias, lymphoma, the effects of CAR-T cell therapies, immune complex disease, graft-versus-host disease, and multiple sclerosis. The session will end with discussions of models of infectious diseases to include: mouse models of Lyme disease, Helicobacter infections, and fungal infections in immunocompromised patients.

Presentations will focus on practical, take-home and readily applicable information for pathologists working with mouse models of human disease in these disease areas.

8:00 a.m.-8:15 a.m.

Introduction

Sue E. Knoblaugh, DVM, DACVP

Jessica M. Snyder, DVM, DACVP

8:20 a.m.-8:45 a.m.

A Review of Common Background Lesions and Newly Recognized/Emerging Pathogens Affecting NOD Scid Gamma Mice

Sara Santagostino, DVM, PhD, DACVP

Genentech, South San Francisco, CA

8:50 a.m.-9:10 a.m.

Proliferative Typhlocolitis with Multinucleated Giant Cells in Immunodeficient Sentinel Mice

Denise Imai, DVM, PhD, DACVP

University of California, Davis, CA

9:15 a.m.-9:35 a.m.

Anemic Mice: Expected Lesions and Utility in Cystic Fibrosis Research

Piper Treuting, DVM, DACVP

University of Washington, Seattle, WA

9:40 a.m.-10:00 a.m.

All Employees Must Wash Hands Before Returning to Work: An Outbreak of Enterotoxigenic E. Coli in an NSG Colony

Kelli Boyd, DVM, PhD, DACVP

Vanderbilt University Medical Center, Nashville, TN

10:05 a.m.-10:25 a.m.

Refreshment Break

10:25 a.m.-10:50 a.m.

Evaluation of Human Non-lymphoid Leukemia Models in NSGS Mice: Challenges and Strain Idiosyncrasies

Laura Janke, DVM, PhD, DACVP

St. Jude Children's Research Hospital, Memphis, TN

10:55 a.m.-11:25 a.m.

Lymphoproliferations: A Complication of Patient Derived Solid Tumor Xenografts (PDTXs) in NSG Mice

Jerold Rehg, DVM, DACVP

St. Jude Children's Research Hospital, Memphis, TN

11:30 a.m.-11:50 a.m.

Approaches to Characterizing the Effects of Chimeric Antigen Receptor T Cell Therapy for Pediatric Tumors in Mice

Heather Tillman, DVM, PhD, DACVP

St. Jude Children's Research Hospital, Memphis, TN

11:50 a.m.-1:00 p.m.

Lunch Break (on your own)

1:00 p.m.-1:25 p.m.

Immunogenicity and Immune-Related Toxicity: A Biopharmaceutical Perspective

Michael Leach, DVM, PhD, DACVP

Pfizer, Cambridge, MA

1:30 p.m.-1:55 p.m.

Experimental Autoimmune Encephalitis (EAE) and the Microbiome: Modulation of the Systemic Immune Response by Gut-derived Commensal Bacteria

Katherine Gibson-Corley, DVM, PhD, DACVP

University of Iowa, Iowa City, IA

2:00 p.m.-2:25 p.m.

GvHD 101: Acute and Chronic Graft Versus Host Disease & Comparative Manifestations in Humanized Mice

Kara N. Corps, DVM, PhD, DACVP (speaker)

The Ohio State University, Columbus, OH

Krista La Perle, DVM, PhD, DACVP

The Ohio State University, Columbus, OH

2:30 p.m.-2:50 p.m.

Miscellaneous Mouse Models of Autoimmune Disease

Jessica M. Snyder, DVM, DACVP

2:55 p.m.-3:15 p.m.

Refreshment Break

3:15 p.m.-3:45 p.m.

Immune Variation in Common In-bred Mouse Strains: Points to Consider

Rani Sellers, DVM, PhD, DACVP

Pfizer, Pearl River, NY

3:50 p.m.-4:10 p.m.

Mouse Models of Lyme Disease

Sebastian E. Carrasco, DVM, MPVM, MSc, PhD, DACVP

Massachusetts Institute of Technology, Cambridge, MA

4:15 p.m.-4:35 p.m.

Mouse Models of Helicobacter Infection

Sureshkumar Muthupalani, BVSc, MVSc, PhD, DACVP

Massachusetts Institute of Technology, Cambridge, MA

4:40 p.m.-5:00 p.m.

The Fungus Among Us: Mouse Models of Fungal Pathogenesis and Host Immune Response

Sue E. Knoblaugh, DVM, DACVP

8:00 a.m.-5:00 p.m.

Salon J

ACVP Pre-Meeting Workshop (available at an additional fee)

Primate Pathology Special Interest Group

Back to Basics: A Primer on NHP Pathology

Session Chair: Theresa Boulineau, DVM, MS, DACVP

Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, CT

The theme of this year's Primate Pathology Workshop is, "Back to Basics: A Primer on Non-Human Primate Pathology". Each lecture will review classic pathologic conditions in different classes of NHPs, including baboons, marmosets, macaques, and apes. A separate lecture will present an overview of clinical pathology in NHPs, with a focus on differences between species (especially macaques). The workshop will be valuable to students and young pathologists but also appeal to all who don't get to work regularly with these species and would like to learn more. In addition to presentations by invited speakers, there will be "mystery" NHP case presentations from workshop attendees in the afternoon. Case material with a focus on classic cases in different primate models is encouraged, but material can be from any interesting or unique primate case. Oral case presentations will be 10-12 minutes with 3-5 minutes for questions/discussion.

8:00 a.m.-8:10 a.m.

Welcome and introductions

8:10 a.m.-9:00 a.m.

Review of Baboon Pathology

Olga Gonzalez, DVM, DACVP

Southwest National Primate Research Center, San Antonio, TX

9:00 a.m.-9:45 a.m.

Review of Marmoset Pathology

Heather Simmons, DVM, DACVP

Wisconsin National Primate Research Center, University of Wisconsin, Madison, WI

9:45 a.m.-10:05 a.m.

Refreshment Break

10:05 a.m.-11:00 a.m.

Review of Macaque Pathology

Rebekah Keesler, DVM, DACVP

California National Primate Research Center, University of California, Davis, CA

11:00 a.m.-12:00 noon

Review of Ape Pathology

Linda Lowenstine, DVM, PhD, DACVP

University of California Veterinary School, Davis, CA

12:00 noon-1:00 p.m.

Lunch Break (on your own)

1:00 p.m.-2:00 p.m.

Back to Basics Review of Primate Clinical Pathology

Kirstin Barnhart, DVM, PhD, DACVP

Envigo, Alice, TX

2:00 p.m.-5:00 p.m.

Short Case Presentations

15 minutes per case: 10 minutes for presentation, 5 minutes for discussion

8:00 a.m.-5:00 p.m.

Salon D

ASVCP Pre-Meeting Workshop (sold out)

Comparative Bone Marrow Hematopathology

Session Chairs: Kurt Zimmerman, DVM, PhD, DACVP

Virginia Tech, Blacksburg, VA

Laura Snyder, DVM, DACVP

Marshfield Medical Center, Marshfield, WI

Participants will review the comparative (cytology and histopathology) for a spectrum of marrow disorders followed by an interactive guided discussion using mystery cases lead by hematopathology experts from both veterinary and human medicine.

8:00 a.m.-8:10 a.m.

Welcome

Kurt Zimmerman, DVM, PhD, DACVP

Laura Snyder, DVM, DACVP

8:10 a.m.-10:30 a.m.

Bone Marrow Histopathological Evaluation and Bone Marrow Cytologic Evaluation

Rose E. Raskin, DVM, PhD, DACVP

Purdue University, West Lafayette, IN

Joanne Messick, VMD, PhD, DACVP

Purdue University, West Lafayette, IN

10:30 a.m.-11:00 a.m.

Refreshment Break

11:00 a.m.-12:00 noon

Bone Marrow Case Presentations

Joanne Messick, VMD, PhD, DACVP

Rose E. Raskin, DVM, PhD, DACVP

12:00 noon-1:30 p.m.

Lunch Break (on your own)

1:30 p.m.-3:30 p.m.

Mystery Cases

Dorothee Bienzle, DVM, PhD, DACVP

University of Guelph, Guelph, Ontario, Canada

Anne Avery, VMD, PhD

Colorado State University, Fort Collins, CO

Sa Wang, MD, DABP

University of Texas MD Anderson Cancer Center, Houston, TX

Joanne Messick, VMD, PhD, DACVP

Rose E. Raskin, DVM, PhD, DACVP

3:30 p.m.-4:00 p.m.

Refreshment Break

4:00 p.m.-5:00 p.m.

Flow Cytometry in the Diagnosis of T-/NK Cell Neoplasms

Sa Wang, MD, DABP

8:00 a.m.-5:00 p.m.

Salon I

C.L. Davis-S.W. Thompson Foundation Pre-Meeting Workshop (available at an additional fee)

Skin and Mammary Tumors: Standardization and Simplification

Speakers: Drs. Valentina Zappulli, Laura Peña, and Michael Goldschmidt

The workshop will be divided into two sections: “Epithelial Tumors of the Skin” and “Tumors of the Mammary Gland”. The presentations will emphasize material from Volumes 1 and 2 of Surgical Pathology of Tumors of Domestic Animals, published by the Davis-Thompson DVM Foundation. The presentation on skin tumors will be focused specifically on more challenging diagnoses and include distinctive histologic features of neoplastic and non-neoplastic epithelial “tumors” of the skin, differential diagnosis, and clinically important information. A majority of the session will be comprised of presentations on mammary tumors. This discussion will emphasize those criteria that are important in establishing a definitive diagnosis, including criteria of malignancy and grading of mammary tumors. Diseases of the teat will focus on neoplastic and non-neoplastic diseases that may be encountered in veterinary diagnostic pathology. Finally, difficult cases will be discussed; attendees will have an opportunity to review these cases before the workshop.

8:00 a.m.-8:15 a.m.

Welcome and Introductions

8:15 a.m.-10:00 a.m.
Tumors of the Skin
Anatomy and Histology of the Canine and Feline
Mammary Gland

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

10:30 a.m.-12:00 noon
Mammary Tumors: Important Diagnostic Criteria

12:00 noon-1:00 p.m.
Lunch Break (on your own)

1:00 p.m.-3:00 p.m.
Mammary Tumors: Grading and Criteria for Determining
Malignancy

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

3:30 p.m.-4:15 p.m.
Diseases of the Canine and Feline Teat

4:15 p.m.-5:00 p.m.
Mammary Tumors: Cases Discussion

12:00 noon-2:00 p.m.
 Conference Room 4
ACVP Council and ASVCP Executive Board Luncheon

12:00 noon-2:00 p.m.
 Conference Room 8
Veterinary Pathology Editors Meeting

3:00 p.m.-8:00 p.m.
 Conference Room 1
Career Center
 Looking for a job? Looking for a candidate? Stop by the
 Career Center!

4:00 p.m.-5:30 p.m.
 Conference Room 14
ASVCP Executive Board and Committees

4:00 p.m.-7:00 p.m.
 Conference Room 8
ACVP Education Committee

5:00 p.m.-6:15 p.m.
 Salon B
Meet the Pathologists:
A Discussion of Careers in Pathology
 Session Chair: R. Mark Simpson, DVM, PhD, DACVP
 National Cancer Institute, Bethesda, MD

6:00 p.m.-7:30 p.m.
 Third Floor Foyer
Professional Photos
 A professional photographer will be available to take your
 photo to use in your work environment. Thank you to IDEXX
 for sponsoring this area!

6:15 p.m.-7:15 p.m.
 Salon D
Student and Resident Reception
Sponsored by Antech

7:00 p.m.-9:00 p.m.
 Conference Room 4
ACVP Clinical Pathology Exam Committee - EAAG and TIWG

7:00 p.m.-9:00 p.m.
 Conference Room 11
Japanese Association of Veterinary Pathologists+

7:30 p.m.-10:00 p.m.
 Salon K
Opening Reception, Exhibits, and Veterinary Student Poster
Session including a special performance at 9:00 p.m. by the
AC/VP Band, all the way from Stillwater, Oklahoma

8:00 p.m.-9:00 p.m.
 Conference Room 7
ACVP Exam Assembly and Administrative Group AP

Sunday, November 10, 2019

6:30 a.m.-7:30 a.m.
 Conference Room 11
Yoga Basics for Pathologists
 Katherine Gibson-Corley, DVM, PhD, DACVP
 University of Iowa, Iowa City, IA
 All levels of experience welcome!

7:00 a.m.-5:00 p.m.
 Third Floor Foyer
Registration and Information Desk

7:00 a.m.-6:00 p.m.
 Conference Room 2
Speaker Ready Room

7:00 a.m.
 Third Floor Foyer
Internet Station
Sponsored by VIN

7:00 a.m.-8:30 a.m.
 Conference Room 8
Academic Leadership Special Interest Group

7:00 a.m.-8:00 a.m.
 Conference Room 9
ASVCP Education Committee

Final Program

7:00 a.m.-8:00 a.m.
Conference Room 15
ASVCP Quality Assurance and Standards Committee

7:00 a.m.-8:00 a.m.
Salon J
Veterinary Student Breakfast
All students are welcome to attend this free breakfast!

8:00 a.m.-5:00 p.m.
Conference Suite 529
Lactation Room
(stop by the ACVP registration desk to pick up a key)

8:00 a.m.-9:30 a.m.
Conference Room 7
Veterinary Pathology Editorial Board Meeting

8:00 a.m.-12:00 noon
Salon I
**ASVCP Current Topics in Clinical Pathology
Infectious Diseases**

Session Chair: Kristina Meichner, DVM, DACVP
University of Georgia, Athens, GA

This session will cover clinical pathology relevant aspects of different infectious diseases in a variety of species, with a focus on diagnostics including clinical and laboratory findings. Topics include bovine anaplasmosis and other relevant bovine hemoparasites, an update on diagnostics for feline infectious peritonitis, a comparative talk on recent advances in the identification of fungal infections, and a comparison between Lyme disease and Tick-borne Relapsing Fever in the dog.

8:00 a.m.-8:50 a.m.
Bovine Anaplasmosis and Other Relevant Bovine Hemoparasites
Jessie Monday, MS, DVM
Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) Amarillo, Amarillo, TX

8:50 a.m.-9:40 a.m.
Feline Infectious Peritonitis (FIP): Diagnostic Dilemmas and Future Perspectives
Kelly S. Santangelo, DVM, PhD, DACVP
Colorado State University, Fort Collins, CO

9:40 a.m.-10:10 a.m.
Refreshment Break - Visit the Focused Scientific Posters

10:10 a.m.-11:00 a.m.
Update on the Identification of Fungal Diseases: Perspectives from a Human International Clinical Mycology Reference Laboratory
Connie F.C. Gibas, PhD
University of Texas Health Science Center, San Antonio, TX

11:00 a.m.-11:50 a.m.
Borrelia spp. Infections: Lyme Disease or Tick-Borne Relapsing Fever (TBRF)?
Julie Piccione, MS, DVM, DACVP
Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL), College Station, TX

11:50 a.m.-12:00 noon
Questions and Discussion

8:00 a.m.-12:00 noon
Salon D
Career Development
Coping with Technology: Real People and Real-life Stories of Digital Pathology Applications

Session Chairs: Kelli L. Boyd, DVM, PhD, DACVP
Vanderbilt University Medical Center, Nashville, TN

Gillian L. Beamer, VMD, PhD, DACVP
Tufts University, Grafton, MA

This half-day session will give examples of real-life uses of digital pathology applications in research, diagnostic, and academic settings. The emphasis of the session is to introduce the audience to multiple digital pathology platforms and demonstrate the ways pathologists will be using these applications in the future. The first part of the program will focus on quantitative applications including some examples using artificial intelligence. The latter half of the program will focus on the implementation of digital pathology and artificial intelligence into large diagnostic laboratories. The final presentation will be an overview of how digital pathology platforms have been used in medical education and present concepts on how these technologies can be adapted to veterinary pathology training programs. The session will end with a roundtable discussion providing participants the opportunity to discuss key topics with the panel of speakers.

8:00 a.m.-8:10 a.m.
Real-World Uses for Digital Pathology Introduction
Kelli Boyd DVM, PhD, DACVP

8:10 a.m.-8:30 a.m.
Using Aiforia
Gillian Beamer DVM, PhD, DACVP

8:30 a.m.-8:50 a.m.
"Qu Can Do it!" An Image Analysis Case Study in QuPath
Lauren Himmel, DVM, PhD, DACVP
Vanderbilt University Medical Center, Nashville, TN

8:50 a.m.- 9:10 a.m.
Practical Applications of VisioPharm Image Analysis in Comparative Pathology
Jessica M. Snyder, DVM, MS, DACVIM, DACVP
University of Washington, Seattle, WA

9:10 a.m.-9:30 a.m.

Approaches to Quantifying Lipid Accumulation in a Mouse Model of Chemotherapy-induced Toxicity: Analysis of Hepatic Lipidosis and Adipocyte Size Using ImageScope and Image-J/Fiji

Laura Janke, DVM, PhD, DACVP

St. Jude Children's Research Hospital, Memphis, TN

9:30 a.m.-9:50 a.m.

Halo: An Intuitive and Versatile Image Analysis Tool

Nicholas A. Crossland DVM, PhD, DACVP

Boston University, Boston MA

9:50 a.m.-10:20 a.m.

Salon K

Refreshment Break - Visit the Focused Scientific Posters

10:20 a.m.-10:40 a.m.

Transitioning Diagnostic Lab to Whole-Slide Image

Richard Luong, BVSc, DACVP

IDEXX, Portland, OR

10:40 a.m.-11:00 a.m.

The Cutting Edge of Clinical Pathology

Jan Andrews, DVM, PhD, DACVP

Antech Diagnostics, Raleigh, NC

11:00 a.m.-11:20 a.m.

Digital Pathology in an Academic Setting

Alex Baras, MD, PhD

Johns Hopkins, Baltimore, MD

11:20 a.m.-12:00 noon

Roundtable Discussions

8:00 a.m.-12:00 noon

Salon B

Concurrent Session I

Peripheral Nervous System

Session Chairs: Lisa Lanigan, DVM, PhD, DACVP

StageBio, Frederick, MD

Brad Bolon, DVM, PhD, DABT, FATS, FIATP, DACVP

GEMPath, Longmont, CO

This half-day session will present an overview of peripheral nervous system (PNS) biology, lesions, and disease mechanisms. The session will begin with talks on PNS organization and function, specialized sampling and processing practices for PNS tissues, and common morphologic lesions and artifacts. After the break, our speakers will delve into the specific PNS lesions and mechanisms, including infectious inflammatory diseases, neoplastic diseases, and metabolic/paraneoplastic diseases. The goal of this session is to provide a brief but well-rounded synopsis of the PNS—a frequently overlooked but extremely important system.

8:00 a.m.-8:30 a.m.

Biology of the Peripheral Nervous System in Vertebrates

Ingrid D. Pardo, MS, DVM, DACVP

Pfizer, Inc., Gales Ferry, CT

8:30 a.m.-9:10 a.m.

Sampling and Fixation Techniques for Routine and Dedicated Peripheral Nerve and Ganglion Evaluation in Rodents, Dogs, and Primates

Mark T. Butt, DVM, DACVP

TPS (a StageBio Company), Frederick, MD

9:10 a.m.-9:45 a.m.

Pathologic Assessment of the Peripheral Nervous System: Lesions of Myelinated Fibers and Selected Artifacts

Bernard S. Jortner, VMD, DACVP

Virginia-Maryland College of Veterinary Medicine, Blacksburg, VA

9:45 a.m.-10:15 a.m.

Salon K

Refreshment Break - Visit the Focused Scientific Posters

10:15 a.m.-10:50 a.m.

Inflammatory Diseases of the Peripheral Nervous System

Duncan S. Russell, BVMS (Hons), DACVP

Oregon State University, Corvallis, OR

10:50 a.m.-11:25 a.m.

Neoplastic Diseases of the Peripheral Nervous System

Kevin D. Woolard, DVM, PhD, DACVP

University of California, Davis, CA

11:25 a.m.-12:00 noon

Metabolic/Paraneoplastic Diseases of the Peripheral Nervous System

Virginia L. Godfrey, DVM, PhD, DACVP

University of North Carolina School of Medicine, Chapel Hill, NC

8:00 a.m.-12:00 noon

Salon C

Industrial and Toxicologic Pathology Focused Scientific Session I

Focused Group Chair: Katherine A.B. Knostman

Focused Group Members: Hibret Adissu, Marie Bockenstedt (Co-Chair), Shambhunath Choudhary, Sanjeev Gumber, Kyathanahalli Janardham (Past Chair), and Bruce LeRoy

Platform Presentations

8:00 a.m.-8:05 a.m.

INTRODUCTION

Katherine A.B. Knostman, DVM, PhD, DACVP

StageBio, Mount Jackson, VA

Invited Speaker

8:05 a.m.-9:00 a.m.

NEW DEVELOPMENTS IN CARCINOGENICITY TESTING - SHOULD WE DO AWAY WITH IT?

Aaron M. Sargeant, DVM, PhD, DACVP

Charles River Laboratories, Spencerville, OH

9:00 a.m.-9:30 a.m.

VALIDATING RASH2 CARCINOGENICITY STUDIES USING ARTIFICIAL INTELLIGENCE

Beth Dray¹, Colin Doolan², Mark Gregson², and Daniel Rudmann¹

¹Charles River Laboratories, ²Deciphex

Keyword: Toxicologic Pathology

9:30 a.m.-9:45 a.m.

IQ DRUSAFE PHARMA SURVEY ON NONCLINICAL AND CLINICAL USE OF EMERGING SAFETY BIOMARKERS

John Burkhardt¹, Deidre Dalma², Dominique Brees³, Jean-Charles Gautier⁴, Warren Glaab⁵, Magali Guffroy⁶, JoAnn Harding⁷, Eric McDuffie⁸, Lila Ramaiah⁹, William Reagan¹, Albert Schultze¹⁰, James Smith¹¹, and Tanja Zabka¹²

¹Pfizer, ²GlaxoSmithKline, ³Novartis, ⁴Sanofi, ⁵Merck,

⁶Abbvie, ⁷AstraZeneca, ⁸Janssen, ⁹Bristol-Myers Squibb, ¹⁰Eli Lilly, ¹¹Boehringer Ingelheim, ¹²Genentech

Keyword: Clinical Pathology

9:45 a.m.-10:00 a.m.

GOING GREEN - REDUCING WORK-RELATED TOXICITY IN ANATOMIC PATHOLOGY

Polina Aukon, Wendy O'Rourke, Andrew Ernest, Jennifer Nelson, Justin Griffin, and Alexandra Brower

Midwestern University College of Veterinary Medicine

Keyword: Xylene

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

Salon K

Refreshment Break

Visit the Focused Scientific Posters

Invited Speaker

10:30 a.m.-11:30 a.m.

CHALLENGES IN MULTIPLEXING AND IMAGING TECHNIQUES

Manu M. Sebastian, DVM, PhD, DABT, DACLAM, DACVP

University of Texas MD Anderson Cancer Center, Smithville, TX

11:30 a.m.-12:00 noon

IMPACT OF FOOD RESTRICTION, WATER DEPRIVATION, RESTRAINT, OR ISOPROTERENOL ON PLASMA CARDIAC TROPONIN I AND N-TERMINAL PRO-ATRIAL NATRIURETIC PEPTIDE IN MALE SPRAGUE-DAWLEY RATS

James Turk, George Hu, Sally Lei, Jean Fu, Kathy Chai, Nancy Poy, and Ron Tyler

Amgen

Keyword: Cardiovascular

8:00 a.m.-12:00 noon

Salon E

Natural Disease Focused Scientific Session I

Focused Group Chair: Angela Pillatzki

Focused Group Members: Pompei Bolfa, Julie Engiles (Co-Chair), Brandon Plattner, Simon Priestnall, and Dan Rissi (Past Chair)

Platform Presentations

Invited Speaker

8:00 a.m.-9:00 a.m.

PATHOLOGY OF VIRULENT NEWCASTLE DISEASE: THE 2018-19 CALIFORNIA OUTBREAK

Francisco A. Uzal, DVM, MSc, PhD, DACVP

University of California, Davis, San Bernardino, CA

9:00 a.m.-9:15 a.m.

THE EFFECT OF DEXAMETHASONE ON HEMATOLOGICAL PROFILES, HAEMOSPORIDIAN INFECTION, AND SPLENIC HISTOLOGY IN HOUSE FINCHES (HAEMORHUS MEXICANUS)

Esther Crouch, Maria Teresa Reinoso-Perez, Keila Dhondt, André Dhondt, José Cruz Otero, and María Forzán

Cornell University

Keyword: Avian

9:15 a.m.-9:30 a.m.

CURRENT STATE OF THE GOLDEN RETRIEVER LIFETIME STUDY: SEVEN YEARS OF DATA, DIAGNOSES, AND POTENTIAL INSIGHTS INTO CANINE CANCER EPIDEMIOLOGY

Missy Simpson¹, Rod Page², Kelly Diehl¹, Michael Cinkosky¹, and Janet Patterson-Kane¹

¹Morris Animal Foundation, ²Colorado State University

Keyword: General Topic

9:30 a.m.-9:45 a.m.

CANINE GASTRIC CARCINOMAS - A HISTOPATHOLOGICAL STUDY

Alexandros Chardas¹, William Becker¹, Alejandro Suarez-Bonnet², Sam Beck³, and Simon Priestnall¹

¹The Royal Veterinary College, ²The Royal Veterinary College / Beck VPG, ³VPG Histology

Keyword: Histology

9:45 a.m.-10:00 a.m.

ASSOCIATION OF DOMESTIC CAT HEPADNAVIRUS WITH HEPATITIS AND HEPATOCELLULAR CARCINOMA

Patricia Pesavento¹, Tiffany Tse¹, Bronte Hampson², Kenneth Jackson¹, John Munday³, and Julia Beatty⁴

¹University of California, Davis; ²Sydney School of Veterinary Science / University of California, Davis; ³Massey University; ⁴Sydney School of Veterinary Science

Keyword: Infectious Disease

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

10:30 a.m.-10:45 a.m.

CULTURE AND METAGENOMIC MINION SEQUENCING TO DETECT AND CHARACTERIZE RNA VIRUSES

James Stanton¹, Kevin Lahmers², Kelsey Young¹, Salman Butt¹, Holly Sellers¹, David Stallknecht¹, Jerry Saliki¹, S. Mark Tompkins¹, Ian Padykula¹, S. Michelle Todd², Chris Siepker¹, and Elizabeth Howerth¹

¹University of Georgia, ²Virginia Tech University

Keyword: Infectious Disease

10:45 a.m.-11:00 a.m.

HEPATIC DISTOMIASIS IN UPPER MIDWEST FETAL AND NEONATAL BEEF CALVES

Heidi Pecoraro, Teresa Newell, and Brett Webb
North Dakota State University Veterinary Diagnostic Laboratory

Keyword: Liver and Pancreas

11:00 a.m.-11:15 a.m.

THE CONTRIBUTION OF KERATINOCYTE STRESS TO EQUINE LAMINITIS PATHOGENESIS: MACRO- AND MICRO-ANATOMICAL LESIONS AND UP-REGULATION OF A STRESS MARKER, GRP78/ BIP

Hannah Galantino-Homer¹, Julie Engiles¹, Lynne Cassimeris², Caitlin Armstrong¹, and Kimberly Hildreth¹

¹University of Pennsylvania, ²Lehigh University

Keyword: Skin

11:15 a.m.-11:30 a.m.

IMMUNOHISTOCHEMICAL EVALUATION OF REGULATORY T LYMPHOCYTE INFILTRATION OF CANINE GLIOMA

Gregory Krane¹, David Malarkey¹, Andrew Miller², C. Ryan Miller³, Debra Tokarz⁴, and Christopher Mariani⁵

¹National Institute of Environmental Health Sciences, North Carolina State University; ²Cornell University; ³University of North Carolina; ⁴Experimental Pathology Laboratories;

⁵North Carolina State University

Keyword: Neoplasia

11:30 a.m.-11:45 a.m.

MITOTIC COUNT IN CANINE CUTANEOUS MAST CELL TUMORS: MANUAL COUNTS CONSISTENT WITH HIGHEST MITOTIC DENSITY?

Christof Bertram¹, Marc Aubreville², Corinne Gurtner³, Alexander Bartel¹, Sarah Corner⁴, Martina Dettwiler⁵, Olivia Kershaw¹, Erica Noland⁴, Anja Schmidt⁶, Dodd Sledge⁴, Rebecca Smedley⁴, Tuddow Thaiwong⁴, Matti Kiupel⁴, Andreas Maier², and Robert Klopffleisch¹

¹Freie Universität Berlin, ²Friedrich-Alexander-Universität Erlangen-Nürnberg, ³University of Bern/Freie Universität Berlin, ⁴Michigan State University, ⁵University of Bern,

⁶IDEXX Laboratories

Keyword: Neoplasia

11:45 a.m.-12:00 noon

A HIGH MORTALITY OUTBREAK OF MYCOPLASMA BOVIS IN WYOMING PRONGHORN (ANTILOCAPRA AMERICANA)

Jennifer Malmberg¹, Terry Creekmore², Marguerite Johnson¹, Erika Peckham², Hally Killion¹, Madison Vance¹, Donal O'Toole¹, and Kerry Sondgeroth¹

¹University of Wyoming, ²Wyoming Game and Fish Department

Keyword: Wildlife

9:00 a.m.-5:00 p.m.

Conference Room 1

Career Center

9:30 a.m.-4:30 p.m.

Salon K

Exhibits Open

9:30 a.m.-4:30 p.m.

Salon K

Focused Scientific Poster Session A

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

Salon K

Focused Scientific Poster Session A (authors present for discussion and questions)

11:00 a.m.-12:00 noon

Conference Room 14

Exhibitor Hosted-Session: An Integrated Approach to High-throughput and High-dimension Multiplexing in Tissue with Single-cell Resolution

Company name: Akoya Biosciences

Company Profile: Instruments, Reagents, and Software for Imaging many biomarkers simultaneously in tissue sections.

Session description:

We will present strategies for imaging and analyzing multiple biomarkers in single tissue sections at different levels of dimensionality and throughput. We will discuss tissue staining using barcoded antibodies as opposed to using tyramide chemistry to iteratively label single markers. Strategies for imaging and analysis will be discussed.

12:00 noon-1:30 p.m.

Conference Room 7

Veterinary Clinical Pathology Editorial Board

12:00 noon-1:30 p.m.

Lunch Break (on your own)

12:00 noon-2:00 p.m.

Salon F

Veterinary Pathology Resident/Trainee Luncheon

Sponsored by IDEXX

12:15 p.m.-1:15 p.m.

Salon E

Emerging Disease Focused Seminar

Introduction: A. Sally Davis, DVM, PhD
Kansas State University, Manhattan, KS

African Swine Fever: How it Got a Global Passport
Mary Louise Penrith, BSc, BSc (Hon), PhD Zoology, PhD Entomology, BVSc, BVSc (Hon)
University of Pretoria, Menlo Park, South Africa

1:00 p.m.-5:00 p.m.

Third Floor Foyer

ACVP Logo Merch for Sale!

1:00 p.m.-4:30 p.m.

Salon C

ASVCP Veterinary Laboratory Professionals Session I

Session Chair: Nicole Rosen, MT (ASCP)
Purdue University, West Lafayette, IN

1:00 p.m.-2:00 p.m.

Managing Conflict: Me First!

John Christian, DVM, PhD
Purdue University, West Lafayette, IN

2:00 p.m.-3:00 p.m.

Advia Hematology Multispecies Cytogram Review
David Odneal, BS, MT
Siemens-Healthineers, Kirbyville, MO

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-4:30 p.m.

ProCyte Dx Cytograms Interpretations
Dennis B. DeNicola, DVM, PhD, DACVP
IDEXX Laboratories, Inc., Westbrook, ME

1:30 p.m.-5:00 p.m.

Salon B

Mini-Symposium I
Cutting Edge Biologic Cancer Therapeutics

Session Chairs: James B. Rottman, DVM, PhD, DACVP
bluebird bio, Cambridge, MA

Keith G. Mansfield, DVM, DACVP
Novartis, Cambridge, MA

1:30 p.m.-2:15 p.m.

Engineered Cell Therapy Products for Oncology
Richard A. Morgan, PhD
Editas Medicine, Cambridge, MA

2:15 p.m.-3:00 p.m.

Learnings from Blincyto® and the BiTE® (Bispecific T-Cell Engager) Platform, from Bench to Bedside
Benno Rattel, DVM, PhD
Amgen, Munich, Germany

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-4:15 p.m.

Development of ONCR-177, a miR-attenuated Oncolytic HSV-1 Designed to Potently Activate Systemic Anti-tumor Immunity
Christophe Queva, PhD
Oncorus, Cambridge, MA

4:15 p.m.-5:00 p.m.

Therapeutic mRNA s: Overview and Examples
Daher Ibrahim Aibo, DVM, PhD, DACVP
Novartis, East Hanover, NJ

1:30 p.m.-4:30 p.m.

Salon D

Clinical Pathology Focused Scientific Session I

Focused Group Chair: Amy Warren

Focused Group Members: Shawn Clark, Mike Fry, Karen Jackson, Catherine Wagg, Valerie Wong, and Kathryn Wycislo

Platform Presentations

1:30 p.m.-1:45 p.m.

EVALUATION OF THE URINARY MIRNA EXPRESSION PROFILE IN DOGS WITH CHRONIC KIDNEY DISEASE DUE TO X-LINKED HEREDITARY NEPHROPATHY
Sabrina Clark*, Candice Chu, George Lees, and Mary Nabity
Texas A&M University
Keyword: Urinary System

1:45 p.m.-2:00 p.m.

URINARY MICRORNA PROFILING IN DOGS WITH CHRONIC KIDNEY DISEASE CAUSED BY GLOMERULAR DISEASES
Candice Chu^{1*}, Rachel Cianciolo², Jessica Hokamp², George Lees¹, and Mary Nabity¹
¹Texas A&M University, ²The Ohio State University
Keyword: Urinary System

Invited Speaker

2:00 p.m.- 3:00 p.m.

WE'RE NOT CRAZY!: INTEGRATION OF CLINICAL PATHOLOGY AND TISSUE ANALYSIS FOR COMPREHENSIVE KIDNEY EVALUATION
Mary B. Nabity, DVM, PhD, DACVP¹ and Rachel E. Cianciolo, VMD, PhD, DACVP²
¹Texas A&M University College of Veterinary Medicine and Biomedical Sciences and ²The Ohio State University

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-3:45 p.m.

CHARACTERIZING THE PRESENCE OF MELAMED-WOLINSKA BODIES IN CANINE URINE CYTOLOGY

Alyssa Brooker*, Bridget Garner, Melinda Camus, and Kristina Meichner

University of Georgia

Keyword: Cytology

3:45 p.m.-4:00 p.m.

DETECTION OF SERUM AND URINE FREE LIGHT CHAINS IN VETERINARY PATIENTS

R. Adam Harris*, Dillon Donaghy, and A Russell Moore
Colorado State University

Keyword: Neoplasia

4:00 p.m.-4:15 p.m.

PRECISION, ACCURACY, AND TOTAL ERROR DETERMINATION FOR SERUM AND URINARY CORTISOL IN DOGS: WHAT IS ACHIEVABLE WITH THE IMMULITE 2000XPI, AND HOW DOES THAT IMPACT RESULTS' INTERPRETATION?

Jeremie Korchia¹ and Kathy Freeman²

¹Texas A&M University, ²University of Exeter

Keyword: Endocrine

4:15 p.m.-4:30 p.m.

COMPARISON OF SERUM VS. EDTA-PLASMA IN CANINE MAJOR CROSSMATCH REACTIONS

Megan Caudill*, Kristina Meichner, Amie Koenig, Roy Berghaus, and Bridget Garner

University of Georgia

Keyword: Hematology

*Competitor for the ASVCP Young Investigator Award

1:30 p.m.-5:00 p.m.

Salon I

Diagnostic Pathology Focused Scientific Session I

Focused Session Chair: Aline Rodrigues Hoffmann

Focused Group Members: Eric Burrough (Past Chair), Rachel Derscheid, Ian Hawkins, Fabiano Oliveira (Co-Chair), Heindrich Snyman, Francisco Uzal, and Arnaud Van Wettene

Platform Presentations

1:30 p.m.-1:35 p.m.

INTRODUCTION AND ANNOUNCEMENTS

Aline Rodrigues Hoffmann, DVM, PhD, DACVP
Texas A&M University, College Station, TX

1:35 p.m.-1:45 p.m.

CHARACTERIZATION OF NEUROPATHOLOGIC LESIONS ASSOCIATED WITH AVIAN REOVIRUS INFECTION IN COMMERCIAL BROILER CHICKENS

Tzushan Yan¹#, Natalie Armour², Martha Pulido-Landinez², Alejandro Banda², Heidi Rose², and Brittany Baughman¹

¹Mississippi State University College of Veterinary Medicine,

²Mississippi Veterinary Research and Diagnostic Laboratory

Keyword: Avian

1:45 p.m.-1:55 p.m.

SPONTANEOUS PROLIFERATIVE TYPHLOCOLITIS OF AN UNKNOWN CAUSE IN FVB/N MICE

Lauren Peiffer#, Cory Brayton, and Karen Sfanos

Johns Hopkins University School of Medicine

Keyword: Alimentary

1:55 p.m.-2:05 p.m.

MYCOBACTERIUM ABSCESSUS PNEUMONIA IN A CAT

Cheng-Hsin Shih¹#, Ying-Chen Wu², and Wei-Hsiang Huang¹

¹National Taiwan University, ²National Chung Hsing University

Keyword: Infectious Disease

2:05 p.m.-2:15 p.m.

BRONCHOPULMONARY DYSPLASIA WITH SECONDARY BULLA RUPTURE AND BACTERIAL BRONCHOPNEUMONIA IN A YOUNG SPHYNX CAT

Megan Schreag¹#, Bennett Deddens¹, Zachary Kern¹, Julie Allen², Devorah Stowe¹, Ian Robertson¹, Adam Birkenheuer¹, Eleanor Hawkins¹, and Janice Harvey¹

¹North Carolina State University College of Veterinary Medicine, ²North Carolina State University College of Veterinary Medicine / Cornell University College of Veterinary Medicine

Keyword: Respiratory System

2:15 p.m.-2:25 p.m.

A PERITONEAL INFLAMMATORY MYOFIBROBLASTIC TUMOR IN AN ARABIAN MARE

Nataly Mamaliger#, Alicia Olivier, and Amy Lack

Mississippi State University College of Veterinary Medicine

Keyword: Neoplasia

2:25 p.m.-2:35 p.m.

HISTOLOGY GUIDED MASS SPECTROMETRY DISTINGUISHES BETWEEN MAST CELL TUMOR GRADES

Melissa Swan¹#, Katy Smoot², Matt Powell², Shelley Newman³, Yava Jones-Hall¹, and Abigail Cox¹

¹Purdue University, ²New River Labs, ³Long Island University

Keyword: Neoplasia

2:35 p.m.-2:45 p.m.

SYSTEMIC MASTOCYTOSIS PRESENTING AS SUBCUTANEOUS HEMORRHAGE AND EDEMA IN A GREYHOUND

Alexander Aceino#, Unity Jeffery, and Carolyn Hodo
Texas A&M University

Keyword: Neoplasia

Veterinary Student Presenter

2:45 p.m.-2:50 p.m.

PROGNOSTIC FEATURES OF CANINE GLIAL TUMORS

Joshua L. Merickel, G. Elizabeth Pluhar, and Gerard O'Sullivan

University of Minnesota

Veterinary Student Presenter

2:50 p.m.-2:55 p.m.

UNIQUE CLINICAL PRESENTATION OF MANDIBULAR
OSTEOMYELITIS IN A WALLABY

Allison Gerras¹, Kimberly Thompson², and Victoria Watson¹

¹Michigan State University, ²Binder Park Zoo

Veterinary Student Presenter

2:55 p.m.-3:00 p.m.

SPECIFIC IN SITU DETECTION OF TRYPANOSOMA CRUZI IN
CHAGAS DISEASE

Anna K. Blick and Raquel R. Rech

Texas A&M University

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-3:40 p.m.

METASTATIC CERVICAL PARAGANGLIOMAS WITH BONE
INVASIONS IN TWO DOGS

Albert Jeon[#], Lilian Oliveira, Alexis Livacarri, Christina Scanlon, Philip Hamel, Erin Porter, and Jeffrey Abbott

University of Florida

Keyword: Neoplasia

3:40 p.m.-3:50 p.m.

CANINE EXTRA-GASTROINTESTINAL STROMAL TUMORS

Hannah Laurence[#], Lauren Harris, and Juan Muñoz
Gutiérrez

Colorado State University

Keyword: Neoplasia

3:50 p.m.-4:00 p.m.

HISTOLOGY GUIDED MASS SPECTROMETRY ACCURATELY
DISTINGUISHES BENIGN AND MALIGNANT SKIN MELANOMAS
IN DOGS

Caitlin Brown^{1#}, Katy Smoot², Matthew Powell², and Yava Jones-Hall¹

¹Purdue University, ²New River Labs

Keyword: Skin

4:00 p.m.-4:10 p.m.

PUTATIVE EPIDERMOLYSIS BULLOSA IN A LITTER OF NEONATAL
BASSET HOUNDS

Teresa Garcia[#] and Duncan Russell

Oregon State University

Keyword: Skin

4:10 p.m.-4:20 p.m.

A NOVEL BURSAL VIRUS, VISCERAL GOUT, AND CEREBRAL
VASCULAR URATE DEPOSITION IN A DOUBLE-CRESTED
CORMORANT, PHALACROCORAX AURITUS

Bianca Pfisterer[#], Cheryl Greenacre, Mohamed Abouelkhair,
Stephen Kania, and Mee-Ja Sula

University of Tennessee

Keyword: Wildlife

4:20 p.m.-4:30 p.m.

MENINGEAL GRANULAR CELL TUMOR IN THE CEREBRUM OF A
GREEN TREE PYTHON (MORELIA VIRIDIS)

Daniel Finnegan^{1#}, Andrew Cartoceti, Amanda Hauck¹, and
Elise LaDouceur¹

¹Joint Pathology Center, ²Smithsonian National Zoo

Keyword: Wildlife

4:30 p.m.-4:40 p.m.

PSITTACOSIS IN A CAT (FELIS DOMESTICUS)

Hailey Sanderson, Marce Vasquez, Hally Killion, Kerry
Sondgeroth, and Jonathan Fox

University of Wyoming

Keyword: Infectious Disease

4:40 p.m.-4:50 p.m.

HISTOPATHOLOGIC CHARACTERIZATION OF SYNOVIAL
BIOPSIES FROM CLINICAL CANINE PATIENTS WITH CRANIAL
CRUCIATE LIGAMENT DISEASE

Kei Kuroki¹, Ned Williams², and James Cook¹

¹University of Missouri, ²Eastern Carolina Veterinary Referral

Keyword: Bone and Joint

4:50 p.m.-5:00 p.m.

HISTIOCYTIC SARCOMA IN TWO FREE-RANGING FLORIDA
MANATEES (TRICHECHUS MANATUS LATIROSTRIS)

David Rotstein¹, Martine deWit², Nicole Stacy³, and Mike
Kinsel⁴

¹Marine Mammal Pathology Services, ²Florida Fish and
Wildlife Conservation Commission, ³University of Florida
College of Veterinary Medicine, ⁴University of Illinois
Zoological Pathology Program

Keyword: Wildlife

#ACVP/AAVLD Diagnostic Pathology Travel Award competitor

1:30 p.m.-5:00 p.m.

Salon J

Experimental Disease Focused Scientific Session I

Focused Group Chair: Oded Foreman

Focused Group Members: Vivian Chen, Sanjeev Gumber
(Past Chair), Stephanie Montgomery, Chris Pinelli, Sara
Santagostino (Co-Chair), Manu Sebastian, Joshua Webster,
and Kevin Woolard

1:30 p.m.-1:35 p.m.

INTRODUCTION

Oded Foreman, DVM, DACVP

Genentech Inc., South San Francisco, CA

Invited Speaker

1:35 p.m.-2:30 p.m.

THE CONNECTION BETWEEN CANCER AND THE GUT MICROBIOME

Vanessa B. Jensen, DVM, DACLAM

University of Texas MD Anderson Cancer Center, Houston, TX

2:30 p.m.-2:45 p.m.

PATHOLOGY OF THE BLOOD-TUMOR BARRIER IN THE DEVELOPMENT OF NON-SMALL CELL LUNG CANCER BRAIN METASTASES

L. Tiffany Lyle, Alexandra Dieterly, Chinyere Kemet, Hsin-Yi Weng, Arvin Soepriatna, Craig Goergen, Aparna Shinde, Michael Wendt, and Gozde Uzunalli

Purdue University

Keyword: Neoplasia

2:45 p.m.-3:00 p.m.

REQUIREMENT OF STEROL REGULATORY ELEMENT-BINDING PROTEIN PATHWAY IN PANCREATIC DUCTAL ADENOCARCINOMA

Stephanie Myers, Meredith McGuire, Wei Shao, Chune Liu, Theodore Ewachiw, Zeshaan Rasheed, William Matsui, and Peter Espenshade

Johns Hopkins University

Keyword: Liver and Pancreas

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

Invited Speaker

3:30 p.m.-4:30 p.m.

ANALYZING GENETIC AND MICROENVIRONMENTAL MEDIATORS OF CARCINOGENESIS WITH THE ZEBRAFISH MODEL

Heather R. Shive, DVM, PhD, DACVP

The Ohio State University Columbus, OH

4:30 p.m.-4:45 p.m.

EARLY INFLAMMATORY LESIONS IN THE PROXIMAL OVIDUCT OF THE LAYING HEN: PRECURSORS TO OVARIAN CARCINOMA

K. Denise Apperson¹, Karyn Bird², Gita Cherian², and Christiane Löhr²

¹Arkansas Veterinary Diagnostic Lab | Oregon State University, ²Oregon State University

Keyword: Reproductive System

4:45 p.m.-5:00 p.m.

AGE-RELATED DIFFERENCES IN THE PATHOGENESIS OF CLADE 2.3.4.4A H5N2 HPAIV IN COMMERCIAL BROAD BREASTED WHITE TURKEYS

Silvia Carnaccini¹, Daniel Perez¹, Daniela Rajao¹, Jefferson Santos¹, Adebimpe Obadan¹, Mary Pantin-Jackwood², and David Suarez²

¹University of Georgia, ²U.S. Department of Agriculture

Keyword: Avian

1:30 p.m.-5:00 p.m.

Salon E

Natural Disease Focused Scientific Session II

Focused Group Chair: Angela Pillatzki

Focused Group Members: Pompei Bolfa, Julie Engiles (Co-Chair), Brandon Plattner, Simon Priestnall, and Dan Rissi (Past Chair)

Platform Presentations

Invited Speaker

1:30 p.m.-2:30 p.m.

THE WONDERFUL WORLD OF VITAMIN D: BONE DISEASE AND MORE

Keren E. Dittmer, BVSc, Dist PhD, DACVP

Massey University, Palmerston North, New Zealand

2:30 p.m.-2:45 p.m.

CATASTROPHIC TIBIAL FRACTURES IN RACEHORSES

Monika Samol, Susan Stover, Francisco Uzal, and Rick Arthur

University of California, Davis

Keyword: Bone and Joint

2:45 p.m.-3:00 p.m.

MOLECULAR CHARACTERIZATION OF 119 MAMMARY CARCINOMAS IN PET RABBITS

Sophie Degner¹, Heinz-Adolf Schoon¹, Mathias Baudis², Claudia Schandelmaier³, Heike Aupperle-Lellbach³, and Sandra Schöninger⁴

¹University of Leipzig, ²Tierarztpraxis Ralf Bischoff,

³Laboklin GmbH & Co. KG, ⁴Targos Molecular Pathology GmbH

Keyword: Mammary

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-3:45 p.m.

SEVERE ESOPHAGITIS IS A COMMON CAUSE OF MORBIDITY IN CAPTIVE NAKED MOLE RATS

Wesley Siniard¹, Megan Smith², Rochelle Buffenstein², and Denise Imai-Leonard¹

¹University of California, Davis, ²Calico Life Sciences

Keyword: Alimentary

3:45 p.m.-4:00 p.m.

PATHOLOGY OF OPHIDIAN SERPENTOVIRUS INFECTIONS IN SNAKES

Robert Ossiboff

University of Florida

Keyword: Other

Invited Speaker

4:00 p.m.-5:00 p.m.

NEWLY DESCRIBED DISEASES IN ARCTIC FOXES, ELEPHANT SEALS, AND HARBOR SEALS

Terry Spraker, DVM, PhD, DACVP

Colorado State University, Fort Collins, CO

2:00 p.m.-5:00 p.m.

Conference Room 12

ACVP Council Meeting

2:30 p.m.-3:30 p.m.

Third Floor Foyer

Professional Photos

A professional photographer will be available to take your photo to use in your work environment. Thank you to IDEXX for sponsoring this area!

4:00 p.m.-6:00 p.m.

Conference Room 14

Exhibitor Hosted Session: Demystifying Deep Learning AI and Digital Pathology

Company Name: Aiforia, Inc.

Company Profile: The Aiforia AI cloud-platform increases the speed and accuracy of analyzing medical images. To train AI models, you point out what you look for, the platform does the rest. Detect subtle changes, increase consistency, and produce quantitative data starting today.

Session description:

Hands-on AI workshop: you will train your own AI model, live on “Aiforia Create”. Bring your laptop and mouse to learn how to annotate, train, and test neural networks. This will be run as a friendly competition. The lowest error rate walks away with a prize and bragging rights.

4:30 p.m.-6:00 p.m.

Salon D

ASVCP Business Meeting

5:00 p.m.-6:00 p.m.

Conference Room 4

Diversity Initiative Reception

All members are invited to attend!

5:15 p.m.-6:00 p.m.

Salon B

Maintenance of Certification Q&A Session

6:00 p.m.-7:30 p.m.

Salon E

ACVP Town Hall Business Meeting

All ACVP Diplomates are encouraged to attend and discuss timely College business topics such as the Affiliate Member proposals, progress on the 2018-2022 Strategic Plan, and updates on reports from 2019 task forces.

7:00 p.m.-9:00 p.m.

Salon D

Antech Reception (by invitation only)+

7:00 p.m.-9:00 p.m.

Salon J

The Ohio State University College of Veterinary Medicine Alumni Reception+

7:00 p.m.-9:00 p.m.

Conference Room 9

University of Florida College of Veterinary Medicine Alumni Reception+

7:00 p.m.-9:00 p.m.

Located off-site at Casa Rio (430 E. Commerce Street)

Virginia-Maryland Alumni Reception+

7:30 p.m.-8:45 p.m.

Salon I

ACVP Speed Networking

(pre-registration required)

7:30 p.m.-9:30 p.m.

Salon F

Mystery Slide Review: Neuropathology

Session Chair: Andrew Miller

Cornell University

Review the mystery slides and win a free beverage at the session! Check the ACVP website at www.acvp.org.

7:30 p.m.-9:30 p.m.

Conference Room 3

North Carolina State University Alumni Reception+

7:30 p.m.-9:00 p.m.

Conference Room 7

University of Pennsylvania School of Veterinary Medicine Alumni Reception+

7:30 p.m.-9:30 p.m.

Conference Room 4

Washington State University College of Veterinary Medicine Alumni Reception+

+Affiliate Event

Monday, November 11, 2019

6:30 a.m.-7:30 a.m.

Conference Room 11

Yoga for the Microscope (Chair Yoga)

Katherine Gibson-Corley, DVM, PhD, DACVP

All levels of experience welcome!

7:00 a.m.-6:00 p.m.

Conference Room 2

Speaker Ready Room

7:00 a.m.

Third Floor Foyer

Internet Station*Sponsored by VIN*

7:00 a.m.-8:00 a.m.

Conference Room 4

ACVP Council and Education Committee

7:00 a.m.-8:00 a.m.

Conference Room 9

ASVCP Veterinary Laboratory Professionals Program Committee

7:00 a.m.-8:00 a.m.

Meeting Off-Site at the Oro Restaurant

ASVCP Web Committee

7:00 a.m.-8:00 a.m.

Conference Room 15

IEPC Committee

7:00 a.m.-8:00 a.m.

Conference Room 7

Pathology Informatics Committee

7:00 a.m.-10:00 a.m.

Conference Room 8

C.L. Davis and S.W. Thompson Foundation Board of Directors+

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

Third Floor Foyer

Registration and Information Desk

8:00 a.m.-11:00 a.m.

Conference Room 10

Certifying Exam Board

8:00 a.m.-1:00 p.m.

Conference Suite 529

Lactation Room

(stop by the ACVP registration desk to pick up a key)

8:00 a.m.-12:00 noon

Salon F

ACVP and ASVCP Plenary Session***Cancer Immunotherapy*****Session Chairs:** Peter Vogel, DVM, PhD, DACVP

St. Jude Children's Research Hospital, Nashville, TN

Lauri Diehl, DVM, PhD, DACVP

Gilead Sciences, Inc., Foster City, CA

8:00 a.m.-9:00 a.m.

The End of the Beginning: Cancer, Immunity, and the Future of a Cure

Michael S. Kinch, PhD

Washington University, St. Louis, MO

9:00 a.m.-9:45 a.m.

T-cell Intrinsic and Extrinsic Mechanisms Limiting Tumor Immunotherapy

Benjamin A. Youngblood, PhD

St. Jude Children's Research Hospital, Memphis, TN

9:45 a.m.-10:15 a.m.

Salon K

Refreshment Break - Visit the Young Investigator Award Competitor and Late-Breaking Posters

10:15 a.m.-11:00 a.m.

New Approaches to Cancer Immunotherapy in Dogs: More Than Checkpoint Inhibitors

Steven Dow, DVM, PhD, DACVP

Colorado State University, Fort Collins, CO

11:00 a.m.-11:45 a.m.

Adoptive T Cell Therapies for Dogs with Cancer and Autoimmune Disease

Nicola Mason, BVetMed, PhD, DACVIM

University of Pennsylvania, Philadelphia, PA

11:45 a.m.-12:00 noon

Questions and Discussion

8:30 a.m.-12:00 noon

Salon C

ASVCP Veterinary Laboratory Professionals Session II**Session Chair:** Nicole Rosen, MT (ASCP)

8:30 a.m.-9:30 a.m.

Laboratory Professionals as Stewards for Quality Point-of-Care Testing

Kim Futrell, MT(ASC), MSHI

Orchard Software Company, Carmel, IN

9:30 a.m.-10:30 a.m.

A Tale of Four Glucose Measurements: Comparison of Three POC Glucometers to a Reference Standard

Aimee Brooks, MS, DVM, DACVECC
Purdue University, West Lafayette, IN

10:30 a.m.-11:00 a.m.

Salon K

Refreshment Break

11:00 a.m.-12:00 noon

Implementing a Point-of-Care Testing (POCT) Quality Assessment Program in an Academic Veterinary Medical Center: Challenges and Lessons Learned

Bente Flatland, DVM, DACVIM, DACVP
University of Tennessee, Knoxville, TN

9:00 a.m.-1:00 p.m.

Third Floor Foyer

ACVP Logo Merch for Sale!

9:00 a.m.-5:00 p.m.

Conference Room 1

Career Center

9:30 a.m.-1:00 p.m.

Salon K

Focused Scientific Poster Session B

9:30 a.m.-1:00 p.m.

Salon K

Exhibits Open

9:45 a.m.-10:15 a.m.

Salon K

Focused Scientific Poster Session B (authors present for questions and discussion)

12:00 noon-1:30 p.m.

Lunch Break (on your own)

12:00 noon-1:30 p.m.

Salon J

Community Service Activity

12:15 p.m.-1:45 p.m.

Salon C

Latin Comparative Pathology Group Presents

Session Chairs: Angela Arenas, DVM, PhD, DACVP
Texas A&M University

Ileana Miranda, DVM, MS
Cornell University

Melissa Sánchez, VMD, PhD, DACVP
Antech Diagnostics

Zoonotic Diseases: How Animals and Humans Trade Disease

Claus Buergelt, DVM, PhD, DACVP
University of Florida, Gainesville, FL

How Would You Call it: Axonal Swelling, Spheroid, or Dystrophy?

Ingrid D. Pardo, MS, DVM, DACVP
Pfizer, Groton, CT

Parrot Bornavirus

Jeann Leal, MS, DVM, PhD
Universidade Federal da Paraíba - UFPB (Brazil)

1:00 p.m.-5:00 p.m.

Conference Room 15

Relaxation Room

Sponsored by IDEXX

1:30 p.m.-3:30 p.m.

Salon B

ASVCP Case Discussion Session

Session Chair: Sharon M. Dial, DVM, PhD, DACVP
University of Arizona, Tucson, AZ

1:30 p.m.-4:00 p.m.

Salon E

70th Anniversary Pillars of Pathology

Session Chair: Krista La Perle, DVM, PhD, DACVP
The Ohio State University, Columbus, OH

Speakers:

1:30 p.m.-2:00 p.m.

Looking Through the Microscope at Seven Decades of ACVP History

Krista La Perle, DVM, PhD, DACVP

2:00 p.m.-2:30 p.m.

Clinical Pathology

Rose E. Raskin, DVM, PhD, MRCVS, DACVP
Purdue University, West Lafayette, IN

2:30 p.m.-3:00 p.m.

Diagnostic Pathology

M. Grant Maxie, DVM, PhD, DACVP
University of Guelph, Guelph, Ontario, Canada

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

Zoo & Wildlife Pathology

Linda J. Lowenstine, DVM, PhD, DACVP
University of California, Davis, CA

3:30 p.m.-4:00 p.m.

Lab Animal & Toxicologic Pathology

Jerrold M. Ward, DVM, PhD, DACVP

Global VetPathology, Montgomery Village, MD

2:00 p.m.-3:00 p.m.

Conference Room 14

Exhibitor Hosted-Session: What's New in IHC and ISH? New Multiplexing Technologies Enable Innovative Experiments

Company name: Roche Tissue Diagnostics

Company Profile: Roche offers DISCOVERY ULTRA instrument that provides the highest level of protocol flexibility for the most challenging assays and for rapid assay development. The thirty independent slide drawers allow for brightfield/immunofluorescence capabilities.

Session description:

Recent advances in immunohistochemistry (IHC) and in situ hybridization (ISH) detection chemistries have enabled new experimental approaches. It is now possible to detect multiple epitopes on a single slide with IHC, ISH and FISH, gene and protein IHC/ISH, mRNA or microRNA ISH. These multiplexed approaches increase the amount of information produced in a single experiment.

2:30 p.m.-4:30 p.m.

Conference Room 8

ACVP Test Writers Group

3:45 p.m.-5:15 p.m.

Conference Room 14

**ASVCP Education Forum for Discussion
*Teaching Practical QA/QC to Clinical Pathology Residents***

Session Chairs: Ashleigh W. Newman, VMD, DACVP
Cornell University College of Veterinary Medicine,
Ithaca, NY

Speaker:

Bente Flatland, DVM, DACVIM, DACVP
University of Tennessee, Knoxville, TN

4:00 p.m.-5:15 p.m.

Salon I

Veterinary Student and Resident Forum

4:00 p.m.-6:00 p.m.

Conference Room 5

Private Foundations Committee

4:30 p.m.-6:30 p.m.

Conference Room 4

Comparative Pathology Reception and Meeting+

5:00 p.m.-6:00 p.m.

Conference Room 12

ACVP Council Meeting

5:00 p.m.-7:00 p.m.

Located off-site at Maria Mia Mexican Bistro

(849 E. Commerce Street)

University of Tennessee Alumni and Friends Reception+

5:00 p.m.-6:30 p.m.

Salon J

C.L. Davis and S.W. Thompson Foundation Reception+

5:15 p.m.-6:45 p.m.

Salon D

ASVCP Reception

6:00 p.m.-7:30 p.m.

Salon B

ACVP New Diplomates Reception

Sponsored by IDEXX

6:00 p.m.-7:30 p.m.

Conference Room 11

**Iowa State University College of Veterinary Medicine
Alumni Reception+**

6:30 p.m.-8:00 p.m.

Conference Room 15

**University of Georgia College of Veterinary Medicine
Alumni Reception+**

7:00 p.m.-8:00 p.m.

Conference Room 14

**ASVCP Team Jeopardy: Clinical Pathologist and
Resident Meet and Greet**

7:00 p.m.-9:00 p.m.

Salon F

Mystery Slide Review Session: *Parasitology*

Session Chairs: Tanya LeRoith, DVM, PhD, DACVP
Virginia Tech, Blacksburg, VA

Gary Conboy, BSc, DVM, PhD
Atlantic Veterinary College, Prince Edward Island,
Canada

Francisco R. Carvallo, DMV, DSc, DACVP
CAHFS, San Bernardino, CA

Review the mystery slides and win a free beverage at the session! Check the ACVP website at www.acvp.org.

Final Program

7:00 p.m.-9:00 p.m.
Located off-site at Casa Rio (430 E. Commerce Street)
Colorado State University Pathology Alumni and Friends Reception+

7:00 p.m.-9:00 p.m.
Conference Room 8
Texas A&M University Alumni Reception+

7:00 p.m.-9:00 p.m.
Conference Room 7
University of California Davis College of Veterinary Medicine Alumni Reception+

8:00 p.m.-10:00 p.m.
Located at Yard House (849 E. Commerce Street)
Michigan State University Alumni Reception+

+Affiliate Event

Tuesday, November 12, 2019

6:30 a.m.-7:30 a.m.
Conference Room 11
Yoga Flow for the Necropsy Floor
Katherine Gibson-Corley, DVM, PhD, DACVP
All levels of experience are welcome.

7:00 a.m.
Third Floor Foyer
Internet Station
Sponsored by VIN

7:00 a.m.-6:00 p.m.
Conference Room 2
Speaker Ready Room

7:30 a.m.-3:30 p.m.
Third Floor Foyer
Registration and Information Desk
You are invited to attend the ACVP President's Reception at the end of today at 7:00 p.m. in Salon D!

7:00 a.m.-8:00 a.m.
Conference Room 4
ACVP Council and Certifying Exam Board

7:00 a.m.-8:00 a.m.
Conference Room 7
Past Presidents Breakfast

7:00 a.m.-8:00 a.m.
Conference Room 5
ACVP Finance Committee

7:00 a.m.-8:00 a.m.
Conference Room 10
Advocacy and Policy Committee

7:00 a.m.-8:00 a.m.
Conference Room 8
Lifelong Learning Committee

7:00 a.m.-8:00 a.m.
Conference Room 9
ACVP Annual Meeting 2023 Planning Group

8:00 a.m.-12:00 noon
Conference Room 12
ACVP Council Meeting

8:00 a.m.-3:30 p.m.
Conference Suite 529
Lactation Room
(stop by the ACVP registration desk to pick up a key)

8:00 a.m.-12:00 noon
Salon D
Mini-Symposium II
Challenges of Animal Models

Session Chairs: Mark J. Hoenerhoff, DVM, PhD, FIATP, DACVP
University of Michigan Medical School, Ann Arbor, MI

David K. Meyerholz, DVM, PhD, DACVM, DACVP
University of Iowa Carver College of Medicine, Iowa City, IA

Genetically engineered animal models are powerful tools utilized in biomedical research. However, a good understanding of the utility and limitations of these models is necessary in order to ensure proper interpretation, experimental rigor, and reproducibility. The veterinary pathologist plays a critical role in their proper use and interpretation, and should be included as an important member of any team utilizing these models. Although the use of genetically engineered animal models is widespread in research and have advanced the understanding of human disease, knowledge of appropriate model selection, various factors that influence interpretation, and an appreciation of the limitations of these models is important in their effectiveness and utility. In this session, we provide information on the common techniques of genetic manipulation, considerations when choosing the most appropriate model, common factors influencing interpretation of these models, and the pathologist's role in working with the investigator to establish optimal conditions for pathology endpoints when using these models. Examples of common pitfalls where the expertise of a pathologist would have prevented misinterpretation of these models will also be provided.

8:00 a.m.-8:30 a.m.
Opportunities and Latent Limitations of Gene Editing Techniques
David K. Meyerholz, DVM, PhD, DACVM, DACVP
University of Iowa Carver College of Medicine, Iowa City, IA

8:30 a.m.-9:00 a.m.

Choosing the Most Appropriate Models: Considerations When Studying Human Disease

Amanda Beck, DVM, DACVP

Albert Einstein College of Medicine/Albert Einstein Cancer Center, Bronx, NY

9:00 a.m.-9:30 a.m.

Common Factors (Gender, Strain, Age, Species) that Affect Interpretation

Cory Brayton, DVM, DACLAM, DACVP

Johns Hopkins University, School of Medicine, Baltimore, MD

9:30 a.m.-10:00 a.m.

Salon K

Refreshment Break - Visit the Focused Scientific Posters

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

Common Factors continued

10:30 a.m.-11:15 a.m.

Communication, Education, Interpretation: Putting it All Together

Mark J. Hoenerhoff, DVM, PhD, FIATP, DACVP

University of Michigan Medical School, Ann Arbor, MI

11:15 a.m.-12:00 noon

Panel Discussion

8:00 a.m.-12:00 noon

Salon E

Concurrent Session II

Emerging Technologies for Tissue-Based Analysis

Session Chairs: Joshua Webster, DVM, PhD, DACVP

Genentech, Daly City, CA

Christiane V. Löhr, DrMedVet, DVM, PhD, DACVP

Oregon State University, Corvallis, OR

Although traditional tools of pathology including gross examination, hematoxylin and eosin-based histopathologic interpretation, and immunohistochemistry are fundamental to a pathologist's daily work, the field of pathology is increasingly impacted by a multitude of new technologies. While digital pathology, whole-slide imaging, and image analysis have been applied across many sub-disciplines of veterinary pathology, and are becoming increasingly fundamental in many pathology workflows, additional imaging technologies that will impact pathologists in the future are emerging. While classical pathology approaches will not be replaced, it is important for pathologists to be aware of and engaged in these developing tissue imaging technologies. This session will include three speakers that will each provide unique perspectives on cutting edge technologies and/or adoption of these technologies including mass spectrometry based tissue imaging, cleared

tissue histology with multiphoton microscopy, and advances in novel microscopy technologies. The fourth speaker will discuss adoption of novel technologies in research pathology.

8:00 a.m.-8:55 a.m.

New Techniques in Tissue Imaging

Meredith S. Sagolla, PhD

Genentech, South San Francisco, CA

8:55 a.m.-9:45 a.m.

CHiMP - Practical, High Quality, Direct to Digital Histology

Richard Torres, MS, MD

Yale School of Medicine, New Haven, CT

9:45 a.m.-10:15 a.m.

Salon K

Refreshment Break - Visit the Focused Scientific Posters

10:15 a.m.-11:10 a.m.

Mass Spectrometry Imaging: A Review of Methodology and Potential Applications of this Emerging Technology in Pathology

Rajanikanth Maganti, BVSc, PhD, DACVP

Moderna, Inc., Cambridge, MA

11:10 a.m.-12:00 noon

Navigating the Promise and Perils of New Technology for Tissue-Based Analysis

Lauri Diehl, DVM, PhD, DACVP

Gilead, Foster City, CA

8:00 a.m.-12:00 noon

Salon B

Clinical Pathology Focused Scientific Session II

Focused Session Chair: Amy Warren

Focused Group Members: Shawn Clark, Mike Fry, Karen Jackson, Catherine Wagg, Valerie Wong, and Kathryn Wycislo

8:00 a.m.-8:15 a.m.

HEPATIC T CELL-RICH B CELL LYMPHOMA IN A YOUNG GREAT DANE

Gary Lee¹, Janet Beeler-Marfisi¹, Stefan Keller¹, Mei-Hua Hwang¹, Nikos Darzentas², Haiyang Chang¹, Emily Ratsep¹, Rebecca Egan¹, and Dorothee Bienzle¹

¹University of Guelph, ²Mazaryk University/University Hospital Schleswig-Holstein

Keyword: Neoplasia

8:15 a.m.-8:30 a.m.

RATES AND TYPES OF ERRORS AT A CLINICAL PATHOLOGY LABORATORY IN A VETERINARY TEACHING HOSPITAL

Kellie Whipple*, Mary Leissinger, and Sarah Beatty

University of Florida College of Veterinary Medicine

Keyword: Clinical Pathology

8:30 a.m.-8:45 a.m.

SCORING EXERCISE-INDUCED PULMONARY HEMORRHAGE:
ACCURACY OF HUMAN OBSERVER AND DEEP-LEARNING
BASED ALGORITHMS

Christof A. Bertram^{1*}, Christian Marzahl², Marc Aubreville²,
Jason Stayt³, Anne-Katherine Jasensky⁵, Florian
Bartenschlager¹, Marco Fragoso-Garcia¹, Samir Jabari²,
Svenja Elsemann⁴, Ann K. Barton¹, Andreas Maier², Jenny
Hill³, and Robert Klopffleisch¹

¹Freie Universität Berlin, ²Friedrich-Alexander-Universität

Erlangen-Nürnberg, ³VetPath Laboratory Services,

⁴Universitätsklinikum Erlangen, ⁵Laboklin GmbH und Co. KG

Keyword: Respiratory System

8:45 a.m.- 9:00 a.m.

DIFFERENTIAL GENE EXPRESSION AND IRON STORAGE
IN TUMOR AND NON-TUMOR TISSUE IN CANINE
HEPATOCELLULAR CARCINOMA

Klaudia Polak*, Paula Schaffer, Madison Zenk, Dillon
Donaghy, and Christine Olver

Colorado State University

Keyword: Liver and Pancreas

Invited Speaker

9:00 a.m.-10:00 a.m.

INTERNATIONAL REFERENCE PREPARATIONS FOR PROTEIN
BIOMARKER DEVELOPMENT FOR SPECIES-SPECIFIC ASSAYS
David Eckersall, BSc, MBA, PhD

University of Glasgow, Glasgow, United Kingdom of Great
Britain and Northern Ireland

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

10:30 a.m.-10:45 a.m.

A PANFUNGAL PCR ASSAY PERFORMED DIRECTLY ON STAINED
CYTOLOGY SLIDES

Alexandra Myers*, Zachary Seyler, Unity Jeffery, Sara
Lawhon, and Aline Rodrigues Hoffmann

Texas A&M University

Keyword: Infectious Disease

10:45 a.m.-11:00 a.m.

EFFICACY OF FOUNTAIN FLOW CYTOMETRY FOR RAPID
DETECTION OF BACTERIAL SEPSIS IN BODY CAVITY FLUIDS
Samantha Evans^{1, 2*}, Alexandra Bonney², Sara Wist², Paul
Johnson³, Kelly Santangelo²

¹The Ohio State University, ²Colorado State University,
³Softray, Inc.,

Keyword: Infectious Disease

11:00 a.m.-11:15 a.m.

VARIATION IN BIOCHEMISTRY TEST RESULTS BETWEEN
ANNUAL WELLNESS VISITS IN APPARENTLY HEALTHY GOLDEN
RETRIEVERS

Unity Jeffery¹, Nick Jeffery¹, Kate Creevy¹, Melissa Simpson²

¹Texas A&M University, ²Morris Animal Foundation

Keyword: Clinical Chemistry

11:15 a.m.-11:30 a.m.

VALIDATION OF THE CELLAVISION DM96 FOR MANUAL
RETICULOCYTE ENUMERATION

Amy DiDomenico^{1*}, Jan Andrews², and Greg Freeman²

¹North Carolina State University, ²Antech Diagnostics

Keyword: Hematology

11:30 a.m.-11:45 a.m.

CHANGES IN INTRAERYTHROCYTIC AND INTRALEUKOCYTIC
CELLULAR REACTIVE OXYGEN SPECIES IN LPS-INDUCED
SEPTIC HORSES

Priscila Serpa*, Andrea Pires dos Santos, and Sandra Taylor
Purdue University

Keyword: Hematology

11:45 a.m.-12:00 p.m.

THE ROLE OF PKC δ IN OUTSIDE-IN SIGNALING IN PLATELETS
Preeti Chaudhary and Soochong Kim

Chungbuk National University

Keyword: Hematology

*Competitor for the ASVCP Young Investigator Award

8:00 a.m.-12:00 noon

Salon C

Education Focused Scientific Session

Focused Group Chair: Mee-Ja Sula

Focused Group Members: Ana Alcaraz, Amanda Beck,
Phaedra Cole (Co-Chair), Abbie Durkes, Ingrid Pardo, Rachel
Mo-Peters (Past Chair), and Katie Wycislo

8:00 a.m.-8:05 a.m.

INTRODUCTION

Mee-Ja Sula, DVM, DACVP

University of Tennessee, Knoxville, TN

8:05 a.m.-9:30 a.m.

WELLBEING IN THE WORKPLACE: IDENTIFYING AND
RESPONDING TO MENTAL HEALTH NEEDS

Stephanie W. Johnson, BA, MSW, LCSW

Louisiana State University, Baton Rouge, LA

9:30 a.m.-10:00 a.m.

Salon K

Refreshment Break - Visit the Focused Scientific Posters

10:00 a.m.-11:50 a.m.

INDIVIDUAL WELLBEING: IDENTIFYING AND RESPONDING TO
YOUR OWN NEEDS

Stephanie W. Johnson, BA, MSW, LCSW

11:50 a.m.-12:00 noon

USE AND BENEFITS OF DISTANCE MENTORING IN VETERINARY
PATHOLOGY

Nicola Parry

Midwest Veterinary Pathology, LLC

Keyword: Mentoring

9:00 a.m.-12:00 noon
Conference Room 15
Relaxation Room
Sponsored by IDEXX

9:00 a.m.-1:00 p.m.
Third Floor Foyer
ACVP Logo Merch for Sale!

9:00 a.m.-5:00 p.m.
Conference Room 1
Career Center

9:30 a.m.-3:30 p.m.
Salon K
Focused Scientific Poster Session C

9:30 a.m.-3:30 p.m.
Salon K
Exhibits Open

10:00 a.m.-10:30 a.m.
Salon K
Focused Scientific Poster Session C (authors present for discussion and questions)

10:00 a.m.-11:00 a.m.
Conference Room 14
International Veterinary Pathology Coalition

12:00 noon-1:30 p.m.
Lunch Break (on your own)

12:15 p.m.-1:15 p.m.
Conference Room 4
ACVP Training Program Network Luncheon

1:30 p.m.-3:30 p.m.
Conference Room 7
ACVP/STP Coalition for Veterinary Pathology Fellows Board of Governors Meeting

1:30 p.m.-5:00 p.m.
Salon B
ASVCP Mystery Slide Case Session

Session Chair: Sharon M. Dial, DVM, PhD, DACVP

1:30 p.m.-5:00 p.m.
Salon D
Concurrent Session III
An Overview of Contemporary Topics on Chagas Disease in Wildlife, Domestic, and Laboratory Animals

Session Chairs: Gregory K. Wilkerson, DVM, PhD, DACVP
MD Anderson Cancer Center, Houston, TX

Carolyn L. Hodo, DVM, DACVP
Texas A&M University, College Station, TX

This half-day session will present an overview of *Trypanosoma cruzi* biology and will review contemporary information related to Chagas disease in domestic and laboratory animal species. The session will begin with talks on the life cycle and basic biology of *T. cruzi*, methods of diagnosis and strain differentiation, the epidemiology of Chagas disease in U.S. wildlife and domestic species and will discuss the zoonotic relevance of Chagas disease to their human owners. After the break, the session will include talks addressing the challenges of Chagas-related research, animal models commonly utilized in research, and Chagas pathology and epidemiology in naturally-infected and experimentally-infected nonhuman primates. The goal of this session is to provide a contemporary overview as to the importance of Chagas disease and Chagas disease research in the United States.

1:30 p.m.-2:10 p.m.
Brief Review of *Trypanosoma Cruzi* Biology and a Contemporary Overview of Chagas Epidemiology in Domestic Species Within the United States and the Zoonotic Relevance to Animal Owners
Sarah A. Hamer, PhD, DVM, DACVPM
Texas A&M University, College Station, TX

2:10 p.m.-3:00 p.m.
Contemporary Review of Chagas Disease Diagnoses Methods and Strain Typing and an Overview of Chagas Disease Epidemiology of Specific Wildlife Populations Within the United States
Carolyn L. Hodo, DVM, PhD, DACVP
Texas A&M University, College Station, TX

3:00 p.m.-3:30 p.m.
Salon K
Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-4:10 p.m.
Chagas Disease in Captive Nonhuman Primate Populations: Pathology, Epidemiology, and Diagnostic Challenges
Gregory K. Wilkerson, DVM, PhD, DACVP
MD Anderson Cancer Center, Bastrop, TX

4:10 p.m.-5:00 p.m.
The Current State and Challenges of Animal-Model Based Chagas Disease Research
Rick L. Tarleton, PhD
University of Georgia, Athens, GA

1:30 p.m.-5:00 p.m.

Salon E

Diagnostic Pathology Focused Scientific Session II

Focused Session Chair: Aline Rodrigues Hoffmann

Focused Group Members: Eric Burrough (Past Chair), Rachel Derscheid, Ian Hawkins, Fabiano Oliveira (Co-Chair), Heindrich Snyman, Francisco Uzal, and Arnaud Van Wettene

Platform Presentations

2018 ACVP/AAVLD Award Winner

1:30 p.m.-1:40 p.m.

A UNIQUE IMMUNOPHENOTYPE OF THYMOMA-ASSOCIATED LYMPHOCYTES IN A DOG

Yvonne Wikander, Calli Coffee, Mary Lynn Higginbotham, and Nora Springer

Kansas State University

Keyword: Neoplasia

1:40 p.m.-1:50 p.m.

DIFFERENTIATION OF FELINE INFLAMMATORY BOWEL DISEASE FROM SMALL CELL LYMPHOMA USING HISTOLOGY GUIDED MASS SPECTROMETRY

Sina Marsilio¹, Shelly Newman², J. Estep³, Paula Giaretta⁴, Jonathan Lidbury⁴, Emma Warry¹, Andi Flory⁵, Paul Morley⁴, Katy Smoot⁶, Erin Seeley⁶, Matt Powell⁶, Jan Suchodolski⁴, and Jörg Steiner⁴

¹Texas A&M University/University of California, ²Long Island University, ³Texas Veterinary Pathology, LCC, ⁴Texas A&M University, ⁵Veterinary Specialty Hospital, ⁶New River Labs, LLC

Keyword: Alimentary

1:50 p.m.-2:00 p.m.

HISTOPATHOLOGIC FEATURES OF A SYNDROME IN BERNESE MOUNTAIN DOGS CHARACTERIZED BY HEPATIC AND CEREBELLAR DEGENERATION

K. Paige Carmichael, Mauricio Seguel, and James Stanton

University of Georgia

Keyword: Nervous System

2:00 p.m.-2:10 p.m.

OLIG2 EXPRESSION IN FELINE EPENDYMOMA

Andrew Miller¹, Eric Glass², Marc Kent³, Daniel Rissi³, and John Edwards⁴

¹Cornell University College of Veterinary Medicine, ²Red Bank Veterinary Hospital, ³University of Georgia College of Veterinary Medicine, ⁴Texas A&M University College of Veterinary Medicine

Keyword: Nervous System

2:10 p.m.-2:20 p.m.

EVALUATION OF BETA AMYLOID PRECURSOR PROTEIN EXPRESSION IN TRAUMATIC BRAIN INJURY OF DOGS AND CATS

Timothy Wu and Teresa Southard

Cornell University College of Veterinary Medicine

Keyword: Nervous System

2:20 p.m.-2:30 p.m.

NEUTROPHILIC CHOLANGIOHEPATITIS/CHOLECYSTITIS CAUSED BY INTRABILIARY COCCIDIOSIS IN 3 DOGS

Eunju Choi¹, Manigandan Lejeune², and Amira Abdu³

¹University of California | Cornell University, ²Cornell University, ³Cornell University | Assiut University

Keyword: Liver and Pancreas

2:30 p.m.-2:40 p.m.

FIRST REPORT OF ADENOVIRAL HEMORRHAGIC DISEASE IN THREE MULE DEER (ODOCOILEUS HEMIONUS) IN ARIZONA

Sylvia Ferguson and Jung Keun Lee

Midwestern University College of Veterinary Medicine

Keyword: Infectious Disease

2:40 p.m.-2:50 p.m.

MOLECULAR AND PATHOLOGIC INVESTIGATION INTO PROTOZOAL ABORTION IN BRITISH COLUMBIA, CANADA
Stephen Raverty¹, Amy Sweeney², Elizabeth Zhang², Gloria Adedoyin², Josh Waddington³, Theresa Burns⁴, John Dick³, Carl Ribble⁴, Tomy Joseph¹, Devon Wilson⁵, and Michael Grigg²

¹Animal Health Center, ²National Institutes of Health,

³Greenbelt Veterinary Services, ⁴Center for Coastal Health,

⁵University of British Columbia

Keyword: Infectious Disease

2:50 p.m.-3:00 p.m.

A HISTOLOGICAL AND IMMUNOHISTOCHEMICAL ASSESSMENT OF ROUND CELL NEOPLASIA IN PSITTACINE BIRDS

Daniel Gibson¹, Nicole Nemeth², Hugues Beaufrère¹, Csaba Varga³, Michael Garner⁴, and Leonardo Susta¹

¹University of Guelph, ²University of Georgia, ³University of Guelph | Ontario Ministry of Agriculture, Food and Rural Affairs, ⁴Northwest ZooPath

Keyword: Neoplasia

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

3:30 p.m.-3:40 p.m.

NON-OCULAR MELANOCYTIC NEOPLASIA IN CATS: A RETROSPECTIVE STUDY OF 32 CASES

Stephanie Muller and Martina Croci

IDEXX

Keyword: Neoplasia

3:40 p.m.-3:50 p.m.

ICHTHYOPHONUS INFECTION IN OPALEYE (*GIRELLA NIGRICANS*)
Elise LaDouceur¹, Judy St. Leger², Alexandria Mena³, Ashley Mackenzie⁴, and Paul Hershberger⁴

¹Joint Pathology Center, ²Cornell University, ³SeaWorld,

⁴U.S. Geological Survey

Keyword: Wildlife

3:50 p.m.-4:00 p.m.

OROPHARYNGEAL TRICHOMONAS GALLINAE INFECTION IN A WESTERN SCREECH OWL (*MEGASCOPS KENNICOTTII*)

Devinn Sinnott¹, Mai Mok², Michelle Hawkins¹, Eliza

Burbank³, Richard Gerhold³, and Kevin Keel¹

¹University of California, Davis, ²Necropsy Services Group,

³University of Tennessee, Knoxville

Keyword: Wildlife

4:00 p.m.-4:10 p.m.

GROSS AND HISTOLOGIC LESIONS IN STRANDED DOLPHINS FOLLOWING FRESH WATER INCURSION IN THE MISSISSIPPI SOUND

Timothy Morgan¹, Debra Moore¹, Mystera Samuelson², and Moby Solangi²

¹Mississippi State University, ²Institute for Marine Mammal Studies

Keyword: Wildlife

4:10 p.m.-4:20 p.m.

HISTOLOGIC AND ULTRASTRUCTURAL FINDINGS OF NUCLEOPOLYHEDROVIRUS (*BACULOVIRIDAE*) AND CYPOVIRUS (*REOVIRIDAE*) IN EUROPEAN GYPSY MOTH CATERPILLARS (*LYMANTRIA DISPAR DISPAR*)

Elise LaDouceur

Joint Pathology Center

Keyword: Wildlife

4:20 p.m.-4:30 p.m.

PARVOVIRUS INFECTION IN A RESCUED FREE-RANGING TAIWANESE PANGOLIN (*MANIS PENTADACTYLA* PENTADACTYLA), TAIWAN

Wen-Ta Li¹, Li-Hsin Wu², Sin-Ling Wang², and Eric Hsien-Shao Tsao²

¹Taiwan University | Fishhead Lab LLC, ²Taipei Zoo

Keyword: Wildlife

4:30 p.m.-4:40 p.m.

MELANOPHOROMAS AND PROGRESSIVE CUTANEOUS MELANOSIS IN A GOLDFISH (*CARASSIUS AURATUS*)

Devinn Sinnott, June Ang, Katherine Watson, Esteban Soto, Denise Imai-Leonard, and Verena Affolter

University of California, Davis

Keyword: Wildlife

4:40 p.m.-4:50 p.m.

PYOTHORAX AND PLEURITIS ASSOCIATED WITH PORPHYROMONAS SPP IN A BENNETT'S WALLABY

Ahmad Saied and Stephan J. Locke

University of Kentucky Veterinary Diagnostic Laboratory

Keyword: Wildlife

4:50 p.m.-5:00 p.m.

CORYNEBACTERIUM FRENEYI BACTERIAL SEPTICEMIA SECONDARY TO CONTAGIOUS ECTHYMA IN A WILD MUSKOXEN (*OVIOS MOSCHATUS*)

Jamie Rothenburger¹, Juliette Di Francesco¹, Krista La Perle², Lisa-Marie Leclerc³, Frank van der Meer¹, Erin Zabek⁴, and Susan Kutz¹

¹University of Calgary, ²The Ohio State University,

³Government of Nunavut, ⁴British Columbia Ministry of Agriculture

Keyword: Wildlife

1:30 p.m.-5:00 p.m.

Salon C

Combined Experimental Disease and Industrial and Toxicologic Pathology Combined Focused Scientific Session

Experimental Disease Focused Group Chair: Oded Foreman

Focused Group Members: Vivian Chen, Sanjeev Gumber (Past Chair), Stephanie Montgomery, Chris Pinelli, Sara Santagostino (Co-Chair), Manu Sebastian, Joshua Webster, and Kevin Woolard

Industrial and Toxicologic Pathology Focused Group Chair: Katherine A.B. Knostman

Focused Group Members: Hibret Adissu, Marie Bockenstedt (Co-Chair), Shambhunath Choudhary, Sanjeev Gumber, Kyathanahalli Janardham (Past Chair), and Bruce LeRoy

1:30 p.m.-1:35 p.m.

INTRODUCTION

Oded Foreman, DVM, DACVP

Genentech Inc., South San Francisco, CA

Katherine A.B. Knostman, DVM, PhD, DACVP

StageBio, Mount Jackson, VA

Invited Speaker

1:35 p.m.-2:30 p.m.

CIRCULATING MICRORNAS AS BIOMARKERS OF CANINE CANCER

Geoffrey A. Wood, DVM, PhD, DVSc

Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada

2:30 p.m.-2:45 p.m.

FLOW CYTOMETRY PROVIDES QUANTITATIVE DATA FOR BONE MARROW SAFETY EVALUATION IN INVESTIGATIVE ONCOLOGY MOUSE MODELS

Clare Hoover, Denise Hughes, Laura Prickett, Courtney Andersen, Jay Mettetal, Mark Anderton, Sean Redmond, and Kim Maratea

AstraZeneca

Keyword: Hematopoietic System

2:45 p.m.-3:00 p.m.

I SPY WITH MY (VIRTUAL) EYE: ASSESSMENT OF A MURINE MODEL OF CLOSTRIDIUM DIFFICILE TYPHLITIS BY TRADITIONAL MICROSCOPY AND BY A DEEP LEARNING ARTIFICIAL NEURAL NETWORK

Ingrid Bergin, Evan Czyzycki, Benjamin Li, Michael Dieterle, Kathryn Eaton, Mark Hoenerhoff, Jenna Wiens, and Vincent Young

University of Michigan

Keyword: Alimentary

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

Salon K

Refreshment Break - Visit the Focused Scientific Posters

Invited Speaker

3:30 p.m.-4:30 p.m.

HYDROGEN SULFIDE-INDUCED NEUROTOXICITY

Elizabeth McRae Whitley, DVM, PhD, DACVP

MD Anderson Cancer Center, Houston, TX

4:30 p.m.-4:45 p.m.

LONGITUDINAL PHENOTYPIC DEVELOPMENT IN A PIG MODEL OF NEUROFIBROMATOSIS 1

David Meyerholz¹, Johanna Uthoff¹, Jared Larson¹, Shawn Sato¹, Emily Hammond¹, Frank Rohret², Christopher Rogers², Dawn Quelle¹, Benjamin Darbro¹, Rajesh Khanna³, Jill Weimer⁴, and Jessica Sieren¹

¹University of Iowa Carver College of Medicine, ²Exemplar Genetics, ³University of Arizona, and ⁴Sanford Research

Keyword: Neoplasia

4:45 p.m.-5:00 p.m.

3-DIMENSIONAL HISTOLOGIC MODELS OF CANINE HEPATIC FIBROSIS FOR QUANTIFICATION AND TEACHING MODEL DEVELOPMENT

T. William O'Neill and Christiane V. Loehr

Oregon State University

Keyword: Liver and Pancreas

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

Salon K

Focused Scientific Poster Session C (authors present for discussion and questions)

5:15 p.m.-6:45 p.m.

Salon I

ACVP Awards and Recognition Event

6:30 p.m.-7:30 p.m.

Third Floor Foyer

Last Chance to Purchase Your ACVP Logo Merch!

7:00 p.m.-9:30 p.m.

Salon D

ACVP President's Reception

All attendees are welcome at the President's Reception!

Cocktail attire suggested.

Wednesday, November 13, 2019

6:30 a.m.-7:30 a.m.

Conference Room 11

Yoga for Relaxation

Katherine Gibson-Corley, DVM, PhD, DACVP

All levels of experience are welcome.

7:00 a.m.-10:30 a.m.

Conference Room 2

Speaker Ready Room

7:00 a.m.-8:00 a.m.

Conference Room 4

ACVP Focused Scientific Group Breakfast

8:00 a.m.-12:00 noon

Conference Suite 529

Lactation Room

(stop by the ACVP registration desk to pick up a key)

8:00 a.m.-12:00 noon

Conference Room 12

ACVP Council Meeting

8:00 a.m.-12:30 p.m.

Third Floor Foyer

Registration and Information Desk

Daily evaluation surveys are in your email box. Please give us your feedback!

8:00 a.m.-12:00 noon

Salon D

Concurrent Session IV: One Liver Health: Comparative Hepatic Pathobiology

Session Chairs: Chandra Saravanan, DVM, MS, PhD, DACVP
Novartis Institutes for Biomedical Research, Cambridge, MA

Arlin B. Rogers, DVM, PhD, DACVP

Alnylam Pharmaceuticals, Cambridge, MA

This session brings a One Health approach to the liver. Topics covered include animal models of nonalcoholic steatohepatitis (NASH), scoring and translating experimental NASH data to humans, how sexual bias in human liver disease is replicated in rodents, domestic animal liver diseases with close human counterparts, and nonhuman primate model contributions to the intervention of chronic viral hepatitis.

8:00 a.m.-8:40 a.m.

Humanized Mouse Models

Karl-Dimiter Bissig, MD, PhD

Baylor College of Medicine, Houston, TX

8:40 a.m.-9:20 a.m.

Translational Aspects of NAFLD/NASH Models: A Pathologist's Perspective

Chandra Saravanan, DVM, PhD, DACVP

9:20 a.m.-10:00 a.m.

Pathology of Proliferative Liver Lesions in Rodent Models and Their Relevance to Humans

Bhanu P. Singh BVSc, MS, DABT, FIATP, DACVP

Johnson & Johnson Pharmaceutical Research & Development, Philadelphia, PA

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

Third Floor Foyer

Refreshment Break—Visit the Young Investigator Award Winning Posters

10:30 a.m.-11:10 a.m.

Most Human Liver Diseases Show a Sex Bias: Why?

Arlin B. Rogers, DVM, PhD, DACVP

11:10 a.m.-11:50 a.m.

Domestic Animal Liver Diseases With Human Correlates

John Cullen, VMD, PhD, FIATP, DACVP

North Carolina State College of Veterinary Medicine, Raleigh, NC

11:50 a.m.-12:00 noon

Questions and Discussion

8:00 a.m.-12:00 noon

Salon B

Concurrent Session V

A Timely Update on Transboundary Animal Diseases

Session Chairs: A. Sally Davis, DVM, PhD
Kansas State University, Manhattan, KS

Angela Arenas Gamboa, DVM, PhD, DACVP
Texas A&M University, College Station, TX

We will focus on emerging transboundary animal diseases, particularly in larger production animals, including pigs, small and large ruminants. Both bacterial and viral pathogens, some vector-borne diseases, will be included. Specific diseases will include foot and mouth disease, Senecavirus disease, Rift Valley fever and brucellosis. While invited talks will all focus on pathology of these diseases, the talks may also cover current understanding of the mechanisms of disease pathogenesis, epidemiology, diagnostics, control, vaccine and therapy status, as well as obstacles to disease management in endemic countries. Look-a-like diseases will be discussed.

8:00 a.m.-8:40 a.m.

Senecavirus A and FMD: The New Normal for Differential Diagnosis of Vesicular Disease In Pigs

Fabio Vannucci, DVM, PhD, DBAVP

University of Minnesota, Minneapolis, MN

8:40 a.m.-9:20 a.m.

Brucellosis: A Neglected or Emerging Disease?

Angela M. Arenas Gamboa, DVM, PhD, DACVP

9:20 a.m.-10:00 a.m.

Rift Valley Fever Virus: A Category A Enigma

A. Sally Davis, DVM, PhD

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

Third Floor Foyer

Refreshment Break--Visit the Young Investigator Award Winning Posters

10:30 a.m.-11:10 a.m.

Reproductive Infectious Diseases in Ruminants: What We Should Be Looking For

John F. Edwards, DVM, PhD, DACVP

Texas A&M University, College Station, TX

11:10 a.m.-12:00 noon

Case Presentations:

11:10 a.m.-11:45 a.m.

Foot and Mouth Disease: The Case of Ngamiland: When is a Disease Not a Disease

Mary Louise Penrith, BSc, BSc (Hon), PhD Zoology, PhD Entomology, BVSc, BVSc (Hon)

University of Pretoria, Menlo Park, South Africa

11:45 a.m.-12:00 noon

Rift Valley Fever Virus in White-tailed Deer (*Odocoileus virginianus*)

Vinay Shivanna, BVSc, MVSc, PhD

Kansas State University, Manhattan, KS

8:00 a.m.-12:00 noon

Salon I

Mini-Symposium III

Select Topics in Veterinary Forensic Pathology

Session Chairs: Sean P. McDonough, DVM, PhD, DACVP
Cornell University, Ithaca, NY

Beverly J. McEwen, DVM, MSc, PhD, DACVP
University of Florida College of Medicine, Gainesville, FL

8:00 a.m.-8:05 a.m.

Introduction

Sean P. McDonough, DVM, PhD, DACVP

Beverly J. McEwen, DVM, MSc, PhD, DACVP

8:05 a.m.-9:00 a.m.

Lessons Learned From the Goudge Commission on the Status of Service, Education, and Research in Forensic Pathology

Michael Pollanen, MD, PhD, FRCPATH, DMJ (PATH), FRCPC
University of Toronto, Toronto, Ontario, Canada

Final Program

9:05 a.m.-10:00 a.m.

Introduction to Crime Scene Investigation: What the Pathologist Needs to Know

Jason Byrd, PhD

William R. Maples Center for Forensic Medicine,
Gainesville, FL

10:00 a.m.-10:15 a.m.

Third Floor Foyer

Refreshment Break—Visit the Young Investigator Award Winning Posters

10:15 a.m.-11:00 a.m.

Case Study of a Gunshot Wound in a Dog and Gunshot Residue Analysis

Jason W. Brooks, VMD, PhD, DACVP

William R. Maples Center for Forensic Medicine,
Gainesville, FL

11:05 a.m.-12:00 noon

Standards for Forensic Pathology

Hannah C. Jarvis, MBBS, AICSM BSc(Hons), MRCS(Eng), FCAP,
FASCP

Harris County Institute of Forensic Sciences

8:00 a.m.-12:00 noon

Third Floor Foyer

ACVP Young Investigator Award Recipient Poster Session

12:00 noon

Annual Meeting Concludes