

ACVP & ASVCP

2013 Concurrent Annual Meeting

November 16-20

Le Westin Hotel and

Palais des congres de Montréal

Montréal, Québec, Canada



Final Program



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STUDENT CHAPTER TRAVEL AWARDS

ACVP thanks the following for providing Student Chapter Travel Awards:

- · Michael and Kimberly Topper
- Novartis

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(as of October 1, 2013)

ASVCP 2013 SPONSORS

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- A special thank you to the authors of Veterinary Hematology: Atlas of Common Domestic and Non-Domestic Species (2nd Edition), published by Wiley Blackwell

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ACVP & ASVCP 2013 • Montréal, QC		

INTRODUCTION

Welcome to Montreal and the 2013 Annual Meeting of the American College of Veterinary Pathologists (ACVP) and the American Society for Veterinary Clinical Pathology (ASVCP)! We appreciate your attendance and are confident you will enjoy this year's outstanding program. In the following paragraphs you will find a day to day summary of the meeting events. There are a variety of session topics that cater to diagnostic, experimental, industrial or research pathology. Regardless of your background, there is something for everyone at this year's meeting.

- Saturday, November 16. Get a head start and jump in with one of the interesting pre-meeting workshops. This year's C.L. Davis workshop is headlined by Brian Wilcock and will cover a host of diagnostic pathology topics from his vast experience including eye, dermatology and GI biopsies of the dog and cat. The primate pathology group will again host an all day workshop on malaria in primates. The ASVCP program will focus on "writing for publication in veterinary medicine" and will be headed by Drs. Mary Christopher and Karen Young. The first day wraps up with the ASVCP Teaching Clinical Pathology session (6:00 p.m.-8:00 p.m.) and of course the Opening Reception (7:00 p.m.).
- Sunday, November 17. Sunday is the first day of the general sessions. The theme for this year's ASVCP Education Symposium will be "It's Elementary: Evidence-Based Cytology". The Career Development Symposium (AM) is titled "I was not Trained for This!" and will explore the transition into new roles outside of bench pathology. The day is packed with focused scientific sessions (natural disease, experimental disease, diagnostic pathology, clinical pathology and industrial/toxicologic pathology) in the morning and afternoon. Invited speakers in the morning will discuss topics ranging from mouse models to Beluga whales, depending on the session. The morning sessions also include a mini-symposium entitled "Pathology and Toxicology of Alternative Therapeutics (stem cells, oligos, and nanos)" which will explore the side effects of new therapeutic treatments. The cast of international speakers will cover alternative medications beyond the little white pills typical of western medicine. In a first for the ACVP, from 11:00 a.m. to 12:00 noon this session will be summarized in French, for the benefit of our Quebec hosts. From 12:15 p.m. to 1:15 p.m., the Emerging Disease Session will focus on Schmallenberg virus, an emerging teratogenic vector borne viral disease of ruminants.

Sunday afternoon will host the first of three ASVCP Laboratory Professionals sessions; this one focusing on hematology and reticulocytes. Afternoon focused scientific sessions will include topics ranging from malignant hematopoiesis, vasculogenomics, reproductive toxicologic pathology, bovine pancytopenia and canine respiratory disease. In the evening, the ASVCP Business Meeting (4:30 p.m.) and the ACVP Town Hall meeting (6:00 p.m.) will finish just in time for attendees to make it to the Mystery Slide Review: Neuropathology beginning at 7:30 p.m.

- Monday, November 18. Monday morning contains the plenary session focusing on "Epigenetics". The session, chaired by Marshall Scicchitano, will explore the regulation of genomic processes (gene expression or cellular phenotype) through means other than genetic sequence, such as via DNA methylation or chromosomal histone modification and its roles in disease and development. This in-depth introduction of the epigenetics topic is at the forefront of science and should be extremely valuable to pathologists involved in a wide range of scientific and clinical disciplines. The second ASVCP Laboratory Professionals session, chaired by Nicole Rosen, will run concurrently. Of course, back by popular demand, Monday afternoon is open for participants to enjoy all of the shopping, dining and sight-seeing in the fabulous and beautiful Montreal area! However, be sure to make it back in time for either the Mystery Slide Seminar: Cattle Diseases or the ASVCP Clinical Chemistry Review Session, both beginning at 7:00 p.m., as well as the many receptions that occur on Monday evening.
- Tuesday, November 19. Tuesday morning will host the first two concurrent sessions. "Mitochondria in Health and Disease" is chaired by Dr. Kevin French and covers that tiny but critically important-to-life subcellular organelle. The session will explore the roles of mitochondria in veterinary and human disease as well as a target for drug-related injury. The second session focuses on emerging and important diseases of cattle, and is geared predominantly for the diagnostic pathologist; however, there will be topics of interest for virtually anyone involved in infectious disease research. The focused scientific sessions will wrap-up including the education focused group and clinical pathology in the morning, and diagnostic pathology, experimental disease and industrial and toxicological pathology in the afternoon. The afternoon will also see the ever popular ASVCP Case Review Session. Do not forget to plan for the Awards and Recognition Event (5:15 p.m.) and the Presidential Reception (7:00 p.m.).
- Wednesday, November 20. Last, but surely not least and guaranteed to please: Wednesday morning is highlighted by three outstanding concurrent sessions. Michael Leach chairs a session on the Microbiome, which will explain "How the Billions of Organisms that Co-Inhabit Animals and Humans Maintain Health and Cause Disease." This session will particularly look at the microflora in veterinary disease. In addition, there will also be a mini-symposium covering "Osteochondrosis" in a variety of species (including humans), hosted by Dr. Cathy Carlson. Finally, in a session ripped from today's headlines, Dr. Mac Law will chair a session entitled "Mini-Symposium: Gulf of Mexico Deepwater Horizon Oil Spill: Response, Research and Perspectives". This session will look at the long term and unforeseen effects and challenges from the BP oil spill. Post-meeting workshops will begin at 1:00 p.m. and include a presentation on Practical Morphometry and Stereology, hosted by Visiopharm. This session includes hands-on training and is a "must" for pathologists who are beginning quantitative pathologic interpretation research. Running concurrently in the afternoon will be a workshop entitled, "Comparative Pathology Toolbox: Tools for Meaningful Assessment of Animal Models" and of particular interest for those in experimental pathology and performing animal model work.

Although continuing education is always paramount, make sure to take time to visit Montreal, renew relationships with old friends and colleagues, and make plans to see them again at next year's ACVP meeting in Atlanta (2014).

We would like to extend thanks to the sponsors and exhibitors that support this meeting. Special thanks also go to Jane Shepard, Wendy Coe, and the staff for their tireless contributions to the ACVP and the Annual Meeting. The organization and implementation of the Annual Meeting could not move forward without their hard work. Thanks are due to the host of volunteers on the ACVP Education Committee, ASVCP Program Committee, Focused Scientific Session Committee, individual session chairs, ACVP Council and executive staff that have teamed together to present this meeting to you. Lastly, we would like to thank the membership of the ACVP and ASVCP for their attendance and participation, without which this meeting would not be possible.

Ken Frazier, DVM, PhD* 2013 ACVP Annual Meeting Program Chair

Jennifer A. Neel, DVM* 2013 ASVCP Annual Meeting Program Chair

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Program Chair

Kendall S. Frazier, DVM, PhD*

Education Committee

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Gary L. Cockerell, DVM, PhD*

Kendall S. Frazier, DVM, PhD*

Keith Mansfield, DVM, PhD*

Bruce H. Williams, DVM*

ACVP FOCUSED SCIENTIFIC GROUPS

Focused Scientific Group Chair

Shelley J. Newman, DVM, DVSc*

Focused Scientific Group Co-Chair and Awards Chair

Lauri J. Diehl, DVM, PhD*

Clinical Pathology

Anne Provencher Bolliger, DVM, MSc, DECVCP, FIATP* (Chair)

Carolyn N. Grimes, DVM*

Dennis B. DeNicola, DVM, PhD*

Charles E. Wiedmeyer, DVM, PhD*

Angela Wilcox, BVSc, MS, DABT*

Diagnostic Pathology

Barbara Lewis, DVM* (Chair)

Akinyi C. Nyaoke, DVM, MSc* (Co-Chair)

Stephen A. Raverty, DVM, PhD*

David S. Rotstein, DVM, MPVM*

Francisco A. Uzal, DVM, PhD* (Past Chair)

Education

Amy L. Warren, BSc, BVSc* (Chair) Ana Alcaraz, DVM, PhD* (Past Chair) Thomas E. Cecere, DVM, PhD* (Co-Chair) Catherine Lamm, DVM* Jeanine Peters, DVM* Melissa D. Sanchez, VMD, PhD*

Experimental Disease

Katherine N. Gibson-Corley, DVM, PhD* (Chair) Mihai Gagea, DVM, DVSc* Justin J. Greenlee, DVM, PhD* (Past Chair) Sebastien Monette, DVM, MVSc* Brandon L. Plattner, DVM, PhD* (Co-Chair) Robert W. Read, DVM, PhD*

Industrial and Toxicologic Pathology

Manu M. Sebastian, DVM, PhD* (Chair)
Curtis Colleton, DVM*
Mike Conner, DVM* (Co-Chair)
Daniela Ennulat, DVM, PhD*
Mark Hoenerhoff, DVM, PhD* (Past Chair)
Gopinath Palanisamy, DVM, PhD*
Vito G. Sasseville, DVM, PhD*
Bhanu Singh, DVM*

Natural Disease

Jens-Peter Teifke, DVM* (Chair)
Gary Haldorson, DVM, PhD*
Ingeborg Langohr, DVM, PhD* (Co-Chair)
Andrew D. Miller, DVM*
Bradley L. Njaa, DVM, MVSc* (Past Chair)
Daniel R. Rissi, DVM, PhD*
Nobuko Wakamatsu, DVM, PhD*

2013 ASVCP PROGRAM COMMITTEE

Jennifer A. Neel, DVM* (Chair)
Anne Provencher Bolliger, DVM, MSc, DECVCP, FIATP*
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Joanne Messick, VMD, PhD*
M. Judith Radin, DVM, PhD*
Nicole Rosen, MT(ASCP)
Laura Snyder, DVM*
Susan J. Tornquist, DVM, PhD*
Linda Vap, DVM*
Marlyn S. Whitney, DVM, PhD*

REGISTRATION

The Registration Area will be located on the Fifth Floor in the 517E Foyer at the Palais des congrès de Montréal and open during the following hours:

Saturday, November 16	7:00 a.m7:30 p.m.
Sunday, November 17	•
Monday, November 18	
Tuesday, November 19	7:30 a.m.–5:00 p.m.
Wednesday, November 20	8:00 a.m1:00 p.m.

You will notice that there are fewer paper handouts this year and more information online and available through the smart phone application. We are making an effort to be more environmentally-friendly but still providing attendees with the information they need to have a successful conference. Please give us your feedback on the electronic evaluation form you receive by email after the meeting is over.

MEETING ROOMS

Please take time to explore the Palais des congrès de Montréal to locate the session rooms for the ACVP/ASVCP meeting so that it is not too confusing when you are trying to find them in a hurry! All the scientific sessions are located on the fifth level of the Center.

Palais des congrès de Montréal (Montréal Convention Center)

All sessions are located on the fifth (5) floor of the Convention Center except the Presidential Reception, which is located on floor seven (7).

LeWestin Hotel

Floor 3

- BonsecoursNotre-Dame
- Papineau
- St-Sulpice
- Youville

Floor 8

- Beaver Hall
- Ramezay
- St-Paul

- McGillPalais
- Ste-Helene
- Viger

i didio

Floor 9

- Fortifications Ballroom
- St-Antoine
- · Ville-Marie

Floor 11

· Montreal Ballroom

SOCIAL MEDIA

Facebook - www facebook com

Please contribute to our ACVP Meetings and Topics Facebook page and our Student Facebook page during the Annual Meeting. Let other members know your impressions of the sessions you attend, as well as your overall experience at this year's meeting in Montreal.

Twitter - www.twitter.com



Want to stay connected with @ACVP and other meeting attendees? Are you excited about a session? Or a poster? Or want your friends to bid on a silent auction item for a great

cause? Or you just found the best restaurant in Montreal for lunch? Follow us on Twitter for information about sessions and new findings revealed by our presenters. We want to hear from you too! Hashtag your tweets #ACVPmeet or comment to @ACVP directly and keep us in the loop.

Mobile App

Download the free ACVP and ASVCP Annual Meeting mobile app through the iTunes store or Google Play. Access the personal scheduler, abstracts, program, proceedings, and more information about the Annual Meeting in Montreal!

Wireless Internet Service

Wireless internet service will be available free of charge in the Center this year. If you are traveling from another country, please check your cell phone plan for international rates. Otherwise, please put your phone on airplane mode while accessing the ACVP App at the Center (if previously downloaded).

CONTINUING EDUCATION CREDITS

This program was reviewed and approved by the AAVSB RACE program for a maximum of 45.5 hours of continuing education. Participants should be aware that some boards have limitations on the number of hours accepted in certain categories and/or restrictions on certain methods of delivery of continuing education. Please contact the AAVSB RACE program if you have any comments/concerns regarding this program's validity or relevancy to the veterinary profession.

ASVCP-VLP is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS PACE Program.

This program meets the requirements for up to 9 hours of continuing education credit for Clinical Laboratory Scientists in jurisdictions which recognize PACE credits.

CAREER CENTER

ACVP is once again hosting its Career Center at the 2013 Annual Meeting, offering an uncommon opportunity for recruiters, employers, veterinary pathologists, trainees and students to meet each other, drop off or receive CVs, arrange on-site interviews or just explore opportunities in veterinary pathology.

The Career Center kicks off on Saturday in Room 521A at the Palais des congrès de Montréal.

Open hours are:

Saturday, November 16	1:00 p.m8:30 p.m	١.
Sunday, November 17	9:00 a.m5:00 p.m	١.
Monday, November 18	9:00 a.m5:00 p.m	١.
Tuesday, November 19	9:00 a.m5:00 p.m	١.

The online Career Center continues until December 30 on the ACVP website at www.acvp.org.

INTERNET STATION

Sponsored by VIN

An Internet Station will be available during the following hours. It will be located in the 517C Foyer at the Palais des congrès de Montréal, next to registration.

Saturday, November 16	1:00 p.m.–8:30 p.m.
Sunday, November 17	7:00 a.m.–7:30 p.m.
Monday, November 18	7:00 a.m.–5:00 p.m.
Tuesday, November 19	7:00 a.m.–5:00 p.m.

VIN is also offering free wi-fi in the Internet Station this year.

ACVP TOWN HALL BUSINESS MEETING

Sunday, November 17, 2013 6:00 p.m.–7:30 p.m.

Room 519, Palais des congrès de Montréal

Several recent changes have been made regarding the Certification Examination. Mike Topper, Secretary—Treasurer, Anne Barger, Councilor, and Keith Harris, Chair, Certifying Examination Board, will update the membership on releasing results of the examination to candidates and sponsors, passing sections of the examination after 2015, and more formal mentorship for candidates pursuing dual certification. Mandy Fales-Williams, Chair of the Maintenance of Certification Development Committee, will provide an update of the online web portal for maintenance of certification credits. Maxey Wellman, President, will moderate the program. Member participation in these discussions is welcome and encouraged.

SPEAKER READY ROOM

The Speaker Ready Room is located in Room 521B at the Palais des congrès de Montréal. Speakers (oral presenters) are required to download their presentation in the Speaker Ready Room prior to their session (please see the schedule below). The Speaker Ready Room will be open at the following times:

Saturday, November 16	12:00 noon–7:00 p.m.
Sunday, November 17	7:00 a.m.–6:00 p.m.
Monday, November 18	7:00 a.m.–6:00 p.m.
Tuesday, November 19	7:00 a.m.–5:00 p.m.
Wednesday, November 20	7:00 a.m.–11:30 a.m.

Below are scheduled check-in times for speakers. Please review and make note of these times.*

If Your Presentation Date/Time is	Then Your Time to Load Your Presentation is
Sunday, November 17 Between 8:00 a.m.–12:00 noon	Report prior to 7:00 p.m. on Saturday, November 16
Sunday, November 17 Between 1:30 p.m.–5:00 p.m.	Report prior to 10:30 a.m. on Sunday, November 17
Monday, November 18 Between 8:00 a.m.–12:00 noon	Report prior to 6:00 p.m. on Sunday, November 17
Tuesday, November 19 Between 8:00 a.m.–12:00 noon	Report prior to 6:00 p.m. on Monday, November 18
Tuesday, November 19 Between 1:30 p.m.–5:00 p.m.	Report prior to 10:30 a.m. on Tuesday, November 19
Wednesday, November 20 Between 8:00 a.m.–12:00 noon	Report prior to 5:00 p.m. on Tuesday, November 19
Wednesday, November 20 Between 1:00 p.m.–5:00 p.m.	Report prior to 10:30 a.m. on Wednesday, November 20

^{*}All pre-meeting workshop presenters are to report to their meeting room thirty (30) minutes in advance of the beginning of the session. They do not need to check-in at the Speaker Ready Room. All other speakers need to report to the Speaker Ready Room (does not apply to poster presenters).

FOCUSED SCIENTIFIC POSTER SESSIONS

Focused Scientific Posters will be available for viewing in Room 517C at the Palais des congrès de Montréal at the following times:

Sunday, November 17	9:30 a.m4:30 p.m.
Monday, November 18	9:30 a.m1:00 p.m.
Tuesday, November 19	9:30 a.m3:30 p.m.

Poster Setup:

Sunday, November 177:00 a.m.-9:00 a.m.

Poster Teardown:

Tuesday, November 19......3:30 p.m.-4:30 p.m.

New this year: session chairs at the Focused Scientific Session platform presentations will be asking their attendees to visit the posters of their respective focused groups during the refreshment break. Please plan to be at your poster during the refreshment break times corresponding with the Focused Scientific Group platform presentations. Please see below for the corresponding refreshment breaks and when you need to be present at your poster:

- Clinical Pathology Posters: Refreshment breaks on Sunday afternoon and Tuesday morning
- Diagnostic Pathology Posters: Refreshment breaks on Sunday afternoon and Tuesday afternoon
- · Education Posters: Refreshment break on Tuesday morning
- Experimental Disease Posters: Refreshment breaks on Sunday morning and Tuesday afternoon
- Industrial and Toxicologic Pathology Posters: Refreshment breaks on Sunday afternoon and Tuesday afternoon
- Natural Disease Posters: Refreshment breaks on Sunday morning and Sunday afternoon

ACVP Veterinary Student Posters will be available for viewing in Room 517C during the same hours as listed above. The setup and teardown dates and times are the same as the Focused Scientific Group posters.

WELCOME VETERINARY STUDENTS!

ACVP welcomes students from the Université de Montréal to participate in activities scheduled for Sunday, November 17:

Concurrent Sessions	8:00 a.m12:00 noon
Emerging Disease Focus Seminar	12:15 p.m1:15 p.m.
IDEXX Veterinary Student Luncheon (all students)1:30 p.m2:30 p.m.
Meet the Pathologists (in French)	2:30 p.m3:30 p.m.
Focused Scientific Poster Session	3:30 p.m4:30 p.m.

AWARDS

ACVP/AAVLD DIAGNOSTIC PATHOLOGY TRAVEL AWARD

The American College of Veterinary Pathologists (ACVP) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD) encourage trainees in veterinary pathology to participate in the Annual Meetings of both organizations. The Sixth Annual ACVP/AAVLD Diagnostic Pathology Travel Award is available to graduate students and/or residents in veterinary pathology for travel to and participation in the Annual Meeting of the AAVLD. The recipient will be awarded a \$1,000 grant from the ACVP to help defray travel and lodging costs associated with attending the AAVLD Annual Meeting. The recipient will be granted a waiver for the AAVLD meeting registration fee. The recipient will be announced at the ACVP Awards and Recognition Event on Tuesday, November 19 from 5:15 p.m.—6:45 p.m. in Room 519 at the Palais des congrès de Montréal.

<u>Travel Award Judges</u> Thomas Cecere, DVM, PhD* Robert A. Foster, BVSc, PhD* Murray J. Hazlett, DVM, DVSc* Margaret A. Miller, DVM, PhD*

ACVP YOUNG INVESTIGATOR AWARDS

The ACVP has established a Young Investigator Award Poster Competition in four categories: diagnostic pathology, experimental disease, industrial and toxicologic pathology, and natural disease. Each of these categories will have monetary awards of \$500 for first place; \$300 for second place; and \$200 for third place. Judging will take place at the Annual Meeting.

The ACVP Young Investigator Award winner's names will be announced to the membership at the ACVP Awards and Recognition Event (Tuesday, November 19 at 5:15 p.m. in Room 519 at the Palais des congrès de Montréal.). Winners are asked to come to the front of the room for a photo after the Event.

Recipients of the 2013 ACVP Young Investigator Awards are asked to display their poster in the 517C Foyer on Wednesday, November 20 from 8:00 a.m.–12:00 noon. Posterboards will be provided for the display.

ACVP Young Investigator Award Judges

<u>Diagnostic Pathology</u> Dominique Fournier, DVM, MVetSci* Ingeborg Langohr, DVM, PhD* Lanny Pace, DVM, PhD* Rebecca Smedley, DVM*

Experimental Disease Gillian L. Beamer, VMD, PhD* Lisa Berman-Booty, VMD, PhD* Richard Luong, BVSc* Joshua Webster. DVM. PhD*

Natural Disease
Dalen Agnew, DVM*
Rachel E. Cianciolo, VMD, PhD*
Katherine Gibson-Corley, DVM, PhD*
Patricia Pesavento. DVM. PhD*

Industrial and Toxicologic Pathology Keith Nelson, DVM, PhD* Gopinath Palanisamy, DVM, PhD* Joshua R. Powe, BVSc, MVS, PhD* Leah Schutt, DVM, DVSc*

Alternate Judges: Eric A. Blomme, DVM, PhD* Mary E. Carsillo, DVM* Dimitry M. Danilenko, DVM, PhD*

ASVCP LIFETIME ACHIEVEMENT AWARD

2013 Recipient: Dr. Jeanne W. George

Congratulations to Dr. Jeanne George for receiving the 2013 ASVCP Lifetime Achievement Award! Jeanne completed her DVM, internship, and residency at Cornell University and her PhD at the University of Georgia. Since then, she has spent most of her incredibly productive career at the University of California-Davis, where she is now Professor Emeritus of Clinical Pathology. The following passages from letters of support for Jeanne's nomination give some insights into her contributions to the field and her positive influence on the lives of the people around her

Jeanne was a stellar, if not daunting, mentor with a passion for all things misunderstood or underappreciated (electrolytes, urinalysis, refractometers, large animals)! She had an unbridled passion for teaching. She would literally fly into the room chuckling about the pattern of phosphorus in goats or handing you the 1960's "original article" that she had promised you on titrational acidosis. In resident gatherings (even now), we can all recite her list of sayings...I still find myself teaching current DVM students about electrolytes and repeating...now, "when Dr. George was here...she would have told you..." and I am not talking about history...and how things have changed...but rather I am always amazed at how what she taught continues to withstand the test of time. Finally, Jeanne was always the right balance of hard task master and loving life mentor. She cried at our weddings and she fussed over our kids. She shared with us her own personal trials and tribulations as well as her successes. Although retired, Jeanne occasionally comes through the halls and loves to provide her congratulations for accomplishments or share photos of her son and his family. She has retired gracefully...caring about all the right things...but keeping in touch with her professional family and her academic home. Dori Borjesson, DVM, PhD, Dipl. ACVP

One of the most significant things about Jeanne for me is the amazing desire she creates in her students to do better, understand more thoroughly, and constantly challenge clinical knowledge. *Joanne Hodges, DVM, Dipl. ACVP*

My sense is that the deepest, most lasting contribution Jeanne has made to our field is as a mentor to so many aspiring veterinary clinical pathologists. She was an exacting mentor to me, tough but caring. *Mike Fry, DVM, MS, Dipl. ACVP*

Quite honestly, prior to working directly with Dr. George, I was a bit intimidated by her productivity, knowledge, and reputation for demanding excellence in study and work, particularly in the area of clinical chemistry, electrolytes and acid/base balance. It only took a short time for me to realize that this accomplished woman was a kind, patient and gentle teacher. I feel fortunate to have been able to interact with her at ASVCP meetings and eventually serve with her in ASVCP leadership positions. Jeanne taught me so many new concepts in clinical chemistry and related the concepts to daily practice of clinical pathologists. In a friendly way, she challenged all around her to rise to her level of knowledge and practice. She is a tremendous mentor who is dedicated to quality in work and study of veterinary clinical pathology, and I am very proud to call her my colleague. *Eric Schultze, DVM, PhD, Dipl. ACVP, Fellow IATP*

ASVCP YOUNG INVESTIGATOR AWARD

The ASVCP presents a \$500 Young Investigator Award to the resident or graduate student whose oral platform presentation is judged best among the competing presentations. Eligibility requirements include a degree in veterinary medicine and enrollment in a residency or graduate program in pathology/clinical pathology or a related discipline. The oral presentation must describe original work of the competitor involving clinical or experimental research that relates to clinical pathology. Award selection is determined by an independent panel of judges and is based on the scientific content, abstract composition, clarity of presentation, and the contestant's ability to answer questions. The recipient of the ASVCP Young Investigator Award will be announced at the start of the ASVCP Case Review Session scheduled for Tuesday, November 19 at 1:30 p.m. in Room 524A at the Palais des congrès de Montréal.

Judges

Jed Overmann, DVM* M. Judith Radin, DVM, PhD* Leslie Sharkey, DVM, PhD* Tracy Stokol, BVSc, PhD*

SOCIETY OF TOXICOLOGIC PATHOLOGY (STP) STUDENT POSTER AWARD

Purpose

The Society of Toxicologic Pathology (STP) is pleased to announce the Seventh Annual STP Student Poster Award to encourage students to pursue careers in the field of Toxicologic Pathology. The award recipient will receive free registration plus \$1,000 to be used for lodging and travel to the 2014 STP Annual Meeting, which will take place June 22-26, in Washington, DC, and may be asked to present the poster at that meeting.

Eligibility

To be eligible to compete for this award, students must be currently enrolled in a veterinary medicine program, or have obtained a degree in veterinary medicine and be enrolled in a residency or graduate program in toxicologic pathology/general pathology/clinical pathology or a related discipline. The abstract must describe original work of the competitor involving clinical or experimental research that relates to industrial and/or toxicologic pathology. The content may include in vitro or in vivo studies. The award selection will be determined by an independent panel of judges and will be based on the scientific content, composition of the poster, clarity and the presenter's ability to answer questions. Trainees in clinical and/or morphologic pathology are encouraged to apply for the award.

Application and Selection Procedure

The award will be given to the veterinary resident or graduate student whose poster is judged best among up to five finalists at the ACVP/ASVCP Annual Meeting. The applicant should follow the guidelines for application for the ACVP YIA in Industrial and Toxicologic Pathology to be eligible for this award.

Award Announcement

The recipient will be announced at the ACVP Awards and Recognition Event on Tuesday, November 19, 2013 from 5:15 p.m.–6:45 p.m. in Room 519 at the Palais des congrès de Montréal.

Student Poster Award Judges Wayne Dochterman, DVM* Jessica S. Hoane, DVM* Keith G. Nelson, DVM, PhD*

VETERINARY STUDENT POSTER AWARDS

For the tenth year in a row, ACVP is offering an award for veterinary students, which requires submission of an abstract followed by a quality poster presentation of pathology-related research work or clinical case material. The posters will be judged by the Student Chapter Committee representatives during the Annual Meeting. There will be two awards this year, one for an experimental disease poster and one for a clinical case report/series. A monetary prize of \$250 will go to the recipients (for group entries, the award is split amongst members) with another award of \$250 to the recipients' ACVP-recognized Student Chapter. Awards will be announced at the ACVP Awards and Recognition Event, on Tuesday, November 19 starting at 5:15 p.m. in Room 519 at the Palais des congrès de Montréal. Candidates are encouraged to attend!

Veterinary Student poster abstracts are available on the ACVP website at www.acvp..org and on the mobile app.

Veterinary Student Poster Award Judges

Clinical Series/Case
Bruce E. LeRoy, DVM, PhD*
Elizabeth W. Uhl, DVM, PhD*

Experimental Disease

Amanda J. Fales-Williams, DVM, PhD* Janet C. Patterson-Kane, BVSc, PhD*

ACVP PRESIDENTIAL RECEPTION

This year, the Presidential Reception will be held in Room 710 at the Palais des congrès de Montréal on Tuesday, November 19 starting at 7:00 p.m. Each attendee and spouse/guest that registered in advance and checked the attendance box is entitled to one ticket to the Presidential Reception. Bring your badge with you as it will serve as your ticket to this Reception.

Thanks to Pfizer for sponsorship of this event!

ASVCP RECEPTION

All ASVCP members are invited to a reception being held on Monday, November 18, 2013 from 5:15 p.m.–6:45 p.m. in the Montreal Ballroom B at Le Westin Hotel. Please be sure to join your friends and colleagues!

PROGRAM EVALUATION FORMS

A link to the online evaluation survey will be emailed to you after the meeting is over. Please complete the survey online. The Education Committee and Council review your comments and suggestions for use in future meetings. Complete your form by December 20 to be eligible to win a complimentary registration to the 2014 Annual Meeting in Atlanta!

SILENT AUCTION

ACVP is proud to present its Tenth Annual Silent Auction at the 2013 Annual Meeting! Located in the Palais des congrès de Montréal, Room 517C, the Silent Auction will support externship scholarships for veterinary students exploring veterinary pathology as a career.

Visit the Silent Auction to place your bid on a treasure trove of items contributed by ACVP members and exhibitors. Silent Auction bids will be closed at 10:30 a.m. on Tuesday, November 19. The highest bids/bidders will be announced on Tuesday afternoon at the Silent Auction area. Plan to pickup your Silent Auction item at the ACVP Registration Desk located in the 517E Foyer at the Palais des congrès de Montréal prior to 1:00 p.m. on Wednesday, November 20.

MICROSCOPES AND SLIDE SETS

Mystery Slide Review and Neuropathology Case Presentations Sunday, November 17 from 7:30 p.m.–9:30 p.m. in Room 520C, Palais des congrès de Montréal.

Slide sets will be available for viewing in Room 517C on Sunday, November 17 from 9:30 a.m.—4:30 p.m. Microscopes will be available at Room 520C one hour prior to the session.

Mystery Slide Review: Cattle Diseases

Monday, November 18 from 7:00 p.m.–9:00 p.m. in Room 520C, Palais des congrès de Montréal.

Slide sets will be available for review in Room 517C on Sunday and Monday. Microscopes will be available at Room 520C one hour prior to the session.

ASVCP Case Review Session

Tuesday, November 19 from 1:30 p.m.–5:00 p.m. in Room 524A, Palais des congrès de Montréal.

Slide sets will be available for review in Room 517C on Sunday and Monday.

Please be sure to leave the slide sets intact when you are finished so that others can review them too.

Thanks to Olympus for providing the microscopes!

You can preview the Mystery Slide Session slides by going to www.scanscope.com and clicking on the ACVP folder. Viewing is available for all PC and Mac users with WebViewer.

ACVP thanks Aperio Technologies for facilitating the slide previews!

SPOUSE/GUEST REGISTRATION

Registration of a guest, spouse, or partner is \$65. This admits your guest to the ACVP Presidential Reception on Tuesday evening if they were pre-registered and indicated an interest in going. It also allows them access to the other social activities at the meeting; as well as the Student/Guest Hospitality Area in the St-Sulpice Room at Le Westin Hotel

If you have any questions, please visit the ACVP Registration Area at the 517E Fover at the Palais des congrès de Montréal.

STUDENT AND GUEST HOSPITALITY AREA

The Student and Guest Hospitality area will be open at the following times in the St-Sulpice Room at Le Westin Hotel:

Sunday, November 17	8:00 a.m.–5:00 p.m.
Monday, November 18	8:00 a.m.–5:00 p.m.
Tuesday, November 19	8:00 a.m.–5:00 p.m.
Wednesday, November 20	8:00 a.m11:00 a.m.

Meet friends and other guests in this area – all students are welcome.

COMMUNITY SERVICE LE COFFRE AUX TRESORS DU CHAINON

Did you register to attend the Community Service activity on Monday afternoon? If so, please meet in the lobby of Le Westin Hotel at 1:15 p.m.

Le Coffre aux tresors du Chainon offers some used and new merchandise at a very low price. The clothes, furniture and household items in the store are goods donated by members of the community. The revenue from these sales is the main source of funding for Le Chainon, which is a shelter for women. You will be involved with sorting clothes in the afternoon. Thank you for volunteering!

VERY IMPORTANT PATHOLOGIST PROGRAM

The Eighth Annual Very Important Pathologist Program is designed to give ACVP emeritus members, and those with 25+ years of certification, an opportunity to visit with old friends and colleagues, hear about the direction of the College, learn more about the history and local lore of the Annual Meeting site, and, of course, participate in the educational offerings of the scientific program at the Annual Meeting.

Tuesday, November 19, 2013

9:00 a.m.-4:30 p.m.

Meet in the Lobby of Le Westin Hotel at 8:45 a.m.

Schedule of Events

9:00 a.m. – 10:00 a.m.

Walking Tour of Old Montreal with one of Montréal's favorite guides. Starting from Le Westin Hotel and ending at Pointe-à-Callière Museum

10:00 a.m. – 11:30 a.m.

Visit Pointe-Callière Museum of Montreal History & Archaeology, accompanied by an archaeologist

- 11:30 a.m. 1:00 p.m.
 - Lunch at Café L'Arrivage (PAC Museum)
- 1:00 p.m. 1:30 p.m.
 - Transfer by mini-bus from PAC Museum to the Biodome
- 1:30 p.m. 4:00 p.m.
 - Tour of the Biodome and 'behind the scenes' with veterinarians and pathologists
- 4:30 p.m.

Back at Le Westin Hotel

Program Cost: \$135 per person. (Participants must also register to attend the Annual Meeting.)

ACVP/ASVCP PROCEEDINGS ONLINE!

The ACVP/ASVCP Proceedings will be available online (after the meeting) at the International Veterinary Informational Service website (www.ivis.org). The IVIS library also includes veterinary textbooks and proceedings of major national and international veterinary organizations. Access to the IVIS Website is free, however, it is reserved for members of the veterinary community (practicing veterinarians, veterinary students, and technicians and scientists active in animal health). First time visitors are required to complete a short registration form. Plan to visit the site in February to access the 2013 Proceedings!

2014 ANNUAL MEETING CALL FOR ABSTRACTS DEADLINE

July 1, 2014

FUTURE ANNUAL MEETING DATES AND SITES

2014 Annual Meeting

November 8-12, 2014

Marriott Marquis Hotel, Atlanta, Georgia USA

2015 Annual Meeting

Combined with the Society for Toxicologic Pathology October 17-21, 2015

Minneapolis Convention Center, Minneapolis, Minnesota USA

2016 Annual Meeting

New Orleans, Louisiana, USA

2017 Annual Meeting

Vancouver, BC, Canada

COUNCIL RECOGNITION

The following Council Members will soon be ending their terms. The Council extends their gratitude to these dedicated volunteers.

Claire Andreasen, DVM, PhD* Mark Simpson, DVM, PhD*

ACVP COUNCIL

President:

Maxey L. Wellman, DVM, PhD*

Vice President/President Elect:

Cory Brayton, DVM, PhD*

Secretary Treasurer:

Michael J. Topper, DVM, PhD*

Immediate Past President:

Claire Andreasen, DVM, PhD*

Councilors:

Anne M. Barger, DVM* Krista La Perle, DVM, PhD* Dave Malarkey, DVM, PhD* Mark Simpson, DVM, PhD*

ASVCP EXECUTIVE BOARD

President

Marlyn Whitney, DVM, PhD*

Immediate Past President Leslie Sharkey, DVM, PhD*

President-Elect

Anne Provencher Bolliger, DVM, MSc, DECVCP*

2nd Year Board Member Jeffery McCartney, DVM, MSc, DABT*

1st Year Board Member Linda Vap, DVM*

Secretary Robin Allison, DVM, PhD*

Treasurer Jennifer Johns, DVM, PhD*

EXHIBITORS

Exhibits are located in Room 517C at the Palais des congrès de Montréal. All refreshment breaks, poster sessions, and the Silent Auction are located there too. Plan time in your schedule to visit the exhibits!

Open hours:

0 0011 110 0101	
Saturday, November 16	7:00 p.m8:30 p.m.
	Opening Reception
Sunday, November 17	9:30 a.m4:30 p.m.
Monday, November 18	9:30 a.m1:00 p.m.
Tuesday, November 19	9:30 a.m3:30 p.m.

See page 121 of this final program book for a listing of exhibiting companies.

SAFETY AND SECURITY

To ensure the safety and security of our attendees and guests, we have composed the following list of safety rules and guidelines for this conference.

- Always check the fire evacuation routes on the back of your hotel room door when you arrive. Know where your exit is located.
- In case of an emergency while at Le Westin Hotel, please dial 0. The operator will respond, evaluate the emergency, and notify the proper authorities.

At the Palais, please contact the Security Operational Center immediately. It can be contacted 24/7 by dialing extension 3141 from any house phone located in the facility or 514-871-3141 with a cell phone or/and from the exterior. Any Palais personnel can also assist you. Contacting Security Operational Center will greatly minimize response time in the event an emergency medical unit has to be dispatched to the Convention Center. Security personnel can quickly assess the situation and lead emergency personnel (because of the size of the building and it's 16 entrances) directly to the individual in need, saving precious minutes. For this reason, the Palais requests that our clients and guests NOT contact 911 directly.

- 3. For emergency aid of any kind, call 911 from any telephone outside of the hotel/center grounds.
- 4. Review fire safety evacuation plans located on the walls near the event rooms at the Palais. Take note of the location of fire stairwells, manual fire alarms, and fire extinguishers. If an alarm is activated at the Palais (horns and strobe lights will be on), move towards the fire exits. In case of emergency, all elevators will return to the first floor, it is forbidden to use any escalators during this kind of situation. Listen carefully to any audio messages and instructions from the Palais staff. Monitors and security officers will assist participants in moving outside of the building.
- 5. Ask at the Westin Montreal front desk or concierge desk about the neighborhood around the hotel so you know what streets to avoid. Be aware of your surroundings while walking around downtown. Like any major city, Montreal is not immune from crime. Exercise caution at all times. Keep your bags and purses close to you when walking outside.
- When inside the conference venue, nametags should be worn and visibly displayed at all times. Security will ask for you to show your badge. You will not be allowed to enter meeting rooms or exhibit areas without them.

For security reasons, we recommend that you DO NOT wear your badge outside of the conference venue. If you lose your badge, please notify registration immediately. Walk in groups or take a taxi if walking long distances at night.

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- 7. Don't answer the door in a hotel room without verifying who it is. If a person claims to be an employee, call the front desk and ask if someone from their staff is instructed to perform a work task in your room. Elevators are only accessible with the guest room key.
- 8. Close the door securely whenever you are in your hotel room and use all of the locking devices provided.
- When returning to your hotel late in the evening, use the main entrance. Be observant and look around before entering parking lots.
- Place all valuables in the hotel's safe deposit box or the safe in your room.
- 11. Do not leave any items of value in your vehicle in the parking lot.
- 12. Please do not leave any bags or articles unsecured in any display area, meeting room, or public areas.
- 13. If you note any suspicious article, packages, persons, or activity please contact the ACVP staff at the registration desk or security immediately.
- 14. Do not give your lodging information to any person.
- 15. Do NOT open any fire exit or other access door to any person. Access to the conference is strictly for members and registered conference guests. All access to display areas and meetings is through the appropriate entrance doors.
- 16. If you see a demonstration or protest beginning, please contact any member of the Annual Meeting staff or security at the ACVP registration desk. They will initiate our Demonstration Response Plan. If you see actions that appear threatening, contact security at once.
- 17. Attendees at this conference are expected to maintain a level of decorum appropriate to the nature and purpose of our meeting. While exchange and debate is welcome where appropriate, any person who is disruptive or abusive in language or manner will be removed and barred from further conference proceedings.

Thank you for attending this meeting, and we hope you enjoy your experience.

COMMITTEE MEETINGS

The following committee meetings are scheduled at the ACVP/ASVCP Annual Meeting.

FRIDAY, NOVEMBER 15

ASVCP Executive Board

3:00 p.m.-9:00 p.m.

Youville, Le Westin Hotel, 3rd Floor

SATURDAY, NOVEMBER 16

ACVP Council

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

Room 448, MCC, 4th Floor

ASVCP Executive Board

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

Youville, Le Westin Hotel, 3rd Floor

ACVP Council and ASVCP Executive Board Meeting

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

Montreal B, Le Westin Hotel, 11th Floor

Veterinary Pathology Editors Luncheon

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

St-Antoine A, Le Westin Hotel, 9th Floor

ACVP Education Committee

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

Montreal D, Le Westin Hotel, 11th Floor

ASVCP Executive Board and Committees

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

St-Sulpice, Le Westin, 3rd Floor

Exam Committee

6:00 p.m.-9:00 p.m.

Montreal B. Le Westin Hotel. 11th Floor

ASVCP Education Committee

8:00 p.m.-9:00 p.m.

Ville-Marie A, Le Westin Hotel, 9th Floor

SUNDAY, NOVEMBER 17

ASVCP Regulatory Affairs Committee

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

St-Antoine A, Le Westin Hotel, 9th Floor

Intersociety Experimental Pathology (IEP) Committee

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

Papineau, Le Westin Hotel, 3rd Floor

Veterinary Pathology Editorial Board Meeting

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

Ville-Marie A, Le Westin Hotel, 9th Floor

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ACVP Council

8:00 a.m.-5:00 p.m. Room 448, MCC, 4th Floor

Veterinary Clinical Pathology Editorial Board Meeting

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

St-Antoine A, Le Westin Hotel, 9th Floor

MONDAY, NOVEMBER 18

ACVP Council and Exam Committee

7:00 a.m.-8:00 a.m. Montreal A, Le Westin Hotel, 11th Floor

ASVCP Quality Assurance and Standards Committee

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

Ville-Marie A, Le Westin Hotel, 9th Floor

ASVCP Program Committee

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

Papineau, Le Westin Hotel, 3rd Floor

Domestic Alliances Committee

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

St-Antoine B, Le Westin Hotel, 9th Floor

Training Program Committee

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

St-Antoine A, Le Westin Hotel, 9th Floor

Government Policy Committee

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

Bonsecours, Le Westin Hotel, 3rd Floor

Certifying Examination Board

7:00 a.m.-9:00 a.m.

Ville-Marie B, Le Westin Hotel, 9th Floor

ACVP Council and Education Committee

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

Montreal A, Le Westin Hotel, 11th Floor

TUESDAY, NOVEMBER 19

ASVCP Veterinary Laboratory Professionals Program Committee

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

Ville-Marie B, Le Westin Hotel, 9th Floor

ACVP Maintenance of Certification Development Committee

7:00 a.m.-9:00 a.m.

Ramezay, Le Westin Hotel, 8th Floor

Awards Committee

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

Ville-Marie A, Le Westin Hotel, 9th Floor

International Alliances Committee

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

Palais. Le Westin Hotel. 8th Floor

ACVP Council

8:00 a.m.-5:00 p.m. Room 448, MCC, 4th Floor

Introduction to the VCS/ACVP Joint Oncology Pathology Working Group

12:00 noon-1:30 p.m. Room 518C. MCC

Training Program Network Meeting

12:00 noon-1:30 p.m. Montreal D, Le Westin Hotel, 11th Floor

WEDNESDAY, NOVEMBER 20

Focused Scientific Groups Meeting

7:00 a.m.-8:00 a.m. Montreal A, Le Westin Hotel, 11th Floor

ACVP Council

8:00 a.m.-12:00 noon Room 447. MCC. 4th Floor

MCC=Montreal Convention Center / Palais des congrès de Montréal

CONCURRENT EVENTS

SATURDAY, NOVEMBER 16

Japanese Group of ACVP (JaGA)

8:00 p.m.-10:00 p.m. St-Antoine A, Le Westin Hotel, 9th Floor

SUNDAY, NOVEMBER 17

Pathology Chairs Breakfast

7:00 a.m.-9:00 a.m.

Ville-Marie B, Le Westin Hotel, 9th Floor

IDEXX Veterinary Pathology Resident Luncheon

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

Montreal B, Le Westin Hotel, 11th Floor

IDEXX/ACVP Veterinary Student Luncheon

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

Room 520B, MCC, 5th Floor

Council and Corporate Partners Reception

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

Ramezay, Le Westin Hotel, 8th Floor

Cornell University College of Veterinary Medicine Alumni Reception

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

Palais, Le Westin Hotel, 8th Floor

North Carolina State University College of Veterinary Medicine Alumni Reception

7:30 p.m.-9:00 p.m. Viger, Le Westin Hotel, 8th Floor

Antech Diagnostics Reception

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

Fortifications Ballroom, Le Westin Hotel, 9th Floor

Washington State University College of Veterinary Medicine Alumni Reception

7:30 p.m.-9:30 p.m. Ste-Helene, Le Westin Hotel, 8th Floor

MONDAY, NOVEMBER 18

The Latin Comparative Pathology Group Presents

12:15 p.m.-2:00 p.m. Room 518C, MCC

Latin Comparative Pathology Group Business Meeting

2:00 p.m.-3:00 p.m. Room 518C, MCC

Veterinary Student and Resident Forum

3:00 p.m.-5:00 p.m. Grande Place, Le Westin Hotel, 8th Floor

C.L. Davis Foundation Reception

5:00 p.m.-6:30 p.m. Montreal C, Le Westin Hotel, 11th Floor

ASVCP Reception (open to ASVCP members)

5:15 p.m.-6:45 p.m. Montreal B, Le Westin Hotel, 11th Floor

IDEXX Reception

5:30 p.m.-7:00 p.m. Ramezay, Le Westin Hotel, 8th Floor

Comparative Pathologists Consortium Reception

6:00 p.m.-8:30 p.m. McGill, Le Westin Hotel, 8th Floor

University of Georgia College of Veterinary Medicine Alumni Reception

6:30 p.m.-8:00 p.m. Palais, Le Westin Hotel, 8th Floor

Iowa State University College of Veterinary Medicine Alumni Reception

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

Viger, Le Westin Hotel, 8th Floor

University of California-Davis College of Veterinary Medicine Alumni Reception

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

Ste-Helene, Le Westin Hotel, 8th Floor

Ohio State University College of Veterinary Medicine Alumni Reception

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

Ville-Marie, Le Westin Hotel, 9th Floor

Colorado State University College of Veterinary Medicine Alumni Reception

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

St-Antoine A, Le Westin Hotel, 9th Floor

TUESDAY, NOVEMBER 19

ACVP Legacy Society Breakfast

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

Montreal C, Le Westin Hotel, 11th Floor

International Veterinary Pathology Coalition

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

Montreal A, Le Westin Hotel, 11th Floor

Very Important Pathologist Program

9:00 a.m.-4:30 p.m.

Meet in the Lobby of Le Westin Hotel at 8:45 a.m.

ACVP/STP Coalition for Veterinary Pathology Business Luncheon

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

Montreal B, Le Westin Hotel, 11th Floor

ACVP/STP Coalition for Veterinary Pathology Fellows Board of Governors Meeting

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

Ville-Marie A, Le Westin Hotel, 9th Floor

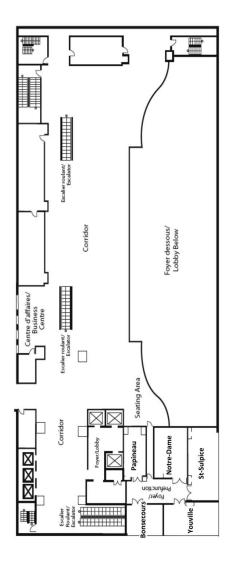
ACVP Presidential Reception

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

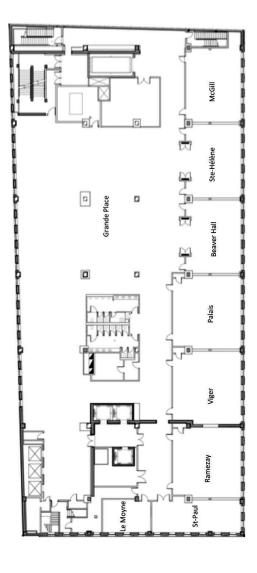
Room 710, MCC, 7th Floor

MCC=Montreal Convention Center / Palais des congrès de Montréal

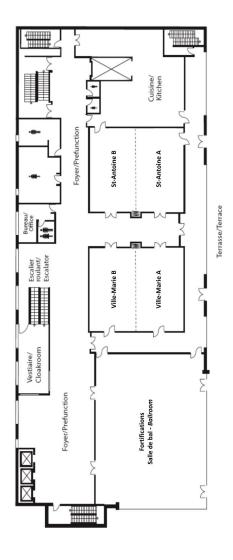
LE WESTIN MONTRÉAL - 3RD FLOOR



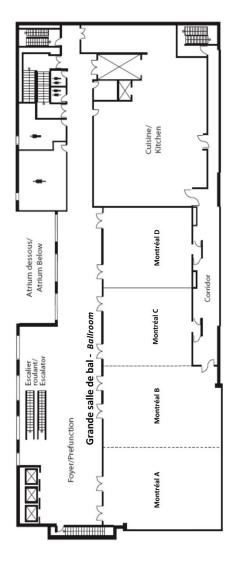
LE WESTIN MONTRÉAL - 8TH FLOOR



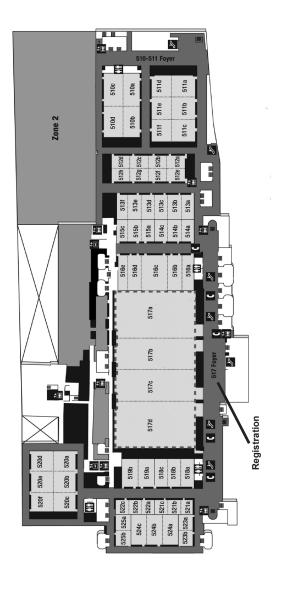
LE WESTIN MONTRÉAL - 9TH FLOOR



LE WESTIN MONTRÉAL - 11TH FLOOR



CONVENTION CENTER - 5TH FLOOR



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ACVP & ASVCP 2013 • Saturday, November 16

7:00 a.m.–7:30 p.m517E Foyer, MCC Registration
8:00 a.m5:00 p.m
Session Chairs: Mary M. Christopher, DVM, PhD, DECVCP* & Karen Young, VMD, PhD*
8:00 a.m5:00 p.m. Room 524, MCC C.L. Davis Pre-Meeting Workshop (available at an additional fee) A Day with Brian Wilcock Session Chair: Bruce Williams, DVM*
8:00 a.m5:30 p.m
12:00 noon-7:00 p.m
1:00 p.m8:30 p.m
1:00 p.m
5:30 p.m6:30 p.m. Room 518C, MCC Social Media: Using Connections to Find Your Career Path Speaker: Heather Jury, Senior Talent Sourcing Strategist, IDEXX Laboratories, Inc.
Sponsored by IDEXX Laboratories
6:00 p.m8:00 p.m
Session Chair: Jed Overmann, DVM*
7:00 p.m8:00 p.m

^{*} ACVP Diplomate

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7:00 a.m.-5:00 p.m.517E Foyer, MCC Registration Speaker Ready Room 7:00 a.m..... 517C Foyer, MCC Internet Station Sponsored by VIN 8:00 a.m.-5:00 p.m. St-Sulpice, Le Westin Hotel, 3rd Floor Student and Guest Hospitality Area ASVCP Education Symposium: It's Elementary: Evidence-**Based Cytology** Session Chair: Jennifer Neel. DVM* 8:00 a m -8:10 a m Introduction 8:10 a.m.-9:00 a.m. Evidence-Based Cytology: What is Evidence? Carlo Masserdotti, DVM, DECVCP

9:00 a.m.-9:50 a.m.

The Evidence-Based Approach to Changing the Routine Practice of Diagnostic Cytopathology and Resident Training Focused Topics and Issues

Gordon H. Yu, MD

9:50 a.m.-10:20 a.m.Room 517C, MCC Refreshment Break and Focused Scientific Posters

10:20 a.m.-11:10 a.m.

Quality Improvement and Risk Reduction in Cytopathology Dina R. Mody, MD

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

Historical Overview of Evidence-Based Diagnostic Cytology Including Bone Marrow in Veterinary Medicine Rose E. Raskin, DVM, PhD*

8:00 a.m.-12:00 noonRoom 518C, MCC

Career Development: I Was Not Trained for This!

Session Chair: Erin Brannick, DVM, MS*

Session Co-Chair: David K. Meyerholz, DVM, PhD, DACVM*

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

8:15 a.m.-8:50 a.m.

Running a Governmental Diagnostic Laboratory

Frederic J. Hoerr, DVM, PhD, DACPV*

8:50 a.m.-9:25 a.m.

Directing a Division at a Contract Research Organization Kevin S. McDorman, DVM, PhD*

9:25 a.m.-10:00 a.m.

Supervising a Combined Pathology Residency/Graduate Program

Paul C. Stromberg, DVM, PhD*

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

Developing and Leading a Core Facility Kelli L. Boyd, DVM, PhD*

Krista La Perle, DVM, PhD*

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

Q&A Session

Kelly L. Boyd, DVM, PhD*

Frederic J. Hoerr, DVM, PhD, DACPV* Krista La Perle. DVM. PhD*

Kevin S. McDorman, DVM, PhD*

Paul C. Stromberg, DVM, PhD*

8:00 a.m.-12:00 noonRoom 524C, MCC Mini-Symposium: Pathology and Toxicology of Alternative

Therapeutics

Session Chair: Marie-Odile Benoit-Biancamano, DVM, PhD, DECVP*

8:00 a.m.-8:25 a.m.

Alternative Medications to the Little White Pill

Ken Frazier, DVM, PhD, DABT, FIATP*

8:25 a.m.-9:15 a.m.

Examples of Histopathology from Preclinical Cellular Therapy Studies

Julia F.M. Baker, BVMS, DipRCPath, MRCVS

9:15 a.m.-10:00 a.m.

Toxicologic Pathology of Antisense Oligonucleotide Therapies Cécile Sobry, DVM*

10:00 a.m.-10:30 a.m.517C, MCC

Refreshment Break and Focused Scientific Posters

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

Thinking Small: New Approaches for Evaluating the Toxicologic Pathology of Nanotechnology Products

Ann Hubbs, DVM, PhD*

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

Les Nouvelles Thérapies: de Nouveaux Défis en Toxicopathologie

Marie-Odile Benoit-Biancamano, DVM, PhD, DECVP* Cecile Sobry. DVM*

(This presentation will be in French.)

Co-Sponsored by the ECVP

8:00 a.m.-12:00 noonRoom 524A. MCC **Experimental Disease Focused Scientific Session I** Session Chair: K. Gibson-Corley

Committee Members: M. Gagea, J. Greenlee (Past Chair), S. Monette, B. Plattner (Co-Chair), and R. Read

Supported by Genentech

Platform Presentations

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

MOUSE MODELS OF HUMAN BREAST CANCER: WHAT THEY HAVE TOLD US

R. Cardiff

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

CHARACTERIZATION OF THE BRAIN MICROENVIRONMENT SURROUNDING PERMEABLE AND IMPERMEABLE LESIONS IN A MOUSE MODEL OF BRAIN METASTATIC INFLAMMATORY BREAST CANCER

L.T. Reed, B. Gril, G. Mason, and P.S. Steeg

Keyword: Neoplasia

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

CONDITIONAL DELETION OF PTEN WITHIN MURINE UTERINE EPITHELIUM RESULTS IN ENDOMETRIAL CARCINOMA

C. Koivisto, V. Bravo, A. Perez-Castro, K. La Perle, and G. Leone

Keyword: Reproductive System

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

LOSS OF RHYTHMIC CIRCADIAN CLOCK GENE **EXPRESSION IS ASSOCIATED WITH DECREASES** IN ESTROGEN RECEPTOR EXPRESSION IN CANINE MAMMARY CANCER

K.L. Hughes, S. Bracha, C. Goodall Peyton, and P.E. Chappell Keyword: Neoplasia

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

EXPRESSION OF DIFFERENT INTEGRIN SUBUNITS IN **HUMAN AND MURINE TRANSGENIC PANCREATIC DUCTAL** ADENOCARCINOMA AND ITS PRECURSOR LESIONS

K. Steiger, S. Haneder, S. Berchtold, M. Trajkovic-Arsic and I. Esposito

Keyword: Liver and Pancreas

10:00 a.m.-10:30 a.m......Room 517C, MCC

REFRESHMENT BREAK—VISIT THE EXPERIMENTAL DISEASE FOCUSED SCIENTIFIC POSTERS!

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

Invited Speaker

MICROBIAL PROVOCATION AND SUSCEPTIBILITY TO GASTROINTESTINAL INFLAMMATION

A. Ramer-Tait

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

CYSTIC FIBROSIS FERRETS MODEL PULMONARY AND GASTROINTESTINAL DISEASE PATHOLOGY

A.K. Olivier, X. Sun, B. Liang, Y. Yi, H. Sui, T. Evans, Y. Zhang, W. Zhou, S.R. Tyler, J.T. Fisher, N.W. Keiser, X. Liu, Z. Yan, Y. Song, J.A. Goeken, J.M. Kinyon, X. Wang, Z.A. Stewart, T. Frana, D.K. Meyerholz, K. Parekh, and J.F. Engelhardt Keyword: Ferret

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

TRANSCRANIAL NEUTRALIZATION OF REACTIVE OXYGEN SPECIES AMELIORATES MILD TRAUMATIC BRAIN INJURY

K.N. Corps, T.L. Roth, and D.B. McGavern Keyword: Nervous System

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

FIBROBLASTS EXPRESS OVHV-2 CAPSID PROTEIN IN VASCULITIS LESIONS OF AMERICAN BISON (BISON BISON) WITH EXPERIMENTAL SHEEP-ASSOCIATED MALIGNANT CATARRHAL FEVER

D. Nelson, N. Taus, D. Schneider, C. Cunha, W. Davis, W. Brown, H. Li, D. O'Toole, and J.L. Oaks Keyword: Infectious Disease

Natural Disease Focused Scientific Session I

Session Chair: J.P. Teifke

Committee Members: G. Haldorson, I. Langohr (Co-Chair), A. Miller, B.L. Njaa (Past Chair), D.R. Rissi, and N. Wakamatsu

Platform Presentations

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

CHRONIC SEIZURE ACTIVITY IN FVB/N MICE

D. Schwahn and R. Kohnken

Keyword: Laboratory Animals, Nervous System

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

ATOXOPLASMA-ASSOCIATED MYOCARDITIS AND MYOSITIS IN PASSERINE BIRDS

A.L. Righton, K.A. Terio, M.J. Adkesson, and T. Snyder Keyword: Avian, Infectious Disease

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

THYROID GLAND MORPHOMETRICS AND IODINE CONCENTRATION IN CAPTIVE SOUTHERN STINGRAYS AND COWNOSE RAYS

N.L. Stedman, T.N. Tollefson, and Z.V. Mills Keyword: Fish. Endocrine

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

PISCINE EXOPHIALOSIS CASES SUBMITTED TO THE PATHOLOGY DEPARTMENT, UNIVERSITY OF GEORGIA, 2006-2013

J.A. Dill and A.C. Camus

Keyword: Fish, Infectious Disease

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

HEPATIC LESIONS IN HARBOR PORPOISES STRANDED ALONG THE DUTCH COAST (2008-2012)

S. Hiemstra, L. Harkema, L.C.M. Wiersma, and R.I. Keesler Keyword: Wildlife

9:15 a.m.-10:00 a.m.

Invited Speaker

THE LIFÉ AND DEATH OF BELUGA WHALES INHABITING THE ST. LAWRENCE ESTUARY (QUEBEC, CANADA)

D. Martineau

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

NEUROLOGIC DISEASE IN CATTLE CAUSED BY THE NOVEL BOVINE ASTROVIRUS BOVASTV-NEUROS1

P.A. Pesavento, L. Li, S. Diab, S. McGraw, B. Barr, R. Traslavina, P. Blanchard, G. Rimoldi, R. Higgins, and E. Delwart Keyword: Infectious Disease

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

FIP OPHTHALMITIS: HISTOPATHOLOGICAL, IMMUNOHISTOCHEMICAL, AND RT-PCR FINDINGS IN 35 CATS

D.B. Needle, F. Del Piero, R.R. Riis, R. Maes, A. Wise, K. Mullaney, and I. Langohr Keyword: Eye and Ear, Infectious Disease

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

MELIOIDOSIS IN IMPORTED PIGTAIL MACAQUES

J.M. Ritter, S. Sanchez, T.L. Jones, C.H. Johnson, B.L. Skinner, S.M. Dietz, R.M. Engel, S.R. Zaki, and C.P. Drew Keyword: Infectious Disease

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

PATHOLOGIC ASPECTS OF PESTE DES PETITS RUMINANTS (PPR): 40 CASES

A. Berkowitz, V. Bumbarov, and S. Perl Keyword: Infectious Disease

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

SCHMALLENBERG VIRUS: A LONG-TERM EPIDEMIOLOGICAL, SEROLOGICAL, VIROLOGICAL AND PATHOLOGICAL FOLLOW-UP IN AFFECTED SHEEP FLOCKS

S. Dei Giudici, A. Oggiano, G. Marruchella, F. Iapaolo, G. Meloni, C. Pinoni, D. Pintus, P. Angioi, E. Bandino, P. Cabras, M. Mulas, G. Savini, C. Ligios, and F. Monaco Keyword: Infectious Disease

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

SCHMALLENBERG VIRUS: PATHOLOGY OF A NEW ARTHROPOD-BORNE VIRUS IN GERMANY

V. Herder, M. Peters, P. Wohlsein, F. Hansmann, M. Palmarini, M. Varela, I. Gerhauser, F. Seehusen, K. Hahn, A. Habierski, M. Weigand, and W. Baumgärtner

Keyword: Infectious Disease

ACVP & ASVCP 2013 • Sunday, November 17

9:00 a.m5:00 p.m
9:30 a.m4:30 p.m
10:00 a.m10:30 a.m
12:15 p.m.—1:15 p.m
12:30 p.m.–4:30 p.mRoom 518C, MCC ASVCP Veterinary Laboratory Professionals Session I Session Chair: Nicole Rosen, MT(ASCP)
1:00 p.m2:00 p.m. Quality Improvement and Risk Reduction in Cytopathology Diane R. Mody, MD
2:00 p.m3:00 p.m. Quantifying and Reporting Reticulocytes: Benefits and Pitfalls of Each Method Melinda Camus, DVM*
3:00 p.m3:30 p.mRoom 517C, MCC Refreshment Break and Focused Scientific Posters
3:30 p.m.–4:30 p.m. Reticulocyte Indices in the Assessment of Iron Availability Andrea Bohn, DVM, PhD*
1:30 p.m4:30 p.m
Platform Presentations
1:30 p.m2:30 p.m. Invited Speaker LOSS OF IMPRINTING AT THE 14q32 LOCUS IN OSTEOSARCOMA S. Subramanian
2:30 p.m2:45 p.m. PIG-A MUTAGENESIS ASSAY AND REGENERATIVE ANEMIA IN RATS B. LeRoy, P. Sonders, J. Murray, J. Nicolette, and E. Blomme Keyword: Clinical Pathology

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

RETICULOCYTOSIS IN NON-ANEMIC DOGS: AN INVESTIGATION INTO POTENTIAL ETIOLOGIES

K.M. Pattullo, T. Epp, B.A. Kidney, S.M. Taylor, and M.L.

Keyword: Hematology

3:00 p.m.-3:30 p.m.Room 517C, MCC

REFRESHMENT BREAK—VISIT THE CLINICAL PATHOLOGY FOCUSED SCIENTIFIC POSTERS!

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

FELINE MICROCYTOSIS: A RETROSPECTIVE STUDY OF 165 CATS

K. Uchiumi, E.H. Griffith, J.A. Neel, and C.B. Grindem

Keyword: Hematology

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

IDENTIFICATION OF VACCINE-DERIVED MATERIAL IN INFLAMMATORY LESIONS USING CULTURED CANINE MACROPHAGES

J.L. Scruggs and C.J. LeBlanc

Keyword: Cytology

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

ALKALINE PHOSPHATASE IS A SENSITIVE AND SPECIFIC MARKER FOR CANINE ACUTE MYELOMONOCYTIC AND MONOCYTIC LEUKEMIA

T. Stokol, D.M. Schaefer, M. Shuman, and N. Bell Keyword: Cytology

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

CYTOCHEMICAL CHARACTERIZATION OF BLOOD LEUKOCYTES IN ELASMOBRANCHS

K. Webb+, N. Stacy, J. Neel, T. Clauss, L. Leppert, A. Santos, and R. Raskin

Keyword: Hematology

+Competitor for the ASVCP Young Investigator Award

Diagnostic Pathology Focused Scientific Session I

Session Chair: B. Lewis

Committee Members:, A. Nyaoke (Co-Chair), S. Raverty, D.

Rotstein, and F.A. Uzal (Past Chair)

Platform Presentations

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

DUCTAL PLATE MALFORMATION IN BOXER DOGS: CLINICAL AND HISTOLOPATHOLOGICAL CHARACTERISTICS

S.P.S. Pillai^, S.A. Center, and S.P. McDonough Keyword: Liver and Pancreas

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

HISTOLOGIC CHARACTERIZATION OF DARK SPOT LESIONS IN MADRACIS CORALS

C. Hollinger^, B. Curtis, A. Bruckner, B. Riegl, and M. Kiupel Keyword: Wildlife

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

LESIONS ASSOCIATED WITH CAPILLARIA SP. IN THE FORESTOMACH OF WILD URBAN RATTUS NORVEGICUS AND **RATTUS RATTUS**

J.L. Rothenburger[^], F.A. Leighton, M. Lejeune, P.M. Treuting, and C.G. Himsworth

Keyword: Alimentary

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

USE OF MALDI-TOF MS FOR PREDICTING RESPONSE OF CANINE DIFFUSE LARGE B CELL LYMPHOMA TO CHOP **CHEMOTHERAPY**

C. Andrews^A. C. Bolin, J. Buchweitz, N. Kettler, and M. Kiupel Keyword: Neoplasia

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

WEST NILE VIRUS EPORNITIC IN A PELICAN RESEARCH **COLONY IN MISSISSIPPI**

S. Kumar[^], A.J. Cooley, F.L. Cunningham, and W. Baumgartner Keyword: Nervous System

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

A NOVEL FERRET ADENOVIRUS IDENTIFIED IN THE RESPIRATORY TRACT OF CYSTIC FIBROSIS FERRETS

A.K. Olivier, X. Sun, B. Liang, Y.Yi, H. Siu, A. Trent, R.K. Maes, R. Smedley, A.G. Wise, and J.F. Engelhardt

Keyword: Respiratory System

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

CLINICAL, MORPHOLOGIC AND IMMUNOHISTOCHEMICAL FEATURES OF CANINE ORBITAL HIBERNOMAS

M. Ravi, C. Schober, R. Dubielzig, and M. Kiupel

Keyword: Eye and Ear

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

FUNGAL POLYMERASE CHAIN REACTION TESTING IN **EQUINE ULCERATIVE KERATITIS**

C. Zeiss, M. Neaderland, F. Yang, G. Terwilliger, and S. Compton Keyword: Eye and Ear

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

INVESTIGATIVE DIAGNOSTIC PATHOLOGY IN ANIMAL FEED **OUTBREAKS-REGULATORY PERSPECTIVES**

D.S. Rotstein, R. Reimschuessel, C. Tuite, A. Castiglia, J. Queen, M. Ross, and D.H. Woody, Jr.

Keyword: General Topic

3:00 p.m.-3:30 p.m......Room 517C, MCC

REFRESHMENT BREAK - VISIT THE DIAGNOSTIC PATHOLOGY FOCUSED SCIENTIFIC POSTERS!

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

IONOPHORE TOXICOSIS IN A DOG: COMPARISON WITH **BOVINE CASES**

M. Behr, D. Sockett, L. Licari, and B. Puschner

Keyword: Toxicologic Pathology

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

UPPER GASTROINTESTINAL LESIONS CAUSED BY A FERRIC SULFATE LITTER TREATMENT PRODUCT IN DAY OLD BABY CHICKS

S.M. Williams, E.A. Myers, and G. Zavala

Keyword: Avian

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

ACUTE KIDNEY INJURY ASSOCIATED WITH PUTATIVE DRUG-INDUCED MINIMAL CHANGE DISEASE IN THREE PROTEINURIC DOGS

R.E. Cianciolo, G.E. Lees, and M. Nabity

Keyword: Urinary System

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

AN UNUSUAL CASE OF CONCOMMITANT EQUINE PROTOZOAL MYELITIS AND CERVICAL VERTEBRAL INSTABILITY IN A STANDARDBRED GELDING

L. Kennedy

Keyword: Nervous System

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

AN UNUSUAL PLEOMORPHIC RETROBULBAR NEOPLASM IN A BEARDED DRAGON

A.E. Ellis and D. Martinez-Jimenez

Keyword: Neoplasia

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

CANINE ACANTHOMATOUS AMELOBLASTOMA WITH SQUAMOUS CELL CARCINOMA DIFFERENTIATION AND AMYLOID-PRODUCING EXTRAMEDULLARY LINGUAL PLASMACYTOMA

U. Bryant

Keyword: Neoplasia

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

CEREBRAL HISTIOCYTIC SARCOMA WITH HEPATIC METASTASIS IN A CORGI

A. McBride and W. Baumgartner

Keyword: Neoplasia

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

CHRONIC INTESTINAL PSEUDO-OBSTRUCTION IN THREE ADULT DOGS: CASE REPORTS AND LITERATURE REVIEW

V.S. Carreira, S. French, J. Lamoureux, V. Vemiredd, K.

Salisbur, and I. Langohr Keyword: Alimentary

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

CLINICAL SIGNS AND LESIONS ASSOCIATED WITH A NOVEL HEMOTROPIC BACTERIUM IN SOWS IN QUEBEC, CANADA

A. Chiasson, D. Tremblay, C.A. Gagnon, I. Mandeville, and C. Girard

Jilaiu Zamand Inte

Keyword: Infectious Disease

^ACVP/AAVLD Diagnostic Pathology Travel Award Competitor

Supported by Antech Diagnostics

1:30 p.m.–5:00 p.m. Room 524C, MCC Industrial and Toxicologic Pathology Focused Scientific Session I Session Chair: M. Sebastian

Committee Members: C. Colleton, M. Conner (Co-Chair), D. Ennulat, M. Hoenerhoff (Past Chair), G. Palanisamy, V. Sasseville, and B. Singh

Supported by Covance Laboratories

Platform Presentations

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

1:35 p.m.-2:20 p.m.

Invited Speaker

MICROHEMORRHAGE, ALZHEIMER'S DISEASE AND THE USE OF ANIMAL MODELS IN ITS ASSESSMENT

R. Dunstan

2:20 p.m.-2:40 p.m.

ASSESSING POTENTIAL THERAPIES FOR DUCHENNE MUSCULAR DYSTROPHY USING IN VIVO MUSCLE ELECTROPHYSIOLOGY IN THE MDX MOUSE

R. Terry and D.J. Wells Keyword: Muscle

2:40 p.m.-3:00 p.m.

CHARACTERIZATION OF THE TUMOR SPECTRUM ARISING IN HZE IRRADIATED OUTBRED MICE

E. Edmondson, C. Fallgren, E. Garcia, D. Kamstock, and M. Weil Keyword: Neoplasia

3:00 p.m.-3:30 p.m.....Room 517C, MCC REFRESHMENT BREAK—VISIT THE INDUSTRIAL AND TOXICOLOGIC PATHOLOGY FOCUSED SCIENTIFIC POSTERS!

3:30 p.m.-4:20 p.m. Invited Speaker

NOVEL BIOMARKERS OF SKELETAL MUSCLE INJURY D. Watson

4:20 p.m.-4:40 p.m.

CHLOROQUINE CAUSES SIMILAR ELECTRORETINOGRAM MODIFICATIONS, NEURONAL PHOSPHOLIPIDOSIS AND MARKED IMPAIRMENT OF SYNAPTIC VESICLE TRANSPORT IN ALBINO AND PIGMENTED RATS

S. Lezmi, N. Rokh, G. Saint-Macary, M. Pino, V. Sallez, F. Thevenard, N. Roome, and S. Rosolen Keyword: Nervous System

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

CONTRIBUTION OF THROMBIN AND PLATELETS TO ACETAMINOPHEN HEPATOTOXICITY IN MICE

K. Miyakawa, B.P. Sullivan, R.P. Albee, C. Brandenberger, R. Signal, M.A. Scott, J.P. Luyendyk, P.E. Ganey, and R.A. Roth Keyword: Toxicologic Pathology

1:30 p.m.-5:00 p.m.Room 524A, MCC

Natural Disease Focused Scientific Session II

Session Chair: J.P. Teifke

Committee Members: G. Haldorson, I. Langohr (Co-Chair), A. Miller, B.L. Njaa (Past Chair), D.R. Rissi, and N. Wakamatsu

Platform Presentations

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

EXPRESSION OF p62/SEQUESTOSOME-1 IN CANINE MAST CELL TUMORS: THE POTENTIAL FOR REFINED THERAPEUTIC DECISION-MAKING

T. Rich, R.T.G. Dean, C.G. Lamm, and J.C. Patterson-Kane Keyword: Neoplasia

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

HER-2 AND METALLOPROTEASES IN CANINE MAMMARY TUMORS: EXPRESSION IN SINGLE VERSUS MULTIPLE NODULES AND IN SPECIFIC TUMOR SUBTYPES

V. Zappulli, E. Clementi, D. D'ambroso, R. Rasotto, and M. Castagnaro

Keyword: Mammary

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

DOES SYNOVIAL CELL SARCOMA EXIST IN ANIMALS?

L.E. Craig and R.A. Fairley Keyword: Neoplasia

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

Invited Speaker

BOVINE NEONATAL PANCYTOPENIA AND BEYOND

S. Scholes

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

REFRESHMENT BREAK – VISIT THE NATURAL DISEASE FOCUSED SCIENTIFIC POSTERS!

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

GENE EXPRESSION AND TISSUE TROPISM OF NATURAL RACCOON POLYOMAVIRUS (RacPyV) INFECTION

M. Church, F. Dela Cruz Jr., and P. Pesavento Keyword: Wildlife, Infectious Disease

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

GENOMIC CHARACTERIZATION AND DISEASE ASSOCIATION OF A NEWLY DISCOVERED CANINE CIRCOVIRUS

P.A. Pesavento, S. McGraw, L. Li, K. Zhu, S. Marks, S. Kubiski, P. Gaffney, F. Dela Cruz, C.M. Leutenegger, C. Wang, and E. Delwart

Keyword: Infectious Disease

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

HUMAN CODON USAGE BIAS (CUB) HAS HIGHER RELATIVE ADAPTIVENESS FOR CANINE DISTEMPER VIRAL PROTEINS THAN CANINE CUB

E.W. Uhl and R.J. Hogan Keyword: Infectious Disease

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

CANINE RESPIRATORY DISEASE COMPLEX: MORE COMPLEX THAN WE THOUGHT

E.J. Dubovi

3:00 p.m.-3:30 p.m. Room 517C, MCC
REFRESHMENT BREAK: VISIT THE CLINICAL PATHOLOGY,
DIAGNOSTIC PATHOLOGY, INDUSTRIAL AND TOXICOLOGIC
PATHOLOGY AND NATURAL DISEASE FOCUSED SCIENTIFIC
POSTERS!

ASVOI Business Meeting

ACVP Town Hall Business Meeting

7:30 p.m.-9:30 p.m. Room 520C, MCC

Mystery Slide Review and Neuropathology Case Presentations

Session Chair: Jey Koehler, DVM, PhD*

Supported by Consultants in Veterinary Pathology, Inc. & Tox Path Specialists

MCC=Montreal Convention Center / Palais des congrès de Montréal

ACVP & ASVCP 2013 • Monday, November 18						



Supported by Charles River Laboratories

8:10 a.m.-9:05 a.m. How Genes and Environment Interact Randy Jirtle, PhD



9:05 a.m.–10:00 a.m.
Epigenetics: Biologic Targets,
Biomarkers and Role in Disease
James Herman. MD

10:00 a.m.-10:30 a.m.Room 517C, MCC Refreshment Break and Focused Scientific Posters



10:30 a.m.–11:15 a.m.

DNA Methylation Mediating the Effects of Early Life Environment on Adult Phenotypes

Moshe Szyf, PhD



11:15 a.m.–12:00 noon Reproductive Epigenetics: Preparing the Epigenome for the Next Generation Jacquetta Trasler, MD, PhD

ACVP & ASVCP 2013 • Monday, November 18

8:00 a.m.-12:00 noonRoom 518C, MCC ASVCP Veterinary Laboratory Professionals Session II Session Chair: Nicole Rosen, MT(ASCP) 8:00 a.m.-10:00 a.m. Interpretation of Graphical Reports from the Advia 2120, Sysmex XT-2000iV and Cell-Dyn Inger Lilliehöök, DVM, PhD, DECVCP Harold Tvedten, DVM, PhD, DECVCP* 10:00 a.m.-10:30 a.m.Room 517C, MCC Refreshment Break and Focused Scientific Posters 10:30 a.m.-11:30 a.m. Comparison of Manual Total Cell Counts with Fresh versus Formalin Fixed Blood from Fish Jill Arnold, MT(ASCP) 11:30 a.m.-12:30 p.m. Roundtable Discussion: After-Hour/Call Back Testing and Staining Issues **Career Center** 9:30 a.m.-1:00 p.m.Room 517C, MCC **Exhibits and Poster Session** 12:15 p.m.–1:15 p.m.Room 520C, MCC **ACVP Clinical Pathology Examination Slide Review ACVP Gross and Microscopic Examination Slide Review** 12:15 p.m.-1:15 p.m.Room 518C, MCC Latin American Pathology Group Presents Freshwater Ornamental Fish Diseases in Colombia, SA Paola Andrea Barato, DVM, Specialty in Aguiculture, Candidate PhD, Owner and Scientific Head Corpavet, Bogota, Colombia and Assistant Professor, National University, Bogota, Colombia Lesions, Virus Distribution, and Forms of Bovine Viral Diarrhea Fabio Del Piero. DVM. PhD* Afternoon on your own to explore Montréal 1:30 p.m. - 4:30 p.m. ACVP Community Service Opportunity (advance registration Meet in the lobby of Le Westin Hotel at 1:15 p.m. Meet the Pathologists: A Discussion of Careers in Pathology Supported by the National Cancer Institute Comparative Pathology Training Partnerships

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ACVP & ASVCP 2013 • Monday, November 18

Panelists:

Agathe Bédard, DVM, DES*
Claus Buergelt, DVM*
Fabio Del Piero, DVM, PhD*
Peter D. Kirkland, BVSc, PhD, FASM, PSM
Rob Moeller, DVM*
Francisco Uzal, DVM, FRVC, MSc, PhD*

MCC=Montreal Convention Center / Palais des congrès de Montréal

ay, November 18

ACVP & ASVCP 2013 • Tuesday, November 19					

7:00 a.m..... 517C Foyer, MCC Internet Station Sponsored by VIN Speaker Ready Room 7:30 a.m.-5:00 p.m.517E Foyer, MCC Registration 8:00 a.m.-5:00 p.m. St-Sulpice, Le Westin Hotel, 3rd Floor Student and Guest Hospitality Area Concurrent Session I: Mitochondria in Health and Disease Session Chair: Kevin J. French, PhD, DABT 8:00 a.m.-8:50 a.m. **Drug-Induced Mitochondrial Toxicity** Yvonne Will, PhD 8:50 a.m.-9:40 a.m. Progress and Challenges in Understanding the Mechanisms of Mitochondrial Disease Eric Shoubridge, PhD 9:40 a.m.-10:10 a.m.Room 517C, MCC Refreshment Break and Focused Scientific Posters 10:10 a.m.-11:00 a.m. Mitochondrial DNA Mutations and Disease Lee-Jun Wong, PhD, CABMG, FACMG 11:00 a.m.-11:50 a.m. Interaction of NLRs with Mitochondria Jenny Ting, PhD 11:50 a.m.-12:00 noon Questions and Discussion 8:00 a.m.-12:00 noon Room 519, MCC Concurrent Session II: Emerging and Important Diseases of

Cattle Session Chair: Fabio Del Piero, DVM, PhD*

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

Lessons from the Abattoir

Yves Robinson, DVM, MSc

8:30 a.m.-9:15 a.m.

Respiratory Diseases of Cattle

Daniel Paulsen, DVM, PhD*

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

Indirect Immunohistochemistry for the Identification of **Cattle Infectious Diseases**

Fabio Del Piero, DVM, PhD*

ACVP & ASVCP 2013 • Tuesday, November 19

9:45 a.m.-10:15 a.m.Room 517C, MCC
Refreshment Break and Focused Scientific Posters

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

Approaches to the Diagnosis of Emerging and Major Endemic Viral Diseases of Cattle

Peter D. Kirkland, BVSc, PhD, FASM, PSM

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

Bovine Viral Diarrhea

Edward J. Dubovi, MS. PhD

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

Enteric Clostridial Diseases of Cattle Francisco Uzal, DVM, FRVC, MSc, PhD*

Platform Presentations

A. Wilcox

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

COMPARISON OF FLOW CYTOMETRY AND CANINE GLYCOPHORIN A ELISA FOR DETECTION OF MICROPARTICLES IN STORED CANINE BLOOD A.G. Burton+, S.D. Owens, and M.S. Mellema

Keyword: Hematology

keyword. Hematology

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

REPORTING AND INTERPRETING RED BLOOD CELL MORPHOLOGY: IS THERE A DISCONNECT BETWEEN CLINICAL PATHOLOGISTS AND CLINICIANS?

A. Newman+, M. Rishniw, and E. Behling-Kelly Keyword: Hematology

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

EFFECTS OF RANAVIRUS INFECTION OF RED EARED SLIDERS (TRACHEMYS SCRIPTA ELEGANS) ON PLASMA PROTEIN CONCENTRATIONS AS DETERMINED BY AGAROSE GEL ELECTROPHORESIS

A.R. Moore+, M.C. Allender, and A.L. MacNeill Keyword: Immune System

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

HIGH-TROUGHPUT SEQUENCING OF THE CANINE T CELL RECEPTOR REPERTOIRE

S.M. Keller+, P. Lott, I. Korf, and P.F. Moore Keyword: Immune System

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

Invited Speaker
DISRUPTION OF EPIGENETIC MECHANISMS AND
MALIGNANT HEMATOPOIESIS

E. Milot

10:00 a.m.-10:30 a.m.Room 517C, MCC REFRESHMENT BREAK—VISIT THE CLINICAL PATHOLOGY FOCUSED SCIENTIFIC POSTERS!

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

EFFECT OF DELAYED SERUM SEPARATION AND STORAGE TEMPERATURE ON RATE OF SERUM GLUCOSE CONCENTRATION DECLINE IN FOUR SPECIES

N.B. Collicutt+, B. Garner, M.S. Camus, and K. Hart Keyword: Clinical Chemistry

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

EVALUATION OF NGAL AND RBP AS TUBULAR DAMAGE BIOMARKERS IN NATURALLY OCCURRING CANINE CHRONIC KIDNEY DISEASE

J.A. Hokamp+, M.B. Nabity, G.E. Lees, and R. Cianciolo Keyword: Urinary System

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

KIDNEY INJURY MOLECULE-1: A POTENTIAL URINARY BIOMARKER IN CATS

S.K. Bland+, O. Côté, and D. Bienzle Keyword: Urinary System

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

LUTEINIZING HORMONE IS NOT DIRECTLY INVOLVED IN THE PATHOGENESIS OF HYPERADRENOCORTICISM IN SCOTTISH TERRIERS

K.L. Zimmerman, D.L. Panciera, W.E. Monroe, and T. LeRoith Keyword: Endocrine

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

A MYCOPLASMA OVIS AND CANDIDATUS MYCOPLASMA HAEMOVIS WHOLE GENOME SEQUENCING AND VALIDATION: A SINGLE BACTERIUM?

P.L. Deshuillers+, N.C. do Nascimento, A.P. Santos, and J.B. Messick

Keyword: Infectious Disease

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

THE EXPRESSION AND ACTIVITY OF SEROTONIN RECEPTORS IN CANINE OSTEOSARCOMA CELLS AND NORMAL CANINE OSTEOBLASTS

A.K. Viall+, C.P. Goodall, P.E. Chappell, and S. Bracha Keyword: Neoplasia

+Competitor for the ASVCP Young Investigator Award

ACVP & ASVCP 2013 • Tuesday, November 19

8:00 a.m.-12:00 noonRoom 524C, MCC

Education Focused Scientific Session

Session Chair: A. Warren

Committee Members: A. Alcaraz (Past Chair), T. Cecere (Co-Chair), C. Lamm. and J. Peters

Platform Presentations

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

DEVELOPMENT OF A GROUPWARE SYSTEM TO ALLOW REAL-TIME FEEDBACK DURING LARGE GROUP INTERACTIONS IN AN ACADEMIC INSTITUTION

M.J. Burkhard, K. Matthias, R. Gaydos, J. Simmons, D.J. Stone, and L.J. King

Keyword: General Topic

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

DESIGNING COMPETENCY-BASED RUBRICS TO MEASURE AND EVALUATE LEARNER OUTCOMES IN PATHOLOGY ROTATIONS

C. Fuentealba

Keyword: General Topic

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

THE USE OF AN ONLINE DISCUSSION FORUM IN AN INTRODUCTORY PATHOLOGY COURSE FOR UNDERGRADUATE STUDENTS: PARTICIPATORY RATES WERE ASSOCIATED WITH BETTER LEARNING OUTCOMES

V.M. Wong, and R.A. Foster Keyword: General Topic

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

USE OF A TEAM-MAKER AND PEER EVALUATION WEBSITE TO FACILITATE GROUP ASSIGNMENTS

B.C. Garner, H.M. Brown, and M.S. Camus

Keyword: General Topic

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

Invited Speaker

CURRICULUM AND ASSESSMENT MODELS: IN SEARCH OF A PANACEA

S. Rhind

SCIENTIFIC POSTERS

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

Invited Speaker

DESIGNING A PROGRAMME OF ASSESSMENT AND FEEDBACK: WORKSHOP/DISCUSSION

S. Rhind

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

AN E-LEARNING COURSE IN GENETICALLY ENGINEERED MOUSE MODEL PATHOLOGY: THE EUROPEAN EXPERIENCE

J.C. Patterson-Kane, C.G. Lamm, T. Linnakylä, E. Kuittinen, L. Strauss, S. Mäkelä, M. Poutanen, M. Schlitter, S. Haneder, K. Steiger, and I. Esposito

Keyword: General Topic

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

EFFECTIVE USE OF ANIMATIONS IN VETERINARY PATHOLOGY INSTRUCTION

J. Green, K. Nelson, J. Chapes, M. Hoover, H. Wang, and D. Masier.

Keyword: None of the Above

8:30 a.m.-12:00 noonRoom 518C, MCC

ASVCP Veterinary Laboratory Professionals Session III

Session Chair: Nicole Rosen, MT(ASCP)

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

Canine DEA 1 Typing and Crossmatching: Various Testing Techniques

Urs Giger, PD, DACVIM, DECVCP, DECVIM-C

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

Direct Antiglobulin Testing with Various Techniques and Implications for IMHA

Urs Giger, PD, DACVIM, DECVCP, DECVIM-C

10:30 a.m.-11:00 a.m.Room 517C, MCC

Refreshment Break and Focused Scientific Posters
Final bids are due for the 2013 Silent Auction!

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11:00 a.m.–12:00 noon

Advanced Techniques for the Diagnosis of Lymphoma and Leukemia

Anne Avery, VMD, PhD

Exhibits and Poster Session

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

Lunch Break (on your own)

1:30 p.m.-5:00 p.m.Room 524A, MCC

ASVCP Case Review Session Session Chair: Linda Vap, DVM*

ACVP & ASVCP 2013 • Tuesday, November 19

Diagnostic Pathology Focused Scientific Session II

Session Chair: B. Lewis

Committee Members: A. Nyaoke (Co-Chair), S. Raverty, D. Rotstein, and F.A. Uzal (Past Chair)

Platform Presentations

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

COMPARISON OF CAT FEMORAL BONE MARROW FAT CONTENT QUANTIFIED BY ANALYTICAL ANALYSIS AND IMAGE ANALYSIS OF HISTOLOGIC SECTIONS

H.B. Hanley, C.R. Wilson, M.C. Mengel, D.E. Stallknecht, and E.W. Howerth

Keyword: General Topic

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

CONCURRENT ADENOVIRAL INFECTION AND PNEUMONIC MANNHEIMIOSIS IN A HOLSTEIN CALF

E.R. Burrough, B.L. Wilberts, and J. Zhang Keyword: Infectious Disease

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

CYTOLOGICAL AND HISTOLOGICAL CHARACTERIZATION OF A CUTANEOUS PHAEOHYPHOMYCOSIS IN A CAT

M. Kummerfeld, S. Muller, N. Pantchev, and N. Kühn

Keyword: Skin

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

INTRAOCULAR CHOLESTEROL GRANULOMA ASSOCIATED WITH SYNCHYSIS SCINTILLANS IN A SHETLAND SHEEPDOG

Y. Sano, M. Okamoto, K. Matsuda, T. Sato, S. Maehara, and H. Taniyama

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Keyword: Eye and Ear

2:10 p.m.-2:20 p.m. ORAL HISTIOCYTOMA-LIKE TUMORS IN 8 DOGS

J. Pinard, and T.J. Scase Keyword: Neoplasia

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

POST-VACCINAL REOVIRUS INFECTION WITH HIGH MORTALITY IN 3-DAY-OLD BREEDER CHICKS

S. Chénier, M. Boulianne, and C. Gagnon

Keyword: Avian

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

PRESUMPTIVE CANE TOAD (RHINELLA MARINUS) TOXICITY IN SOUTHERN CASSOWARYS (CASUARIUS CASUARIUS) J. Scott, R. Basham, A. Salim, R. Capon, S. Joseph, and L. Johnson

J. Scott, R. Basham, A. Salim, R. Capon, S. Joseph, and L. Johnson Keyword: Avian

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

PRIMARY RADIAL GRANULOMATOUS OSTEOMYELITIS DUE TO HALICEPHALOBUS GINGIVALIS IN A THOROUGHBRED HORSE

W.A. Baumgartner and C. Mochal

Keyword: Bone and Joint

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

PRIMARY RENAL RHABDOMYOSARCOMA IN A CORGI DOG

K.R. Clarke, and A.J. Cooley

Keyword: Neoplasia

3:00 p.m.-3:30 p.m.Room 517C, MCC

REFRESHMENT BREAK – VISIT THE DIAGNOSTIC PATHOLOGY FOCUSED GROUP POSTERS

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

SERUM AMYLOID A AND INTERLEUKIN 1 AS AN EARLY MARKER OF FATIGUE IN ENDURANCE HORSES

R.F. Siqueira, S.R.R. Lucas, T.S. Lima, R.Y. Baccarin, and W.R. Fernandes

Keyword: General Topic

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

SPECTRUM OF HISTOLOGICAL AND PATHOLOGICAL FEATURES IN THE DISTAL THIRD METACARPAL BONE OF THOROUGHBRED RACEHORSES WITH AND WITHOUT CONDYLAR FRACTURES

M.J. Pinilla, C.A. Tranquille, R.C. Murray, T.D.H. Parkin, K.C. Smith, and A.S. Blunden Keyword: Bone and Joint

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

DOG1 IS A SENSITIVE AND SPECIFIC IMMUNOHISTOCHEMICAL MARKER FOR DIAGNOSIS OF CANINE GASTROINTESTINAL STROMAL TUMORS (GISTS)

D. Dailey, E.J. Ehrhart, T. Bass, and B. Powers Keyword: Neoplasia

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

ESTROGEN RECEPTOR EXPRESSION AND STAT3 ACTIVITY IN EQUINE MAMMARY TUMORS

K. Hughes and A.K. Foote Keyword: Mammary

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

FATAL SARCOCYSTIS ENCEPHALITIS INFECTIONS IN DOVES IN TEXAS

C.L. Hodo, D.B. Whitley, S.A. Hamer, B.F. Porter, W.V. Corapi, K.F. Snowden, J.J. Heatley, and A. Rodrigues Hoffmann Keyword: Wildlife

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

STRESS CARDIOMYOPATHY SECONDARY TO SEVERE SOFT TISSUE TRAUMA IN A CHIMPANZEE

B. Troan and M. Loomis Keyword: None of the Above

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

2012 AAVLD Award Recipient

CANINE COLORECTAL POLYPS AND PROGRESSION TO MALIGNANCY; A RETROSPECTIVE STUDY OF 100 CANINE COLORECTAL EPITHELIAL POLYPOID TUMORS

B Butler and G Duhamel

ACVP & ASVCP 2013 • Tuesday, November 19

1:30 p.m.-5:00 p.m.Room 524C, MCC

Experimental Disease Focused Scientific Session II

Session Chair: K. Gibson-Corley

Committee Members: M. Gagea, J. Greenlee (Past Chair), S. Monette, B. Plattner (Co-Chair), and R. Read

Supported by Amgen

Platform Presentations

Supported by Genentech

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

Invited Speaker

UNRAVELLING HOST-BACTERIAL INTERACTIONS IN IBD

K. Simpson

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

A GUINEA PIG MODEL OF TYPE 2 DIABETES AS A RISK FACTOR FOR TUBERCULOSIS

B.K. Podell, D.F. Ackart, A. Obregon-Henao, M. Henao-Tamayo, I.M. Orme, D. Ordway, and R.J. Basaraba Keyword: Infectious Disease

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

SPECIFICITY OF MUC5B EXPRESSION IN HUMAN AND PORCINE AIRWAYS

D.K. Meyerholz, M.T. Maher-Sturm, P. Karp, L. Ostedgaard, D.A. Stoltz, and M.J. Welsh

Keyword: Respiratory System

3:00 p.m.-3:30 p.m.....Room 517C, MCC
REFRESHMENT BREAK—VISIT THE EXPERIMENTAL DISEASE
FOCUSED SCIENTIFIC POSTERS!

3:30 p.m.-4.15 p.m.

Invited Speaker

CHARACTERIZATION OF THE ATTACHING AND EFFACING MECHANISM OF ESCHERICHIA COLI IN THE PIG INTESTINE USING IN VITRO, ORGAN CULTURE, AND TISSUE CULTURE INFECTION MODELS

J.M. Fairbrother

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

AVIAN INFLUENZA VIRUS AND CENTRAL NERVOUS SYSTEM (CNS) INFECTION IN FERRETS: A PROPOSED NOVEL ROUTE FOR CNS INVASION

I. Moore, H. Kenney, and K. Subbarao

Keyword: Infectious Disease

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

ROLE OF THE E211K PRION PROTEIN POLYMORPHISM IN BOVINE SPONGIFORM ENCEPHALOPATHY

J. Greenlee, J. Smith, C. Vrentas, M. West Greenlee, and E. Nicholson

Keyword: Nervous System

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

EFFECTS OF FORMALIN-INACTIVATED HUMAN RESPIRATORY SYNCYTIAL VIRUS (FI-hRSV) IN THE NEONATAL LAMB MODEL OF hRSV

R.J. Derscheid, J.M. Gallup, C.J. Knudson, S.M. Varga, D.D. Grosz, A. van Geelen, S.J. Hostetter, and M.R. Ackermann Keyword: Respiratory System

1:30 p.m.-5:00 p.m. Room 519, MCC Industrial and Toxicologic Pathology Focused Scientific

Session II

Session Chair: M. Sebastian

Committee Members: C. Colleton, M. Conner (Co-Chair), D. Ennulat, M. Hoenerhoff (Past Chair), G. Palanisamy, V. Sasseville, and B. Singh

Platform Presentations

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

1:35 p.m.-2:20 p.m.

Invited Speaker

REPRODUCTIVE PATHOLOGY: HAZARD MITIGATION IN NONCLINICAL SAFETY ASSESSMENT

J. Vidal

2:20 p.m.-2:40 p.m.

DEVELOPMENT OF AN IN VITRO MODEL OF ACQUIRED RESISTANCE TO TOCERANIB PHOSPHATE (PALLADIA®) IN CANINE MAST CELL TUMOR

C.H.C. Halsey, D.L. Gustafson, B.J. Rose, R.C. Burnett, D.L. Duval, A.C. Avery, and D.H. Thamm Keyword: Neoplasia

2:40 p.m.-3:00 p.m.

MINOCYCLINE, A PUTATIVE NEUROPROTECTANT, IN THE SETTING OF DOXORUBICIN-CYCLOPHOSPHAMIDE CHEMOTHERAPY IN A XENOGRAFT MODEL OF TRIPLE-**NEGATIVE BREAST CANCER**

L. Himmel, M.B. Lustberg, A.C. DeVries, C.-S. Chen, C.L. Shapiro, and S.K. Kulp

TOXICOLOGIC PATHOLOGY FOCUSED SCIENTIFIC

Keyword: Toxicologic Pathology

3:00 p.m – 3:30 p.m.Room 517C, MCC REFRESHMENT BREAK - VISIT THE INDUSTRIAL AND

POSTERS!

3:30 p.m.-4:20 p.m.

Invited Speaker

GENOMIC AND MECHANISTIC INSIGHTS INTO DRUG-INDUCED VASCULAR INJURY IN THE RAT

D.A. Dalmas Wilk

4:20 p.m.-4:40 p.m.

ORAL ADMINISTRATION OF SOLUBLE GUANYLYL CYCLASE ACTIVATORS TO RATS RESULTS IN OSTEOCLASTIC BONE RESORPTION AND REACTIVE NEW BONE FORMATION IN THE APPENDICULAR AND AXIAL SKELETON

B. Homer, C.M. Bagi, C.J. Andresen, J.A. Warneke, L.O. Whiteley, D.L. Morris, and M.A. Tones Keyword: Bone and Joint

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

NOVEL MULTIFUNCTIONAL TUMOR-TARGETING NANOPORPHYRIN

T. Lin, Y. Li, Y. Lo, Q. Chang, C-X. Pan, and K. Lam Keyword: Neoplasia

5:15 p.m.-6:45 p.m. Room 519, MCC
ACVP Awards and Recognition Event
7:00 p.m.-9:30 p.m. Room 710, MCC
ACVP Presidential Reception

MCC=Montreal Convention Center / Palais des congrès de Montréal

Wednesday, November 20, 2013

ACVP & ASVCP 2013 • Wednesday, November 20					
			 		
			 		

7:00 a.m.-11:30 a.m......Room 521B, MCC Speaker Ready Room 8:00 a.m.-1:00 p.m.517E Fover, MCC Registration 8:00 a.m.-11:00 a.m.......... St-Sulpice, Le Westin Hotel, 3rd Floor Student and Guest Hospitality Area 8:00 a.m.-12:00 noon 517C Foyer, MCC Young Investigator Award Poster Session Concurrent Session III: The Microbiome: How the Billions of Organisms that Co-Inhabit Animals and Humans Maintain **Health and Cause Disease** Session Chair: Michael Leach, DVM, PhD* 8:00 a m -8:10 a m Introduction 8:10 a.m.-9:00 a.m. An Introduction to the Microbiome and the Human Microbiome Project Lita M. Proctor, PhD 9:00 a.m.-9:50 a.m. The Respiratory Tract Microbiome in Health and Disease Michael Surrette, PhD 9:50 a.m.-10:20 a.m.517E Foyer, MCC Refreshment Break 10:20 a.m.-11:10 a.m. The GI Microbiome in Domestic Animals: Contributions to Health and Disease Jan Suchodolski. PhD

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

The Skin Microbiome in Health and Disease: Humans, Dogs and Their Relationship

Aline Rodrigues Hoffmann, DVM, MS, PhD

8:00 a.m.-12:00 noonRoom 518A, MCC

Mini-Symposium: Osteochondrosis

Session Chair: Cathy S. Carlson, DVM, PhD*

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

From König to the Present: What Have We Learned? Cathy S. Carlson, DVM, PhD*

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

Current Understanding of the Pathogenesis and Risk Factors

Stina Ekman, DVM, PhD, DECVP

ACVP & ASVCP 2013 • Wednesday, November 20

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

CT and Micro-CT Investigations of Induced and Naturally Occurring Disease

Kristin Olstad, BVSc, PhD, CertVR

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

High Field MRI Investigations: Pathway to Diagnosing

Subclinical Disease

Ferenc Tóth, DVM, PhD, DACVS

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

Where Do We Go From Here? Cathy S. Carlson, DVM, PhD*

Co-Sponsored by ECVP

Mini-Symposium: Gulf of Mexico Deepwater Horizon Oil Spill:

Response, Research and Perspectives Session Chair: Mac Law, DVM, PhD*

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

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

The Effects of Crude Oil on Wild Fish Populations: Lessons Learned From the Exxon Valdez Oil Spill

Gary Marty, DVM, PhD*

9:00 a.m.-9:50 a.m.

Ecological Impacts During the Deepwater Horizon Oil Spill Mace Barron, PhD

9:50 a.m.-10:10 a.m. 517E Foyer, MCC Refreshment Break

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

Marine Mammals, Oil, and the Gulf of Mexico: Perspectives on the Ongoing Unusual Mortality Event Investigation

Kathleen M. Colegrove, DVM, PhD*

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

Physiological and Genomic Footprint of the Deepwater Horizon Oil Spill in Gulf Killifish in Field and Laboratory Studies

Fernando Galvez, BSc, PhD

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

Questions and Discussion

12:00 noon

Annual Meeting Ends

Quantitative histomorphometry is an important tool to assess morphological tissue changes due to drug treatment, aging, etc. from histological tissue sections. This workshop presents different methods to extract as much reliable quantitative information as possible from the tissue sections in a reproducible, precise, and efficient manner. Advantages and disadvantages of image analysis and stereology and when to apply each method will be addressed. The focus will be on practical guidelines and examples from pre-clinical and safety studies.

Practical Morphometry and Stereology for the Pathologist Danielle L. Brown, DVM*

Practical Examples of Stereology to Address Questions Related to Toxicologic Pathology Rosanna Mirabile, MS, HTL (ASCP)

1:00 p.m.-5:15 p.m.Room 520C, MCC
Post-Meeting Workshop II
(available at an additional fee)
Comparative Pathology Toolbox: Tools for Meaningful

Assessment of Animal Models

Session Co-Chairs: Marilene Paquet, DVM, MSc* Lauren Richey, DVM, PhD*

Animal models have extensively expanded our knowledge of biology, physiology, genetics, mechanisms of disease, prevention, and treatments. However, the value of research animals as models of human disease continues to be questioned in literature and the news media. In the first Comparative Pathologist Consortium pre-meeting workshop held last year, pathologists raised questions: are we assessing models correctly? Are we effectively communicating the accuracy and limitations of the model? Are we over interpreting the data coming from these models? In this year's workshop, experts in comparative pathology will address these questions directly by sharing tools that can be used in small academic labs to large scale research initiatives to define, manipulate, compare, and interpret data from models. We will discuss the use of non-rodent models such as zebrafish as well as new mouse resources developed to more closely model the human population. Experts will share how they use descriptive, semi-quantitative, and quantitative tools to validate models.

1:00 p.m.1:10 p.m.

* ACVP Diplomate

Introduction: Tools of Trade: Research Tools for Fair Evaluation of Comparative Pathology Models Marilene Paquet, DVM MSc* Lauren Richey, DVM, PhD*

75

1:10 p.m.2:00 p.m.

Image Acquisition, Processing, Quantitative Analysis and Ethics

Claire Brown, PhD

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

Image Analysis for Pathologists: Getting Down to the Bare Bones

Alicia K. Olivier, DVM, PhD*

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

Refreshment Break

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

Modeling Human Disease: Methods for Getting Practical and Relevant Data From Animal Models

David K. Meyerholz, DVM, PhD, DACVM*

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

Toxicologic Pathology for Non-Toxicologic Pathologists Jean-Martin Lapointe, DVM, MSc*

ACVP & ASVCP 2013 • Focused Scientific Posters					

Focused Scientific Posters will be available for viewing in Room 517C at the Palais des congrès de Montréal at the following times:

Sunday, November 17	9:30 a.m4:30 p.m.
Monday, November 18	9:30 a.m.–1:00 p.m.
Tuesday, November 19	9:30 a.m.–3:30 p.m.
	•
Poster Setup:	
Sunday, November 17	7:00 a.m9:00 a.m.
Poster Teardown:	

New this year: session chairs at the Focused Scientific Session platform presentations will be asking their attendees to visit the posters of their respective focused groups during the refreshment break. Please see below for the corresponding refreshment breaks and when you need to be present at your poster:

- Clinical Pathology Posters: Refreshment breaks on Sunday afternoon and Tuesday morning
- Diagnostic Pathology Posters: Refreshment breaks on Sunday afternoon and Tuesday afternoon
- · Education Posters: Refreshment break on Tuesday morning
- Experimental Disease Posters: Refreshment breaks on Sunday morning and Tuesday afternoon
- Industrial and Toxicologic Pathology Posters: Refreshment breaks on Sunday afternoon and Tuesday afternoon
- Natural Disease Posters: Refreshment breaks on Sunday morning and Sunday afternoon

The ACVP abstracts are available on the website at www.acvp.org and on the mobile app.

CLINICAL PATHOLOGY POSTER PRESENTATIONS

C-1

A CASE OF PANCYTOPENIA IN A YOUNG MIXED-BREED CANINE ON THE ISLAND OF ST. KITTS

J. Beeler-Marfisi, F. Castillo Alcala, A.D. Loftis, R. Hall, S. Porter, B.M. Nibblett, and M.A. Thrall Keyword: Infectious Disease

C-2

PREVALENCE OF HEMOPLASMAS AND ITS HEMATOLOGICAL ALTERATIONS IN BRAZILIAN PETS

L.C. Aquino, M.C. Scalon, T.F. da Silva, M.G. da Mota Lima, M. dos S. Lemos, and G.R. Paludo Keyword: Clinical Pathology

C-3

OCCURRENCE OF EHRLICHIA SPP. INFECTION IN DOGS FROM DISTRITO FEDERAL AND ITS CLINICAL PATHOLOGICAL ALTERATIONS

M.A. Lima, M.C. Scalon, L.C. Aquino, T.F. da Silva, F.T. Carneiro, M.A. Abrahim, W.A.C. da Silva, S.P. Mesquita, and G.R. Paludo Keyword: Clinical Pathology

C-4

HEMATOLOGY OF BOBTAIL LIZARDS (TILIQUA RUGOSA) IN WESTERN AUSTRALIA

C.A. Moller, T. Gaál, and J.N. Mills Keyword: Hematology

C-5

HEMATOLOGY RESULTS OF DOGS WITH LYMPHOMA AT INITIAL PRESENTATION

B.C. Rütgen, M. Hutter, and I. Schwendenwein Keyword: Hematology

C-6

PROGNOSTIC VALUE OF IMMUNOCYTOCHEMISTRY IN CANINE LYMPHOMA

S.J. Tornquist, S.C. Helfand, M.E. Gorman, and J. Rigas Keyword: Clinical Pathology

C-7

LACTATE DEHYDROGENASE ACTIVITY IN EQUINE ABDOMINAL FLUID: A PREDICTOR OF LIFE OR DEATH?

C. Smuts, J. Mills, R. Myles, C. Moller, G. D'Mello, and T. Gaál Keyword: Clinical Pathology

C-8

AGE-DEPENDENT VARIATION IN THE CELLULAR COMPOSITION OF EQUINE BRONCHOALVEOLAR LAVAGE FLUID

S.J. Hostetter, J. Gilbertie, S. Wiechert, S.K. Clark, M. de Macedo and B.A. Sponseller Keyword: Cytology

C-9

LABORATORY MARKERS OF INFLAMMATION: DETECTING CANINE C-REACTIVE PROTEIN WITH A POINT-OF-CARE TEST COMPARED TO MICROSCOPIC CHANGES IN NEUTROPHILS

C. Smuts, J. Mills, G. Allen, C. Moller, R. Myles, and T. Gaál Keyword: Clinical Pathology

C-10

ANTI-CHEMOTACTIC EFFECTS OF CANINE PROTEIN C ARE DEPENDENT ON THE ENDOTHELIAL PROTEIN C RECEPTOR (EPCR) EXPRESSED IN CANINE NEUTROPHILS

V.M. Wong, O. Côté, D. Bienzle, M.A. Hayes, and R.D. Wood Keyword: Hematology

C-11

N-LINKED GLYCOSYLATION MAPPING OF CANINE PROTEIN C

V.M. Wong, D. Bienzle, M.A. Hayes, P. Taylor, and R.D. Wood Keyword: Hematology

Focused Scientific Poster Session

C-12

BONE MARROW AND HAEMATOLOGICAL EVALUATION OF 62 XENOGRAFTED CYNOMOLGUS MONKEYS

M.E. Gelain, A. Salmaso, L. Pintore, F. Fante, M. Boldrin, E. Cozzi, and L. Cavicchioli Keyword: Primates

C-13

EFFECTS OF PHYSICAL AND CHEMICAL RESTRAINT ON HEMATOLOGICAL AND HEMOSTATIC VARIABLES IN CATS

J. Volpato, C.R.S. Mattoso, S.L. Beier, M.M. Coelho, R. Tocheto, C.E. Kirsten, R.R. Antunes, and M.E. Saito Keyword: Clinical Pathology

C-14

VALIDATION OF THE ELECTRACHROME CHROMOGENIC FACTOR VIII ASSAY IN MONKEY PLASMA USING THE AUTOMATED ACL ADVANCE COAGULATION ANALYZER

L. Huard, F. Poitout, M. Zamfir, J. McCartney, D. Lourdel, J. Forget, A. Sehgal, and S. Barros Keyword: Hematology

C-15

HEPARINASE MODIFIED THROMBELASTOGRAPHY: AN EX-VIVO EXPERIMENTAL STUDY IN HEALTHY CATS

B. Cuq, M. Dunn, and C. Bédard Keyword: Clinical Pathology

C-16

INTRA-INDIVIDUAL VARIABILITY OF FELINE THROMBELASTOGRAPHY PARAMETERS AND EFFECT OF TISSUE FACTOR CONCENTRATION ON FELINE CITRATED WHOLE BLOOD

B. Cuq, C. Bédard, and M. Dunn Keyword: Clinical Pathology

C-17

BIOLOGICAL VARIATION OF THROMBOELASTOGRAPHY VARIABLES IN CLINICALLY HEALTHY FEMALE HORSES

J.L. Scruggs, B. Flatland, and A. Reed Keyword: Clinical Pathology

C-18

MICROVOLUME URINARY BIOMARKER ANALYSIS IN A RAT MODEL OF KIDNEY DISEASE

A.M. Stepanek, C.C. Sun, V. Vaja, A. Vernet, H.Y. Lin, J.L. Babitt, and D.E. Brown Keyword: Urinary System

C-19

COMPARISON OF GLUCOSE CONCENTRATION IN RAT AND MONKEY WHOLE BLOOD ANALYZED WITH THE STATSTRIP XPRESS GLUCOMETER AND SERUM ANALYZED WITH THE MODULAR ANALYTICS

M. Zamfir, F. Poitout, K. Larocque, L. Huard, and J. McCartney Keyword: Clinical Chemistry

C-20

SERUM PROTEIN CONCENTRATIONS IN CAPTIVE BLUE-FRONTED AMAZON PARROT (AMAZONA AESTIVA) DETERMINED BY MEANS OF SODIUM DODECYL SULFATE-POLYACRYLAMIDE GEL ELECTROPHORESIS (SDS-PAGE)

E.M.S. Schmidt, A.C. Paulillo, R.R. Lange, J.J. Fagliari, and P.C. Silva

Keyword: Clinical Chemistry

C-21

SERUM PROTEIN CONCENTRATIONS IN MALE TURKEYS DETERMINED BY MEANS OF SDS-PAGE ELECTROPHORESIS

E.M.S. Schmidt, A.C. Paulillo, D.N. Souza, J.J. Fagliari, P.C. Silva, C.P. Rubio, and L. Barbosa Keyword: Clinical Chemistry

C-22

LIPOPEROXIDATION AND CARDIAC MARKERS IN HORSES SUBMITTED TO LOW INTENSITY EXERCISE BEFORE AND AFTER ANTIOXIDANT SUPPLEMENTATION

L.A. Yonezawa, T.S. Barbosa, M.J. Watanabe, C.L. Marinho, J.L. Knaut, and A. Kohayagawa Keyword: Cardiovascular

C-23

COMPARISON OF THREE COMMERCIAL ENZYME-LINKED IMMUNOASSAYS FOR DETERMINATION OF HISTAMINE IN SPRAGUE DAWLEY RAT SERUM

A. Farhad, M. Ameri, and D. Hollenback Keyword: Clinical Pathology

C-24

A METHOD COMPARISON STUDY OF TWO ROUTINELY-USED METHODOLOGIES FOR PERFORMING NON-MAMMALIAN COMPLETE BLOOD COUNTS

M.S. Camus and S. Bush Keyword: Clinical Pathology

C-25

AVOIDING TRANSFUSION REACTIONS IN DOGS: EVALUATION OF A COMMERCIALLY AVAILABLE CROSS-MATCHING KIT

D. Villlarnovo, S.A. Burton, B.S. Horney, A.L. MacKenzie, and R.V. Vanderstichel

Keyword: Clinical Pathology

C-26

DETERMINATION OF ALLOWABLE TOTAL ERROR FOR HEMATOLOGY AND COAGULATION MEASURANDS

M.B. Nabity, M.S. Camus, K.E. Harr, B. Flatland, K. Freeman, and L.M. Vap

Keyword: Hematology

C-27

DISCOVERY OF A CARIBBEAN ARENAVIRUS IN LONE STAR TICKS FROM NORTH CENTRAL FLORIDA

K.A. Sayler, J. Lednicky, A.F. Barbet, W. Clapp, and A.R. Alleman Keyword: Infectious Disease

Focused Scientific Poster Session

C-28

DEVELOPMENT OF A SYBR GREEN QUANTITATIVE PCR FOR THE DETECTION OF RANGELIA VITALII

F.C. Paim. A.P. Santos. N.C. Nascimento, S.T. Oliveira, C.S.

Lasta, S.T.A. Lopes, and J.B. Messick

Keyword: Infectious Disease

The ASVCP abstracts are published in the Journal of Veterinary Clinical Pathology.

DIAGNOSTIC PATHOLOGY POSTER PRESENTATIONS

D-1+

HETEROTROPIC GASTRIC MUCOSA/WALL IN SMALL INTESTINE OF DOG

V. Kulshreshtha, K. Saile, and N. Wakamatsu Keyword: Alimentary

CONGENITAL SPONGIFORM LEUKODYSTROPHY IN TWO FEMALE LITTERMATE GERMAN SHEPHERD PUPPIES

Z. Demeter+, D.W. Hague, D.A. Coleman, and S. Lezmi Keyword: Nervous System

A RETROSPECTIVE STUDY OF THYMIC HEMORRHAGE IN 16 DOGS

S. Coutermarsh-Ott+ and E. Howerth Keyword: Toxicologic Pathology

D-4

ALTERNARIA SP. SUPERFICIAL DERMATITIS IN A REHABILITATED HARBOR SEAL

S.J. Belton+, A. Tuttle, K. Marcheterre, D. Sutton, and S. Frasca, Jr.

Keyword: Skin

BILE DUCT DYSPLASIA IN A CALF

A. Ahamat Aboulmali+, D. Francoz, D. Achard, and C. Girard Keyword: Liver and Pancreas

COMPREHENSIVE PATHOLOGIC EVALUATION OF EMBOLIZING COILS IMPLANTED FOR OCCLUSION OF A **CANINE PATENT DUCTUS ARTERIOSUS**

M.T. O'Brien+, T. Lancon, B. Weeks, M.W. Miller, and F.J. Clubb Keyword: Cardiovascular

D-7

LISTERIA MONOCYTOGENES HEPATITIS IN A SERVAL CAT (LEPTAILURUS SERVAL): A CASE REPORT

C. Schmidt+, C. Miller, and G. Haldorson

Keyword: Infectious Disease

D-8

MULTIFOCAL IDIOPATHIC NODULAR BONE FORMATION IN THE DERMIS AND SUBCUTIS OF A CYNOMOLGUS MACAQUE (MACACA FASCICULARIS)

J.A. Beck+, J.F. Lane, R.C. Smedley, S.M. Howell, R. Morales, and L.J. Wagner

Keyword: Primates

D-9

OUTBREAK OF HISTOPHILUS SOMNI MYOCARDITIS AND LARYENGITIS IN FIVE STEERS

K. Horzmann+, Y. Jones-Hall, S. Lenz, and W. Wigle Keyword: Infectious Disease

D-10

PREVALENCE OF INDIGESTIBLE FOREIGN BODY (PLASTIC) AND ITS PATHOLOGY IN THE RUMEN OF THE CATTLE IN ALGERIA

Z. Rouabah+ and M. Tlidjane Keyword: Clinical Pathology

D-11

SMALL INTESTINAL MUSCULARIS THICKENING IN DOGS: CORRELATION OF HISTOLOGIC AND ULTRASONOGRAPHIC FINDINGS

M.M. Broman+, M.A. Miller, J.D. Ruth, and H.G. Heng Keyword: Alimentary

D-12

SUBCUTANEOUS GRANULAR CELL TUMOR (FORMERLY GRANULAR CELL MYOBLASTOMA) IN A GUINEA PIG (CAVIA PORCELLUS)

L. Wennerdahl+, D. Shaw, and F. Williams III Keyword: Neoplasia

D-13

DISSEMINATED HISTIOCYTIC SARCOMA IN A HORSE: A DIAGNOSIS BY IMMUNOCYTOCHEMISTRY AND CYTOCHEMISTRY

K. Nunez+, R. Raskin, M. Broman, and S. Lenz Keyword: Cytology

D-14

EXTRASKELETAL COELOMIC OSTEOSARCOMA IN A PARAKEET

R. Blair+, M. Leissinger, J. Johnson, and F. Del Piero Keyword: Neoplasia

D 45

FATAL SARCOCYSTIS ENCEPHALITIS INFECTIONS IN DOVES IN TEXAS

C.L. Hodo+, D.B. Whitley, S.A. Hamer, B.F. Porter, W.V. Corapi, K.F. Snowden, J.J. Heatley, and A. Rodrigues Hoffmann Keyword: Wildlife

D-16

FIRST POTENTIAL CASE OF NOCARDIOFORM PLACENTITIS IN A MARE FROM ALABAMA

S.M. Shrader+, J.C. Newton, and R.R. Wilborn Keyword: Reproductive System

D-17

GUINEA PIG ADENOVIRUS

A. Schucker+, M. Troutman, Y. Jiang, A. Armien, D. Marthaler, J.L. Shivers, D.Y. Kim, and R. Porter

Keyword: Respiratory System

D-18

IDENTIFICATION OF A DISSEMINATED PSEUDALLESCHERIA BOYDII INFECTION IN A GOLDEN RETRIEVER USING DNA SEQUENCING

S. Aschenbroich+, S. Sanchez, J. O'Neill, S. Platt, and U. Blas-Machado Keyword: Infectious Disease

D 40

INTESTINAL PYTHIOSIS IN A BLACK JAGUAR (PANTHERA ONCA)

N. Villafuerte-Ramirez, G. Martinez-Romero, L. Aviles-Serrano, L. Mendoza, and A. Alcaraz Keyword: Infectious Disease

D-20

CONN'S SYNDROME IN CATS - A CASE REPORT

K. Dietert, J. Magenwirth, M. Deutschland, O. Kershaw, and R. Kopfleisch Keyword: Endocrine

D-21

GLOSSAL SQUAMOUS CELL CARCINOMA IN SITU WITH CANINE ORAL PAILLOMAVIRUS INFECTION IN A DOG

D. Kojima and N. Wakamatsu Keyword: Neoplasia

D-22

A NEW APPROACH TO APE POSTMORTEM CARDIAC EVALUATION

R. McManamon, A.E. Ellis, L.J. Lowenstine, K.A. Terio, C.A. Brown, B. Gilleland, and F.J. Clubb, Jr. Keyword: Cardiovascular

D-23

CANINE DEGENERATIVE MYELOPATHY: A ROLE FOR ASTROCYTES

B. Bacci, P. Hodge, A. Hamilton, J.R. Sandy, and S.N. Long Keyword: Nervous System

D-24

CONGENITAL ANOMALY OF KIDNEY AND URINARY TRACT (CAKUT) IN A RHODESIAN RIDGEBACK DOG

R. Cianciolo, G.E. Lees, and J. Stafford Keyword: Urinary System

D-25

CONGENITAL HEPATIC FIBROSIS IN A HUACAYA ALPACA

M.D. Vieson, T. LeRoith, and T. Cecere

Keyword: Liver and Pancreas

D-26

CYTOLOGIC DIAGNOSIS OF PERKINSUS-LIKE PROTOZOAL INFECTION IN SOUTHERN LEOPARD FROGS (RANA

SPHENOCEPHALA) IN GEORGIA

H.M. Brown, J.D. Brown, and M.K. Keel Keyword: Infectious Disease

D-27

CYTOLOGY AND HISTOPATHOLOGY OF FELINE LUNG-DIGIT SYNDROME IN A CAT

P.J. Yang, C.I. Wu, D.B. Whitley, K. Peery, and E.M. Pieczarka Keyword: Cytology

D-28

DIFFUSE LEPTOMENINGEAL HISTIOCYTIC SARCOMA IN THE CEREBROSPINAL FLUID OF A DOG

C. Cluzel, A. Ahamat Aboulmali, J. Parent, and C. Gara-Boivin Keyword: Neoplasia

D-29

IMMUNOHISTOCHEMICAL EXPRESSION OF IONIZED CALCIUM-BINDING ADAPTER MOLECULE 1 (IBA1) IN CUTANEOUS HISTIOCYTIC PROLIFERATIVE AND INFLAMMATORY DISORDERS OF DOGS AND CATS

F. Pierezan, J. Mansell, A. Ambrus, and A. Rodrigues Hoffmann Keyword: Skin

D-30

MORTALITY IN 8 SPECIES OF 14 ANSERIFORMES FROM A NORTH LOUISIANA AVIARY

K. Kim and F. Del Piero Keyword: Avian

D-31

OCULAR LESIONS OF LEISHMANIASIS IN DOGS FROM BRAZIL

T.B. Martins, C.S.L. Barros, K.J. Esch, J.S. Haynes, and C.A. Petersen

Keyword: Eye and Ear

D-32

PORCINE RESPIRATORY DISEASE COMPLEX IN SOUTHERN BRAZIL: PATHOGENS AND ASSOCIATED HISTOPATHOLOGY

M.C. Silva, R.R. Rech, D. Gava, S.S. Kuchiishi, R. Schaefer, I.M. Langohr, and J.R. Ciacci-Zanella Keyword: Respiratory System

D-33

POSTMORTEM FINDINGS IN DOGS TRAPPED IN A HOUSE FIRE

B. McHale and A.W. Stern Keyword: None of the Above

D-34

TIMP-1 IMMUNOEXPRESSION IN CANINE CUTANEOUS MAST CELL TUMORS CORRELATES WITH HISTOPATHOLOGICAL GRADING

L.H. Pulz, J.G. Xavier, S.R. Kleeb, J.L. Catao-Dias, R.A. Sobral, H. Fukumasu, and R.F. Strefezzi

Keyword: Neoplasia

D-35

ULTRASTRUCTURAL AND HISTOCHEMICAL CHARACTERISTICS OF A LYSOSOMAL STORAGE DISEASE IN A GERMAN SHORTHAIRED POINTER

C.E. Watson and M.D. Chalkley Keyword: Nervous System

D-36

WEISELLA CONFUSA BACTEREMIA IN A FOAL

S.D. Lawhon, F.R. Lopez, A. Joswig, A.E. Watts, T.E. Norman, and B.F. Porter

Keyword: None of the Above

D-37

MOLECULAR DETECTION OF FELINE AUTOSOMAL-DOMINANT POLYCYSTIC KIDNEY DISEASE IN CATS FROM DISTRITO FEDERAL, BRAZIL

M.C. Scalon, L.C. Aquino, T.F. da Silva, F.T. Carneiro, M.A. Abrahim, W.A.C. da Silva, S.P. Mesquita, M.A. Lima and G.R. Paludo

Keyword: Clinical Pathology

+ACVP Young Investigator Award Competitor

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EDUCATION POSTER PRESENTATIONS

ED-1

THE ACVP MAINTENANCE OF CERTIFICATION PROGRAM

A.J. Fales-Williams, E.A.G. Blomme, J.M. Cline, A. Gröne, R.L. Hall, R.M. Simpson, and M.G. Weiser

Keyword: None of the Above

FD-2

THE MPI RESEARCH/MICHIGAN STATE UNIVERSITY COMBINED RESIDENCY PROGRAM – A COLLABORATIVE TOXICOLOGIC PATHOLOGY TRAINING PROGRAM

K. Nelson, D. Patrick, and S. Fitzgerald Keyword: Toxicologic Pathology

The ACVP abstracts will be published on the website at www.acvp. org.

EXPERIMENTAL DISEASE POSTER PRESENTATIONS

E-1

THE EFFECT OF HYPERCHOLESTEROLEMIA ON JOINT HEALTH IN A SWINE MODEL

K. Kuroki, C.C. Bozynski, A.M. Stoker, M.H. Laughlin, and J.L. Cook Keyword: Bone and Joint

F-2

A WINDOW TO THE PERIPHERAL NERVOUS SYSTEM: CORNEAL SENSORY NERVE FIBER LOSS IN SIV-INFECTED MACAQUES

L. Mangus+, J. Dorsey, J. Oakley, and J. Mankowski Keyword: Nervous System

E-3

ADMINISTRATION OF VIRUS NEUTRALIZING ANTIBODIES IN THE PERIPHERY CAN CLEAR RABIES VIRUS FROM THE CNS ONCE THE BLOOD-BRAIN-BARRIER PERMEABILITY IS ENHANCED IN MICE

C. Huang+, Z. Li, G. Zhang, M. Zhou, H. Wu, and Z. Fu Keyword: Infectious Disease

E-4

AGE-DEPENDENT SUSCEPTIBILITY TO MYCOBACTERIUM AVIUM SUBSPECIES PARATUBERCULOSIS INFECTION IN EXPERIMENTALLY INFECTED CALVES USING TWO DIFFERENT DOSES

R. Mortier, H. Barkema, J. Bystrom, O. Illanes, K. Orsel, R. Wolf, G. Atkins, and J. De Buck Keyword: Infectious Disease

E-5

ATTENUATION OF GASTRIC TUMORIGENESIS ASSOCIATED WITH MNU AND HELICOBACTER PYLORI INFECTION IN OSTEOPONTIN DEFICIENT MICE

S-H. Lee+, J-W. Park, D-M. Go, H-K. Kim, and D-Y. Kim Keyword: Neoplasia

E-6

BICARBONATE AVAILABILITY IN PORCINE VOCAL FOLD DEFENSE TO ACIDIC CHALLENGE

A. Durkes+, P. Snyder, and M. Sivasankar Keyword: Alimentary

E-7

CANINE ADIPOSE DERIVED MESENCHYMAL STEM CELLS – A USEFUL THERAPEUTIC OPTION FOR DEGENERATIVE DISEASES OF THE CENTRAL NERVOUS SYSTEM?

F. Hansmann+, N. Jungwirth, T. Skripuletz, M. Stangel, and W. Baumgärtner

Keyword: Nervous System

E-8

CELLULAR TARGETS OF THE MOUSE PAPILLOMAVIRUS ONCOPROTEINS

C.E. Harbison, E.A. White, M.J. Tan, A. Handisurya, S.D. Hayes, J.W. Harper, S.V. Westmoreland, J.T. Schiller, and P.M. Howley Keyword: Neoplasia

DEREGULATION OF THE RAS SIGNALING AXIS PROMOTES METASTASIS VIA THE NFKB PATHWAY IN THE PTEN-/-TP53-

/- MOUSE PROSTATE CANCER MODEL

H.S. Tillman+, J.J. Yin, Y-N. Liu, M. Awan, O. Casey, P. Hynes, P. Martin, and K. Kelly

Keyword: Neoplasia

E-10

CONDITIONAL DELETION OF PTEN WITHIN MURINE UTERINE EPITHELIUM RESULTS IN ENDOMETRIAL CARCINOMA

C. Koivisto+, V. Bravo, A. Perez-Castro, K. La Perle, and G. Leone

Keyword: Respiratory System

E-11

HISTOPATHOLOGICAL AND IMMUNOHISTOCHEMICAL STUDY OF EXOCRINE AND ENDOCRINE PANCREATIC LESIONS IN AVIAN INFLUENZA A EXPERIMENTALLY-INFECTED TURKEYS

L. Cavicchioli, G. Beffagna, R. Zanetti, M. Mainenti, F. Frezza, F. Bonfante, C. Terregino, V. Zappulli, and I. Capua Keyword: Avian

E 12

ULTRASTRUCTURAL STUDIES ON THE VF MUTANT RAT WITH RECOVERABLE TREMOR

M. Kuwamura+, M. Tanaka, T. Izawa, J. Yamate, R.J. Franklin , T. Kuramoto, and T. Serikawa Keyword: Nervous System

E-13

CHARACTERIZATION OF A NOVEL MOUSE MODEL OF RENAL DYSPLASIA WITH AN ENU-INDUCED MUTATION ON CHROMOSOME 8

A.R. Ji+, H. Adissu, S. Newbigging, P.K. Potter, G.A. Wood, and C. McKerlie

Keyword: Urinary System

F-1/

CHARACTERIZATION OF INTERFERON-EPSILON EXPRESSION IN THE RHESUS MACAQUE (MACACA MULATTA)

L.M. Kattenhorn+, E.A. Gengo, and A.D. Miller Keyword: Immune System

E-15

CHARACTERIZING AND DIMINISHING AUTOFLUORESCENCE IN FORMALIN-FIXED PARAFFIN-EMBEDDED HUMAN RESPIRATORY TISSUE

A.S. Davis+, A. Richter, S. Becker, J.E. Moyer, A. Sandouk, O. Schwartz, and J.K. Taubenberger Keyword: Respiratory System

E-16

COMPARISONS OF MONKEYPOX VIRUS CLADE KINETICS AND PATHOLOGY WITHIN THE PRAIRIE DOG ANIMAL MODEL

C.L. Hutson, D.S. Carroll, N. Gallardo-Romero, C.P. Drew, S. Zaki, T. Nagy, C. Hughes, V.A. Olson, J. Bartlett, N. Patel, S.K. Smith, M.S. Keckler, K. Karem, and I.K. Damon

Keyword: Infectious Disease

DISRUPTED MATURATION OF OLIGODENDROCYTES IN THE VF MUTANT RAT

M. Tanaka, T. Izawa, J. Yamate, R.J. Franklin, T. Kuramoto, T. Serikawa, and M. Kuwamura Keyword: Nervous System

E-18

GROSS AND HISTOLOGIC LESIONS ASSOCIATED WITH ACCIDENTAL INTRA-ARTERIAL XYLAZINE ADMINISTRATION IN A REINDEER (RANGIFER TARANDUS)

D. Woodburn and K. Singh Keyword: Nervous System

F-19

IDENTIFICATION OF CRYOGLOBULIN-PRODUCING CELLS IN A CAPILLARIHA HEPATICA-INFECTED CRYOGLOBULINEMIA MOUSE MODEL

N. Aihara+, M. Yamada, J. Kamiie, and K. Shirota Keyword: Immune System

F-20

INVESTIGATION OF THE BIOLOGY OF KERATOACANTHOMAS IN A MOUSE MODEL

K.N. Gibson-Corley, L.M. Rogers, A.J. Dupuy, and D.K. Meyerholz Keyword: Skin

E-21

LECTIN HISTOCHEMISTRY ANALYSES DEMONSTRATE ALTERED GLYCANS IN MOUSE MODEL OF NONALCOHOLIC STEATOHEPATITIS

C. Saravanan+, C. Spence, J. Trevaskis, X. Wang, J.R. Galarneau, W. Chutkow, and K. Mansfield Keyword: Liver and Pancreas

E-22

LOSARTAN RE-PURPOSED AS NOVEL MONOCYTE MIGRATION INHIBITOR FOR TREATMENT OF CANCER METASTASIS

D.P. Regan, A.M. Guth, J. Dunham, M. Petri, and S.W. Dow Keyword: Immune System

E-23

MICE HETERZYGOUS FOR THE F508DEL MUTATION IN THE CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR ANION CHANNEL DISPLAY ATTENUATED CARDIOPULMONARY DYSFUNCTION AND LUNG INJURY AFTER INFLUENZA H1N1 INFECTION

F. Aeffner+, L.M. Joseph, A.A. Gaughan, B. Abdulrahman, J.M. Hickman-Davis, P. Janssen, D. Hayes, A. Amer, D.M. Bedwell, E.J. Sorscher, and I.C. Davis Keyword: Respiratory System

E-24

MICROARRAY ANALYSIS OF ILEUM FROM PIGS EXPERIMENTALLY CHALLENGED WITH LAWSONIA INTRACELLULARIS

S.H. Smith, A. Wilson, I. Van Ettinger, N. MacIntyre, A.L. Archibald, and T. Ait-Ali Keyword: Alimentary

MOLECULAR CHARACTERIZATION OF A NOVEL DIETARY MOUSE MODEL OF NONALCOHOLIC STEATOHEPATITIS

C. Saravanan+, C. Spence, J. Trevaskis, X. Wang, J.R. Galarneau, W. Chutkow, and K. Mansfield

Keyword: Liver and Pancreas

E-26

MYCOBACTERIUM TUBERCULOSIS MAY PERSIST IN VIVO BY INFECTING BONE MARROW MESENCHYMAL STEM CELLS

S. Major, A. Campos-Neto, and G. Beamer Keyword: Infectious Disease

F-27

MYOSTATIN/ACTRIIB ANTAGONISM REVERSES LOSS OF LEAN BODY MASS AND BODY WEIGHT IN SIV-INFECTED MACAQUES

K.E. O'Connell+, H. Knight, M. O'Connell, M. Beck, L. Wachtman, A.D. Miller, C.A. Morris, W. Guo, S. Westmoreland, and S. Bhasin

Keyword: Muscle

E-28

NEUTROPHILS MAY CONTRIBUTE TO PULMONARY TUBERCULOSIS

S. Major and G. Beamer Keyword: Infectious Disease

E-29

NON-SPECIFIC STRESSORS AS HOST DEFENSES

E.K. LeGrand and J. Day Keyword: Immune System

E-30

NOVEL SV40 POLYOMAVIRUS INFECTION OF SPINAL CORD AND RETINA IN SIV-IMMUNOSUPPRESSED MACAQUE MONKEYS WITH PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY AND MENINGOENCEPHALITIS

S. Kaliyaperumal+ and S.V. Westmoreland Keyword: Primates

E-31

OSTEOLYTIC SARCOMAS FROM MICE EXPRESSING HUMAN T-LYMPHOTROPHIC VIRUS-1 TAX VIRAL ONCOGENE

L.G. Lanigan, W.P. Dirksen, J.K. Simmons, T.L. Papenfuss, and T.J. Rosol

Keyword: Bone and Joint

E-32

PHENOTYPIC CHARACTERIZATION OF AN ALLELIC VARIANT OF THE MECHANISTIC TARGET OF RAPAMYCIN (MTOR)

J. Gary, S. Zhang, K. Zhang, W. DuBois, D. Tran, A. Michalowski, and B. Mock Keyword: General Topic

PLAYING WITH FIRE: AN AGENT-BASED MODEL OF FEVER AND OTHER SYSTEMIC STRESSORS

E.K. LeGrand and J. Day Keyword: Immune System

E-34

ROLE OF THE E211K PRION PROTEIN POLYMORPHISM IN BOVINE SPONGIFORM ENCEPHALOPATHY

J. Greenlee, J. Smith, C. Vrentas, M. West Greenlee, and E. Nicholson

Keyword: Nervous System

E-35

SIV-INDUCED AIDS AND DEATH IN RHESUS MACAQUES IN THE ABSENCE OF MACROPHAGE INFECTION

S.V. Westmoreland, A.P. Converse, K. Hrecka, H. Knight, M. Piatak, J. Lifson, K.G. Mansfield, J. Skowronski, and R.C. Desrosiers Keyword: Immune System

E-36

SPINAL CORD NEURONAL DYSFUNCTION IN NAGLU-/- MICE

D. Collins, R. Wheeler, J.V. Rutkowski, and T. Nagy Keyword: Nervous System

F-37

SPONTANEOUS COLITIS IN A RECOMBINANT INBRED LINE OF THE MURINE COLLABORATIVE CROSS

A. Rogala+ and V. Godfrey Keyword: Alimentary

E-38

THE ROLE OF TLRS IN THE PATHOGENESIS OF GLOBOID CELL LEUKODYSTROPHY

E.R. Snook+, J.M. Fisher-Perkins, H.A. Sansing, K.M. Lee, X. Alvarez, A.G. MacLean, K.E. Peterson, A.A. Lackner, and B.A. Bunnell

Keyword: Nervous System

E-39

VALIDATION OF NORMAL HUMAN BRONCHIAL EPITHELIAL CELLS AS A MODEL FOR INFLUENZA A VIRUS INFECTIONS

A.S. Davis+, D.S. Chertow, J.E. Moyer, A. Sandouk, J.B. Suzich, C. Logun, J.H. Shelhamer, and J.K. Taubenberger Keyword: Respiratory System

F-40

THE ROLE OF PALATINE TONSILS AS A PRION ENTRY SITE IN CLASSICAL AND ATYPICAL SHEEP SCRAPIE

M.G. Cancedda, G. Di Guardo, R. Chiocchetti, F. Demontis, G. Marruchella, C. Sorteni, D. Pintus, C. Contu, and C. Ligios Keyword: Nervous System

E-41 THE IDENTIFICATION OF KINASE TARGETS IN EWING SARCOMA CELL LINES

A.C. McCalla+, P.J. Grohar, S.E. Martin, E. Buehler, S. Kim, N.J. Caplen, J. Morris, M. Kunkel, D. Evans, A. Monks, B.A. Teicher, and L.J. Helman Keyword: Neoplasia

+Competitor for the ACVP Young Investigator Award

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INDUSTRIAL AND TOXICOLOGIC PATHOLOGY POSTER PRESENTATIONS

T-1

COMBINATION OF MITOMYCIN C AND LOW DOSE SURAMIN INCREASES SURVIVAL IN AN OPTIMIZED ORTHOTOPIC MODEL OF URINARY BLADDER CARCINOMA IN MICE

J. Tremblay, C. Glover, L. Kolodzieyski, D. Lacroix, S. Thebaud, J. Godin-Ethier, A. Nelson, and V. Dimitriadou Keyword: Toxicologic Pathology

T-2

EVALUATION OF THE EFFECT OF CASTRATION ON THE LIVER TRANSCRIPTOME OF MALE SPRAGUE DAWLEY-RATS

E. Blomme, A. Ditewig, M. Liguori, and W. Buck Keyword: Liver and Pancreas

T-3

HISTOLOGIC AND ECHOCARDIOGRAPHIC CHARACTERIZATION OF CATECHOLAMINE-INDUCED CARDIOMYOPATHY IN DOGS WITH PHEOCHROMOCYTOMAS

E. Edmondson+^, J. Bright, and E.J. Ehrhart Keyword: Cardiovascular

T-4

INTERDIGITAL TRICHOGENIC DERMATITIS IN LABORATORY BEAGLES: ORIGINS IN FOLLICULAR TRAUMA

S. Morgan, E. Nunamaker, C.L. Medina, and W.R. Buck Keyword: Skin

T-5

PARTICIPATION OF MACROPHAGE POPULATIONS IN GST-P-POSITIVE LIVER LESIONS INDUCED IN RATS BY REPEATED INJECTIONS OF THIOACETAMIDE (TAA)

K. Wijesundera+, T. Izawa, C. Katou-Ichikawa, A. Tennakoon, H. Murakami, H. Golbar, M. Kuwamura, and J. Yamate Keyword: Liver and Pancreas

T-6

PROMETASTATIC VARIANTS OF NOVEL MOUSE GASTRIC CANCER CELL LINE WITH CANCER STEM CELL PHENOTYPE AND RESISTANCE TO CYTOTOXIC CHEMOTHERAPY

J.W. Park, S.H. Jang, H.K. Kim, S-H. Lee, and D-Y. Kim Keyword: Neoplasia

T-7

THE NOVEL ENERGY-RESTRICTION MIMETIC AGENT OSU-CG5 REDUCES PROSTATE CANCER SEVERITY IN TRANSGENIC ADENOCARCINOMA OF THE MOUSE PROSTATE (TRAMP) MICE

L.D. Berman-Booty+, P.C. Chu, J.M. Thomas-Ahner, D. Wang, T. Yang, S.K. Clinton, S.K. Kulp, and C.S. Chen Keyword: Neoplasia

T-8

DEVELOPMENT OF AN IN VITRO MODEL OF ACQUIRED RESISTANCE TO TOCERANIB PHOSPHATE (PALLADIA®) IN CANINE MAST CELL TUMOR

C.H.C. Halsey[^], D.L. Gustafson, B.J. Rose, R.C. Burnett, D.L. Duval, A.C. Avery, and D.H. Thamm Keyword: Neoplasia

т_α

CONTRIBUTION OF THROMBIN AND PLATELETS TO ACETAMINOPHEN HEPATOTOXICIY IN MICE

K. Miyakawa+^, B.P. Sullivan, R.P. Albee, C. Brandenberger, R. Signal, M.A. Scott, J.P. Luyendyk, P.E. Ganey, and R.A. Roth Keyword: Toxicologic Pathology

T-10

CHARACTERIZATION OF THE TUMOR SPECTRUM ARISING IN HZE IRRADIATED OUTBRED MICE

E. Edmondson+^, C. Fallgren, E. Garcia, D. Kamstock, and M. Weil Keyword: Neoplasia

T-11

ASSESSING POTENTIAL THERAPIES FOR DUCHENNE MUSCULAR DYSTROPHY USING IN VIVO MUSCLE ELECTROPHYSIOLOGY IN THE MDX MOUSE

R. Terry[^] and D.J. Wells Keyword: Muscle

T-12

MINOCYCLINE, A PUTATIVE NEUROPROTECTANT, IN THE SETTING OF DOXORUBICIN-CYCLOPHOSPHAMIDE CHEMOTHERAPY IN A XENOGRAFT MODEL OF TRIPLE-NEGATIVE BREAST CANCER

L. Himmel, M.B. Lustberg, A.C. DeVries, C.-S. Chen, C.L. Shapiro, and S.K. Kulp

Keyword: Toxicologic Pathology

+Competitor for the ACVP Young Investigator Award.

^Competitor for the STP Student Poster Award.

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NATURAL DISEASE POSTER PRESENTATIONS

N-1

MODULATION OF COAGULATION AND FIBRINOLYSIS BY CARBON MONOXIDE AND NITRIC OXIDE IN HEALTHY AND DISEASED DOGS: A THROMBOELASTOGRAPHIC ANALYSIS

S. Yoo+ and C. Olver
Keyword: Clinical Pathology

N-2

GENE EXPRESSION AND TISSUE TROPISM OF NATURAL RACCOON POLYOMAVIRUS (RACPYV) INFECTION

M. Church+, F. Dela Cruz Jr., and P. Pesavento Keyword: Wildlife

N-3

IDENTIFICATION OF BABESIA SPP. INFECTIONS IN WILD CERVIDS OF SASKATCHEWAN, CANADA

K.M. Pattullo+, H.J. Burgess, C.A. Rainbow, B.P. Lockerbie, and T.K. Bollinger Keyword: Wildlife

N-4

PROGNOSTIC SIGNIFICANCE OF PAKT, E-CADHERIN, AND KI-67 EXPRESSION IN FELINE MAMMARY CARCINOMAS

K.M. Musil+, S.W. Mills, J.L. Davies, S. Hendrick, C.G. Duncan, M.L. Jackson, B.A. Kidney, H. Philibert, B. Wobeser, and E. Simko

Keyword: Mammary

N-5

SURVEY OF RESPIRATORY PATHOLOGY IN WILD URBAN RATTUS NORVEGICUS AND RATTUS RATTUS

J.L. Rothenburger+, C.B. Clifford, F.A. Leighton, P.M. Treuting, and C.G. Himsworth
Keyword: Respiratory System

N_6

BONE METASTASES FROM CANINE TRANSITIONAL CELL CARCINOMA

V.A. Charney+, M.A. Miller, H.G. Heng, and D.W. Knapp Keyword: Neoplasia

N-7

DEVELOPMENT OF AN INDIRECT ELISA FOR DETECTING SERUM ANTIBODIES TO LEPORID HERPESVIRUS-4 USING A NOVEL RECOMBINANT GLYCOPROTEIN G

J. Sunohara-Neilson+, É. Nagy, S. Carman, and P.V. Turner Keyword: Infectious Disease

N-8

ESTABLISHING DETECTION METHODS FOR A CHIMERIC ANTIGEN RECEPTOR FOR CANCER IMMUNOTHERAPY IN DOGS

S.M. Keller+, M. Schjaerff, R. Rebhun, and P.F. Moore Keyword: Neoplasia

N-9

EVIDENCE OF OXIDATIVE INJURY IN PIGS WITH MELANOSIS COLI

B. Wilberts+, K. Schwartz, P. Gauger, and E. Burrough Keyword: Alimentary

N-10

EXPRESSION OF MICROSOMAL PROSTAGLANDIN SYNTHASE-1 (MPGES-1) IN NORMAL TISSUES AND IN MAMMARY TUMORS IN FEMALE DOGS

B. Pouleur-Larrat+, S. Larrat, K. Sayasith, and M. Doré Keyword: Mammary

N-11

LOCAL IMMUNE RESPONSES IN CYTAUXZOON FELIS-INFECTED DOMESTIC CATS

K. Frontera-Acevedo+ and K. Sakamoto Keyword: Immune System

N-12

MENINGOENCEPHALITIS IN A DOG DUE TO TRICHOSPORON MONTEVIDEENSE

L.K. Bryan+, S.C. Kerwin, B.L. Wickes, S.D. Lawhon, and B.F. Porter Keyword: Nervous System

N-13

THE PREVALENCE OF EHRLICHIA CHAFFEENSIS, EHRLICHIA EWINGII, AND RICKETTSIA SPECIES IN HOST-SEEKING AMBLYOMMA AMERICANUM IN NORTH CENTRAL FLORIDA

S.S.K. Beatty+, K.A. Sayler, A.D. Loftis, and A.R. Alleman Keyword: Infectious Disease

N-14

PROGNOSTIC VALUE OF HISTOLOGIC GRADING FOR FELINE MAMMARY CARCINOMA: A RETROSPECTIVE SURVIVAL ANALYSIS

S.W. Mills+, K.M. Musil, J.L. Davies, S. Hendrick, C.G. Duncan, M.L. Jackson, B.A. Kidney, H. Philibert, B. Wobeser, and E. Simko Keyword: Mammary

N-15

PROGRAMMED DEATH 1 (PD-1) - MEDIATED T CELL EXHAUSTION CAUSES IMPAIRED PHAGOCYTE FUNCTION DURING CANINE LEISHMANIASIS

K.J. Esch+, R. Juelsgaard, P.A. Martinez, D.E. Jones, and C.A. Petersen

Keyword: Infectious Disease

N-16

SIMILARITIES BETWEEN CANINE AND HUMAN MUCOSAL MELANOMA INDICATE PROMISE FOR SURROGATE PRE-CLINICAL MODELING IN DOGS

H.T. Michael+, S.M. Hewitt, and R.M. Simpson Keyword: Neoplasia

Focused Scientific Poster Session

N-17

ATYPICAL MYELOENCEPHALOPATHY WITH CEROID LIPOFUSCINOSIS IN A TENNESSEE WALKER HORSE

K. Sakaguchi, D. Kojima, K.N. Shell, F. Del Piero, R.

McConnico, and N. Wakamatsu Keyword: Nervous System

N-18

CAUSES OF MORTALITY IN LIVE EXPORT CATTLE ON LONG HAUL VOYAGES

S.J. Moore, M.A. O'Dea, J. Creeper, N. Perkins, A. Barnes, and A.J. O'Hara

Keyword: Respiratory System

CHARACTERIZATION OF THE NONSTRUCTURAL PROTEINS OF CANINE MINUTE VIRUS

O. Fasina, L. Sukhu, and D. Pintel Keyword: Infectious Disease

N-20

DESCRIPTION OF THE PATHOLOGY ASSOCIATED WITH SUDDEN DEATH OF YOUNG FELINES IN SHELTERS

D. Ordanes and A. Alcaraz Keyword: Infectious Disease

N-21

EQUINE HERPESVIRUS-5 (EHV-5) ASSOCIATED INTERSTITIAL PNEUMONIA IN FOALS

M. Komine, S. Bolin, T. Mullaney, A. Lim, M. Okamoto, H. Taniyama, R. Kirisawa, and K. Williams Keyword: Respiratory System

HEREDITARY OSTEOGENESIS IMPERFECTA IN FINNISH LAPPHUND

M. Anttila, K. Vainio-Siukola, and G. Vidren Keyword: Bone and Joint

N-23

PULMONARY VENO-OCCLUSIVE DISEASE IN DOGS

K. Williams, S. Priestnall, I. Moore, and A. Jutkowitz

Keyword: Respiratory System

RENAL EXPRESSION OF ALPHA-ENOLASE IN CATS WITH CHRONIC KIDNEY DISEASE

S. McLeland and M. Lappin Keyword: Urinary System

UNUSUAL FACIAL PRESENTATION OF HALICEPHALOBUS GINGIVALIS IN A MARE FROM COSTA RICA

A. Berrocal, A. Aguilar Chavarría, and J.B. Oliveira Keyword: Skin

N-26

CACTUS BUCKS, TESTICULAR LESIONS, AND EPIZOOTIC HEMORRHAGIC DISEASE IN COLORADO MULE DEER

K. Fox, L. Wolfe, and B. Diamond

Keyword: Wildlife

N-27

COMPARISON OF THE VIRAL LOAD OF EQUUS CABALLUS PAPILLOMAVIRUS TYPE 2 (ECPV-2) DNA IN EQUINE SQUAMOUS CELL CARCINOMAS AND NON-CANCEROUS TISSUES USING QUANTITATIVE PCR

C. Knight, M. Dunowska, J. Munday, J. Peters-Kennedy, and B. Rosa

Keyword: Infectious Disease

N-28

CUTANEOUS LYMPHOCYTOSIS IN 5 DOGS

D.R. Rissi and P.M. Rakich

Keyword: Skin

N-29

IMMORTALIZED SHEEP MICROGLIA ARE PERMISSIVE TO A DIVERSE RANGE OF RUMINANT VIRUSES

J.B. Stanton, J.F. Muñoz-Gutierrez, J.F. Evermann, J.F. Ridpath, and D.S. Bradway
Keyword: Infectious Disease

N-30

STUDY OF THE HYPPO-TRANSDUCER TAZ IN CANINE AND FELINE MAMMARY TUMORS: PRELIMINARY DATA

V. Zappulli, S. Gasparini, G. Beffagna, M. Mainenti, L. Cavicchioli, and M. Castagnaro Keyword: Mammary

N-31

TUBULOPROTEINOSIS IN AN EMACIATED LIVE STRANDED HUMPBACK WHALE (MEGAPTERA NOVAEANGLIAE)

T.D. Redford, P. Cottrell, L. Akhurst, M. Haulena, and S. Raverty Keyword: Wildlife

+Competitor for the ACVP Young Investigator Award

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Veterinary student poster abstracts will be available for viewing in Room 517E at the Palais des congrès de Montréal at the following times:

Sunday, November 17	. 9:30 a.m.–1:00 p.m.
Poster Setup: Sunday, November 17	7:00 a.m9:00 a.m.
Poster Teardown: Tuesday, November 19	3:30 p.m4:30 p.m.

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CLINICAL CASE REPORT/SERIES

Veterinary Student Poster #1

MICROSCOPIC LESIONS AND DIFFERENT TYPES OF CLOSTRIDIUM PERFRINGENS AND THEIR RELATED TOXINS BY SANDWICH ELISA IN CATTLE

F. Sasani¹*, H. Marzban², J. Javanbakht¹, F. Moosakhani³ and M. Imanparast³

¹Faculty of Veterinary Medicine, Department of Pathology, Tehran University, Tehran, Iran; ²Faculty of Veterinary Medicine, Tehran University, Tehran, Iran; and ³Faculty of Veterinary Medicine, Department of Microbiology Sciences, Islamic Azad University, Branch of Karaj, Karaj, Iran

Veterinary Student Poster #2 ESTABLISH REFERENCE INTERVAL FOR VOIDED URINE SAMPLES IN HEALTHY ADULT ALPACAS

W.H. Brown¹, L. Butler², C. Wang³, and H.A. Flaherty² Departments of Veterinary Clinical Pathology², Veterinary Diagnostic and Production Animal Medicine³, and College of Veterinary Medicine¹

Veterinary Student Poster #3 TRANSIENT MYELOPEROXIDASE DEFICIENCY IN A DOG IDENTIFIED BY ADVIA® 120 TECHNOLOGY

K.M. Whipple, J.H. Meinkoth, and A.J. Jarchow Center for Veterinary Health Sciences, Oklahoma State University, Stillwater, OK

Veterinary Student Poster #4 PATHOLOGY OF HAEMONCHUS CONTORTUS IN NEW

PATHOLOGY OF HAEMONCHUS CONTORTUS IN NEW WORLD CAMELIDS IN GEORGIA: A RETROSPECTIVE STUDY

E.E. Edwards, L.H. Williamson, B. Garner, B. Storey, and K. Sakamoto

Departments of Pathology, Large Animal Medicine, and Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, GA

Veterinary Student Poster #5 THE DENTAL PATHOLOGY OF THE CALIFORNIA SEA LION (ZALOPHUS CALIFORNIANUS)

N.L. Sinai, R.H. Dadaian, and F.J.M. Verstraete
Department of Surgical and Radiological Sciences, School of
Veterinary Medicine, University of California, Davis, CA

Veterinary Student Poster #6 COCCIDIOIDOMYCOSIS IN NONHUMAN PRIMATES: A CASE SERIES AND REVIEW OF THE LITERATURE

L.C. Mullaney^{1,2}, M.A. Owston², and E.J. Dick Jr.²

¹Department of Biomedical Sciences, College of Veterinary
Medicine, Cornell University, Ithaca, NY, and ²Department of
Pathology, Southwest National Primate Research Center, Texas
Biomedical Research Institute, San Antonio, TX

Veterinary Student Poster #7 SILICA UROLITHIASIS IN DOGS FROM THE CARIBBEAN ISLAND OF ST. KITTS

S. Niesz-Ent, M. Arauz, and C. Chapman Department of Pathobiology, Ross University School of Veterinary Medicine, St. Kitts, West Indies

Veterinary Student Poster #8

COMPARISON OF MANNHEIMIA HAEMOLYTICA ISOLATES FROM AN OUTBREAK OF BOVINE RESPIRATORY DISEASE

S. Rainbolt, M. Moore, B. Lubbers, R. Davis, D. Pillai, and D. Mosier Department of Diagnostic Medicine and Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, KS

Veterinary Student Poster #9

FATAL STREPTOCOCCUS ANGINOSIS-ASSOCIATED PNEUMONIA IN A CAPTIVE SUMATRAN ORANGUTAN (PONGO ABELII)

E.A. Ihms, J.B. Daniels, C.S. Koivisto, M.T. Barrie, and D.S. Russell Department of Veterinary Biosciences, The Ohio State University College of Veterinary Medicine, Columbus OH and Columbus Zoo and Aquarium, Powell OH

Veterinary Student Poster #10 UNUSUAL PRESENTATION OF PSEUDOMYCETOMA IN A DOMESTIC LONGHAIR CAT

L. Huang and K. Zimmerman

Department of Biomedical Sciences and Pathobiology, Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA

Veterinary Student Poster #11 CRYPTOCOCCUS IN A FERAL CAT

E. Lane, S. Jolissaint, D. Ordanes, and A. Alcaraz Department of Pathology, College of Veterinary Medicine, Western University of Health Sciences, Pomona, CA

Veterinary Student Poster #12

MICROCYSTIC MENINGIOMA IN A ST. KITTS AFRICAN GREEN MONKEY [CHLOROCEBUS AETHIOPS SABAEUS]

A. Nichols¹, M. Arauz¹, A. Beierschmitt¹.², F.M.K. James³, and J. Beeler-Marfisi¹

¹Department of Biomedical Sciences, Ross University School of Veterinary Medicine, St. Kitts; ²Behavioural Science Foundation, St. Kitts; and ³Ontario Veterinary College, University of Guelph, Canada

Veterinary Student Poster #13 HISTOLOGICAL CHARACTERIZATION OF SIBERIAN STURGEON (ACIPENSER BAERII) LYMPHOCYTIC CELLS USING IN SITU HYBRIDIZATION AND IMMUNOHISTOCHEMISTRY

J. Munhofen, J. Zhang, S. Fogelson, and C. Brown Department of Pathology, College of Veterinary Medicine, University of Georgia, Athens, GA

Veterinary Student Poster #14 CYTOGENETIC MONITORING OF TREATMENT RESPONSE IN CANINE CHRONIC MYELOID LEUKEMIA

S.C. Roode, L. Borst, K. Kow, R.J. Milner, and M. Breen Department of Molecular Biomedical Sciences and Department of Population Health and Pathobiology, College of Veterinary Medicine, NC State University, Raleigh, NC, and Department of Small Animal Clinical Sciences, College of Veterinary Medicine, University of Florida, Gainesville, FL

Veterinary Student Poster #15 COMPARISON OF REPORTED PROGNOSTIC DATA TO ACTUAL SURVIVAL TIMES FOR SOFT TISSUE SARCOMAS IN DOGS

A. Lisankis, M. Ackermann, J. Hostetter, E. Whitley, M. Yaeger, R. Myers, J. Haynes, and A. Fales-Williams Department of Veterinary Pathology, College of Veterinary Medicine, Iowa State University, Ames, IA

Veterinary Student Poster #16 THE EFFECT OF UREA ON THE REFRACTOMETRIC TOTAL PROTEIN MEASUREMENT IN DOGS AND CATS WITH AZOTEMIA

K. Young, M. Leissinger, V. LeDonne, B.J. Grasperge, and S.D. Gaunt

Department of Pathobiological Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA

Veterinary Student Poster #17 CUTANEOUS BENIGN IRIDOPHOROMA IN A SPADEFOOT TOAD (SPEA SPP.)

H.M. Atkins¹, V. Madden², S. Churchill, and V. Godfrey²
¹Texas A&M College of Veterinary Medicine, College Station,
TX and ²Department of Laboratory Animal Medicine, University
of North Carolina-Chapel Hill

Veterinary Student Poster #18

HISTOLOGICAL AND MOLECULAR PREVALENCE OF YERSINIA ENTEROCOLITICA IN MICE, RATS, AND MONGOOSE IN A CAPTIVE AFRICAN GREEN MONKEY FARM IN ST. KITTS, WEST INDIES

D. Recinos¹, M. Arauz¹, O. Illanes¹, A. Beierschmitt^{1,2}, S. Rostad¹, M. McCoy¹, A. Loftis¹, D. Boruta¹, D. Spencer¹, and E. Soto¹

¹Department of Clinical Sciences, Ross University School of Veterinary Medicine, Basseterre, St. Kitts, West Indies and ²Department of Behavioral Sciences, Behavioural Science Foundation, St. Kitts, West Indies

Veterinary Student Poster #19 A CASE OF TUBERCULOSIS IN A NORTHERN FULMAR FROM THE NORTHWEST ATLANTIC

N. Brochu¹, P-Y. Daoust¹, and Z. Lucas²

¹Canadian Cooperative Wildlife Health Centre, Department of Pathology & Microbiology, Atlantic Veterinary College, University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada and ²Halifax CRO, Halifax, Nova Scotia, Canada

Veterinary Student Poster #20

HEPATOCELLULAR CARCINOMA AND DUODENAL ADENOMA IN AN AFRICAN GRASS RAT (ARVICANTHUS NILOTICUS)

A.T. Massa¹, D. Agnew^{1,2}, and S.J. French^{1,2}

¹College of Veterinary Medicine, Michigan State University, East Lansing, MI and ²Department of Pathobiology and Diagnostic Investigation, Diagnostic Center for Population and Animal Health, Michigan State University, Lansing, MI

Veterinary Student Poster #21

CHARACTERIZATION OF PANCREATIC NODULES FROM TWO SPECIES OF TELEOSTEAN FISH: SHORTHORN SCULPIN (MYOXOCEPHALUS SCORPIUS) AND ATLANTIC WOLFFISH (ANARHICHAS LUPUS)

J.S. Fortin, A.D. Dallaire, and M.-O. Benoit-Biancamano Department of Pathology and Microbiology, Faculty of Veterinary Medicine, University of Montreal, Saint-Hyacinthe, QC, Canada

Veterinary Student Poster #22

GENETICALLY DISTINCT ORAL PAPILLOMAVIRUSES IN SYMPATRIC POPULATIONS OF COYOTES AND DOMESTIC DOGS

M.W. Zabrodski, M. Eschbaumer, M. Li, M. Czub, A. Massolo, O.M. Slater, S. Liccioli, C.G. Knight, and P.J. Duignan Department of Ecosystem and Public Health, Faculty of Veterinary Medicine, University of Calgary

Veterinary Student Poster #23

CYTAUXZOON FELIS CYTOCHROME B PHARMACOGENOMICS: DEVELOPMENT OF A RAPID CYTOCHROME B GENOTYPING ASSAY USING HIGH RESOLUTION MELT ANALYSIS

M.E. Schreeg¹, H.S. Marr¹, J. Tarigo¹, L.A. Cohn², M.G. Levy¹, and A.J. Birkenheuer¹

¹Department of Clinical Sciences, North Carolina State College of Veterinary Medicine, Raleigh, NC and ²Department of Veterinary Medicine and Surgery, University of Missouri College of Veterinary Medicine, Columbia, MO

Veterinary Student Poster #24

MANNHEIMIA HAEMOLYTICA IN A TENNESSEE WALKING HORSE

D. Butler, S. Sturdivant, and E. Gilbreath Department of Pathobiology, Tuskegee University School of Veterinary Medicine, Tuskegee, AL

Veterinary Student Poster #25 VIRAL GRANULOMATOUS DISEASE IN A MARE

A. Myers¹, R. Wilkes², K. Williams³, and J. Edwards¹
¹Department of Veterinary Pathobiology, Texas A&M University,
College Station, TX; ²Department of Biomedical and Diagnostic
Sciences, University of Tennessee, Knoxville, TN; and ³Department
of Pathobiology and Diagnostic Investigation, Michigan State
University, East Lansing, MI

Veterinary Student Poster #26 SMALL COLON GASTROINTESTINAL STROMAL TUMOR (GIST) WITH SMALL COLON INTUSSUSCEPTION AND RECTUM AND SMALL COLON PROLAPSE IN A MULE

M.V. Bianchi¹, N. Fowlkes², K. Kim², and F. Del Piero²
¹Setor de Patologia Veterinária, Universidade Federal do Rio
Grande do Sul, Porto Alegre, RS, Brazil and ²Department of
Pathobiological Sciences, Louisiana State University, Baton
Rouge, LA

Veterinary Student Poster Abstract #27 THYMOMA IN A DWARF RABBIT

C.E. Alex¹, K.M. Boes¹, M. McCormick², and T.E. Cecere¹
¹Department of Biomedical Sciences and Pathobiology, Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA and ²Companion Animal Clinic, Blacksburg, VA

Veterinary Student Poster #28 LONE KATAHDIN EWE WITH COPPER TOXICITY FROM A HERD OF 60

J. Armstrong, C. Benson, B. Oscarson, and L. Sharkey Department of Clinical Sciences, University of Minnesota

Veterinary Student Poster #29 AVIAN TUBERCULOSIS AND PORCUPINE QUILL TRAUMA IN A NORTHERN GOSHAWK (ACCIPITER GENTILIS)

K. Pon, M. Lejeune, O.M. Slater, C. Wagg, M. Kovacs, and P.J. Duignan

Department of Ecosystem and Public Health, University of Calgary Veterinary Medicine, Calgary, Alberta, Canada

Veterinary Student Poster #30 PROTOZOAL INFESTATION OF THE YOLK SAC IN ANGELFISH FRY

E.R. Cornwell, R.G. Getchell, G.A. Wooster, and P.R. Bowser Aquatic Animal Health Program, Department of Microbiology and Immunology, College of Veterinary Medicine, Cornell University, Ithaca, NY

Veterinary Student Poster #31 SARCOCYSTIS CANIS-ASSOCIATED NECROTIZING HEPATITIS IN A BLACK BEAR (URSUS AMERICANUS)

G. Moll¹, T. Thaiwong², A. Lim², and D. Sledge²

¹College of Veterinary Medicine and ²Diagnostic Center for Population and Animal Health, Michigan State University, Lansing, MI

Veterinary Student Poster #32

BOXER DOGS AND DNA MISMATCH REPAIR: INVESTIGATING SINGLE NUCLEOTIDE POLYMORPHISMS IN MSH2 AND MLH1

E.C. Alloway and M.L. Hauck
Department of Clinical Sciences, North Carolina State
University College of Veterinary Medicine

Veterinary Student Poster #33 PREVALENCE OF INCIDENTAL ENDOCRINE PATHOLOGY IN DOGS

A.M. Dieterly, S.J. Sharpe, B.L. Njaa, S.F.E. Cole, A.

Van Griesthuysen, and C.G. Lamm

Department of Anatomic Pathology, Veterinary Diagnostic Services, University of Glasgow, Scotland, UK and IDEXX Laboratories, Inc.

Veterinary Student Poster #34 CLINICAL AND HISTOLOGIC FEATURES OF EIGHT CASES OF CANINE GALLBLADDER NEUROENDOCRINE CARCINOMA

P.K. Rosenstein¹, D.C. Clendaniel², C.G. Schelling², K.K. Sadanaga², and M.D. Sánchez¹

¹Department of Pathobiology, University of Pennsylvania, School of Veterinary Medicine, Philadelphia, PA and ²Mid-Atlantic Veterinary Specialists, Malvern, PA

Veterinary Student Poster #35

MORBILLIVIRUS PNEUMONIA IN A BOTTLENOSE DOLPHIN (TURSIOPS TRUNCATES) FROM THE 2013 OUTBREAK ON USA EAST COAST

E.L. Noland, E.W. Howerth, and C. Driscoll
Department of Pathology, College of Veterinary Medicine, University
of Georgia, Athens, GA and Fish & Wildlife Health Program,
Maryland Department of Natural Resources, Cooperative Oxford
Laboratory, Oxford, MD

Veterinary Student Poster #36 PREVALENCE OF HEMOSPORIDIAN BLOOD PARASITES IN CALIFORNIA HUMMINGBIRDS

S. Bahan and H. Ernest

Wildlife Genetics and Population Health Laboratory, Department of Population Health and Reproduction, School of Veterinary Medicine, University of California, Davis

EXPERIMENTAL DISEASE

Veterinary Student Poster #37 RESPONSE OF EPICARDIAL CORONARY ARTERIES AND MYOCARDIUM TO GROWTH HORMONE FOLLOWING LOW DOSE WHOLE BODY IRRADIATION

K. Vail^{1,2}, G. Melendez², J.M. Cline², and T.B. Clarkson²
¹Tuskegee University School of Veterinary Medicine, Tuskegee,
AL and ²Center for Comparative Medicine Research, Wake Forest
University School of Medicine, Winston-Salem, NC

Veterinary Student Poster #38

ENERGY IMBALANCE AND PHYSIOLOGICAL CHANGES DURING DETOMIDINE CONSTANT RATE INFUSION IN STANDING HORSES

P.B.S. Serpa, P. Garbade, C.C. Natalini, R.L. Cavalcanti, F.S.F. Cruz, B.F.P. Molnar, J.P.N. Estrella, D.P. Bezerra, A.R. Pires, and M. Midon

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Veterinary Student Poster #39

PATHOGENESIS OF DISSEMINATED INTRAVASCULAR COAGULATION IN CANCER: HEMANGIOSARCOMA CELLS GENERATE THROMBIN IN A TISSUE FACTOR-DEPENDENT MANNER

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Veterinary Student Poster #40

ACUTE EFFECTS OF MULTIPLE DOSE FULLERENE EXPOSURES IN MICE AFTER INTRAVENOUS OR INTRAPERITONEAL EXPOSURE

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IN VITRO TYPE I INTERFERON STIMULUS IN HUMAN MACROPHAGES INCREASES TRANSCRIPTION OF CCL8/MCP-2

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PATHOGENESIS OF LOW VIRULENCE NEWCASTLE DISEASE VIRUS INFECTION IN MALLARDS

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EFFECTS OF CORTICOSTEROIDS ON BIOSYNTHETIC CARTILAGE MATRIX PRODUCTION

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IS TOXOPLASMA-INDUCED CHRONIC WASTING IN MICE CAUSED BY IMMUNE-MEDIATED PATHOLOGICAL CHANGES IN THE GUT OR CHANGES IN COMMENSAL MICROBIOTA?

Y.M. Kouch, S.E. Ewald¹, J.L. Sonnenburg¹, J.C. Boothroyd¹, and D.M. Bouley²

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SMALL MOLECULE VISUALIZATION USING MALDI-MS IMAGING IN BRAIN TISSUE OF SIV-INFECTED VERSUS UNINFECTED MACAQUES

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DISTRIBUTION AND CYTOKINE GENE EXPRESSION OF INTESTINAL GAMMA-DELTA T CELL SUBSETS IN NEONATAL, UNINFECTED AND MYCOBACTERIUM AVIUM SUBSP PARATUBERCULOSIS INFECTED CALVES

M. Kornya, S. Lim, N. Karrow, and B.L. Plattner Ontario Veterinary College, Department of Pathobiology and Department of Animal and Poultry Science, University of Guelph, Guelph, Ontario, Canada

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INVESTIGATING THE MOLECULAR MECHANISMS OF MACTRIIB-MFC-ASSOCIATED BRUNNER'S GLAND LESIONS IN MICE

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THE ROLE OF TNF IN A MOUSE MODEL OF ACUTE COLITIS

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State University College of Veterinary Medicine, Raleigh, NC, and
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¹lowa State University College of Veterinary Medicine, Ames, IA;
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Stanford University, Stanford, CA

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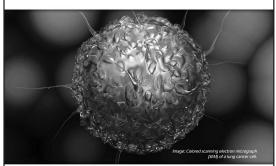
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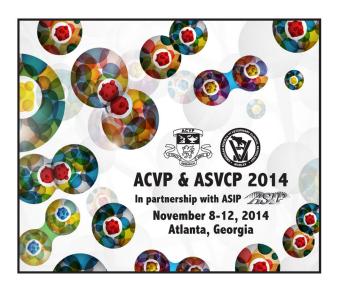
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