



Twenty-Eighth Annual Research Symposium

March 16, 2017
Blacksburg, Virginia





Welcome

to our

28th Annual Research Symposium

Each year the Virginia-Maryland College of Veterinary Medicine hosts this event to support the College's mission of providing education to a diverse population of professional and post-graduate students in preparation for careers in the broad areas of veterinary medicine, biomedical sciences, and public health. The event serves to showcase the research of our graduate students and residents from our various graduate and training programs. The MS and Ph.D. degree curriculum operates as a single multi-disciplinary Biomedical and Veterinary Sciences (BMVS) graduate program.

PROGRAM AT A GLANCE

7:00am Registration and Continental Breakfast

7:30am Welcome and Introduction

7:45am Keynote Speaker, Dr. Mark Simpson

8:45am Oral Session I: Masters Student Presentations

11:00am Poster Session I: Presentations and Break

11:45am LUNCH – Commons Area for Registered Participants

12:45pm Keynote Speaker, Dr. Andrew Pelling

1:45pm Oral Session II: Ph.D. Student Presentations

3:00pm Poster Session II: Presentations and Break

3:45pm Oral Session III: Ph.D. Student Presentations

6:00pm Banquet Registration – The Inn at Virginia Tech

6:30pm Banquet Dinner

7:00pm Awards Ceremony

**Oral Presentations & Keynote Speaker - Classroom 102

*Poster Presentations - CVM Student Lounge



Dr. Mark Simpson, DVM, Ph.D.

**Head, Molecular Pathology Unit NIH
Center for Cancer Research
National Cancer Institute**

**Keynote Speaker: 7:45am
Classroom 102**

Dr. R. Mark Simpson is a Senior Scientist in the Laboratory of Cancer Biology and Genetics at the National Cancer Institute's Center for Cancer Research. He is adjunct graduate professor or clinical professor at four colleges of veterinary medicine, and serves as an elected board member and is immediate past president of the Executive Council of the American College of Veterinary Pathologists. Dr. Simpson is a doctor of veterinary medicine graduate of the University of Georgia, Athens. He completed post-graduate clinical training in veterinary pathology and research training leading to a Ph.D. in comparative biomedical science at the Louisiana State University, Baton Rouge. He is specialty board certified by The American College of Veterinary Pathologists. Dr. Simpson was a faculty member and hematopathologist at the North Carolina State University Veterinary Medical Teaching Hospital, Raleigh. Subsequently, he became a staff scientist with the National Institute of Allergy and Infectious Diseases intramural research program, Laboratory of Immunogenetics and the Infectious Diseases Pathogenesis Branch. In May 2001, Dr. Simpson joined the NCI Center for Cancer Research to establish and head the Molecular Pathology Unit, Laboratory of Cancer Biology and Genetics. He is founding director of the NIH Comparative Biomedical Scientist Training Program, an initiative to provide interdisciplinary training for veterinarians, in both diagnostic pathology and human disease-oriented medical research, to increase the synergy for comparative biomedical research interactions. This program is an NCI-administered component of the NIH Graduate Partnership Program and training leads to a Ph.D. and eligibility to certify as a veterinary pathologist.



Dr. Andrew Pelling, Ph.D.

**Professor, Canada Research Chair
University of Ottawa**

**Keynote Speaker: 12:45pm
Classroom 102**

Award winning Scientist, Professor, Entrepreneur, TED Fellow and TED speaker, Dr. Andrew Pelling has built a career on unapologetic curiosity, creativity and serendipity. Dr. Pelling is a Professor and Canada Research Chair at the University of Ottawa, where he founded and directs a curiosity-driven research lab that brings together Artists, Scientists, Social Scientists and Engineers. The lab uses low-cost, open source materials and methods to explore speculative living technologies of the future. He has, for instance, created human body parts made from plants and grown living skins on LEGOs – innovations with the potential to replace prohibitively expensive commercial biomaterials. Dr. Pelling is also the co-founder and CTO of Spiderwort Inc, a mission driven company developing open source platforms to enable the widespread and global adoption of biological research in all environments and economic contexts. Most recently, Dr. Pelling co-founded and directs pHacktory, a distributed street-level research lab that amplifies community ideas through a potent mixture of craft, serendipity and curiosity. Dr. Pelling's work has been in the international media spotlight for many years, with recognition in outlets such as Wired, The Atlantic, OZY, Huffington Post, NPR, Scientific American, Popular Science, BBC, Der Spiegel, Deutsche Welle and others, as well as numerous highlights in the Canadian media and Scientific media. In 2016, he was named a TED Fellow, one of 21 people chosen annually by the TED organization who are considered to be the most disruptive and transformative change-makers in the world.

PROGRAM SCHEDULE
THURSDAY MARCH 16, 2017

7:00am	Registration and Continental Breakfast
7:30am	Welcome and Introduction Dr. Ansar Ahmed, Associate Dean for Research and Graduate Studies, VMCVM
7:45am	Keynote Speaker R. Mark Simpson, DVM, PhD Diplomate and Immediate Past President, The American College of Veterinary Pathologists Head, Molecular Pathology Unit Director, NIH Comparative Biomedical Scientist Training Program Laboratory of Cancer Biology and Genetics Center for Cancer Research, NCI/NIH Seminar Title: <i>One health translational research in comparative oncology: A model for clinician scientists</i> Oral Session I: Clinical & Basic Science MS Student Presentations CHAIR: GIULIO MENCIOTTI
8:45am	Aherne, Michael Evaluation of right ventricular function using conventional and real -time 3-dimensional echocardiography in dogs with myxomatous mitral valve disease
9:00am	Disney, Julia Tear film lacritin concentrations in dogs with keratoconjunctivitis sicca
9:15am	Monti, Katelynn Fecal Survey for internal parasites of cats in eastern Virginia

SESSION I - CONTINUES

9:30am	Jue, Nathaniel Effects of oxygen concentrations on blastocyst formation of in-vitro derived porcine embryo culture
9:45am	King, Jamie Phase I Clinical Trial of Recombinant Oncolytic Newcastle Disease Virus for Canine Intracranial Meningiomas
10:00am	Groom, Lauren Accuracy of Open MRI for Guiding Injection of the Equine Deep Digital Flexor Tendon within the Hoof
10:15am	Trahan, Richard Effects of three corticosteroids on co-cultures of equine synovium, cartilage and subchondral bone in vitro
10:30am	Wentworth-Morre, Wendy Investigation of a novel modified fixed dose determination protocol for radioiodine treatment of feline hyperthyroidism
10:45am	Williamson, Allan Cardiovascular effects of low and high dose of fentanyl in the isoflurane anesthetized dog: the influence of the anesthetic-sparing effect and the correction of bradycardia
11:00am	Poster Session I: Presentations and Break
11:45am	LUNCH Commons Area for Registered Participants

SESSION II - PH.D. STUDENT PRESENTATIONS

12:45pm

Keynote Speaker

Andrew Pelling Ph.D

Center for Interdisciplinary Nanophysics
Department of Physics
TED Fellow
University of Ottawa

Seminar Title:

Augmented Biology: A New Frontier Inspired by Cheesy Sci-Fi Movies

Session II

CHAIR: ANNE NICHOLS

1:45pm

Bogers, Sophie

Optimized Culture of Equine Bone Marrow Derived Mesenchymal Stem Cells for Joint Disease

2:00pm

Coutermarsh-Ott, Sheryl

Inflammatory signaling pathways involved in canine histiocytic sarcoma

2:15pm

Liao, Xiaofeng

The role of renal infiltrating CD11c+ cells in lupus nephritis

2:30pm

McKell, Allison

A temperature-sensitive Lesion in the N-terminal Domain of the Rotavirus Polymerase Affects its Intracellular Localization and Enzymatic Activity

2:45pm

Menciotti, Giulio

Three-dimensional echocardiographic comparison of mitral valve morphology in Cavalier King Charles Spaniels to mitral valve morphology in dogs of other breeds

SESSION III - PH.D. STUDENT PRESENTATIONS

3:00pm	Poster Session II: Presentations and Break Session III CHAIR: THOMAS BRICKLER
3:45pm	Mu, Qinghui Antibiotics ameliorate lupus-like disease in mice
4:00pm	Petruzzi, Briana Polymicrobial Biofilm Formation by Pasteurella multocida and Histophilus somni
4:15pm	Popielarczyk, Tracee Aligned Nanofiber Topography Directs the Tenogenic Differentiation of Mesenchymal Stem Cells
4:30pm	Saleh, Meriam The Value of PCR in the Diagnosis of Canine giardiasis
6:00pm	Banquet Registration – The Inn at Virginia Tech
6:30pm	Banquet –The Inn at Virginia Tech
7:00pm	Award Presentations Graduate Student Awards Co-Worker Award 2017 Zoetis Research Award

POSTER PRESENTERS

POSTER SESSION I - 11:00 am

Brickler, Thomas
Cao, Qian
Carr, Susan MS
Catanzaro, Nicholas
Eden, Kristin
Ernst, Marigold
Hazy, Amanda
Ledford, Benjamin
Lehman, Christian, MS
McDaniel, Dylan
Moyer, Christine, MS
Nichols, Anne
Qin, Qizhi
Ramesh, Ashwin
Rothschild, Daniel
Twitchell, Erica
Waldrop, Stephen

POSTER SESSION II - 3:00 pm

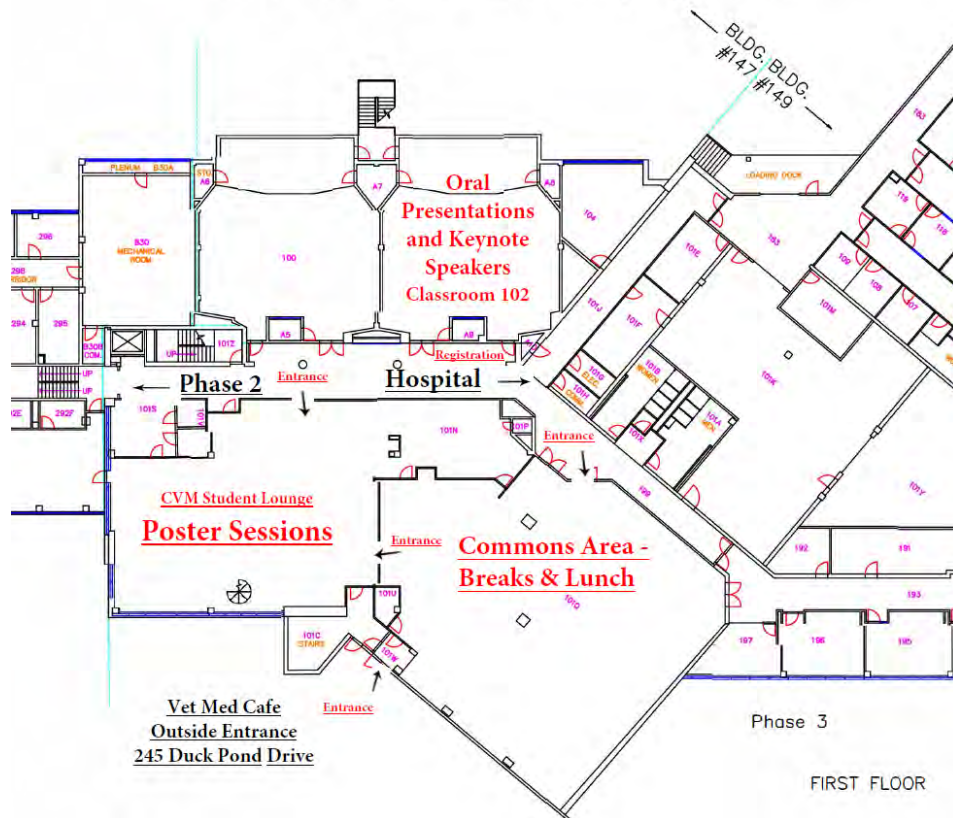
Budnick, James
Castellucci, Tammy
Chen, Miao
Edwards, Michael
Giangarra, Jenna MS
Gudenschwager, Kristobal
Kang, Gloria
Lei, Shaohua
Menarim, Bruno
Mercer, Melissa, MS
Okyere, Benjamin
Rajpar, Ibtesam
Ren, Jingjing
Seward, Marion, MS
Sheehan, Lauren
Villafranca, Maria Cristina
Yugo, Danielle

VMCVM/UNIVERSITY OF MARYLAND

Chantal Ama Agbemabiese
Asha A. Philip

Kaitlin A. Davis

28th Annual Research Symposium



Acknowledgements:

On behalf of the faculty, staff and students of the VA-MD College of Veterinary Medicine we would like to thank our invited speakers:

Dr. Mark Simpson and Dr. Andrew Pelling.

We would like to thank the BMVS-GSA, especially Anne Nichols, Thomas Brickler and Giulio Menciotti for all their help in organizing the days events along with Dr. Jessica Crawford, Cyndi Booth, and Susan Rosebrough.

Thank you to our faculty judges and a special thank you to Becky Jones for her work and input all along the way.

We appreciate the support the College has given to this event. Thank you all for attending the 28th Annual Research Symposium!

Dr. Ansar Ahmed, Associate Dean



SPECIAL THANKS TO:

