Penn Vet Student Research Day
Friday, March 19, 2021

11:45 am Opening Remarks
Andrew M. Hoffman, DVM, DVSc
The Gilbert S Kahn Dean of Veterinary Medicine

Virtual Event REMO

12pm - 2:20 pm STUDENT SPEAKERS Talks: 10 min + 5 min Q&A

12:00-12:05 pm Introduction of students by Greg Sousa

12:05-12:20 pm Jaclyn Carlson: Collagen V Haploinsufficiency Results in Delayed Healing and Altered Wound Matrix Post-Injury in Murine Tendons (mentor: Dr. L. J. Soslowsky)

12:20-12:35 pm Elizabeth Lemmon: IL-1β Alters Cytoskeletal Networks and Reduces Cell Contractility in Meniscal Fibrochondrocytes (mentor: Dr. R. L. Mauck)

12:35-12:50 pm Martha Stone: Chemogenetic Activation of Orexin Neurons Accelerates Emergence from Isoflurane Anesthesia (mentor: Dr. M. Kelz)

12:50–1:30 pm Poster Slam – a video presentation

1:30—1:35 pm Introduction of students by Faazal Rehman

1:35-1:50 pm Justine Cianci: Qualitative Assessment of Fracture Configuration and Subchondral Bone Pathology in Horses with Lateral Condylar Fractures of MC/MT3 (mentor: Dr. K. Ortved)

1:50-2:05 pm Victoria Kranz: Sow Familiarity and Aggression at Post-Gestation Mixing (mentor: Dr. M. K. Pierdon)

2:05-2:20 pm Julianne Nolte: Non-canonical NF-κB Signaling in Lymphatic Vessels Regulates Immune Homeostasis in the Lung (mentor: Dr. M. May)

2:20—3:45 pm Poster Session hosted by REMO

3:45—4:45 pm The Martin M Kaplan V'40 Lectureship

3:45—3:50 pm Keynote Speaker introduction by Justin Hoffman

3:50-4:30 pm Epigenetic Regulation of the Host-Microbiota Relationship
40 min talk with 10 min Q & A
Theresa Alenghat, VMD, PhD
Associate Professor, University of Cincinnati School of Medicine, Cincinnati Children’s Hospital

4:40—5:30 pm Awards presented by Dr. Jennifer Punt
Associate Dean of One Health and the Student Research Club
Acknowledgements

2021 Student Research Day
University of Pennsylvania School of Veterinary Medicine

We wish to acknowledge the NIH/Boehringer Ingelheim Summer Research Program that is designed to expose students in their first or second year of veterinary school to all phases of biomedical research. We also thank Dr. John Wherry and the Penn Institute for Immunology for generously supporting the summer research program. We are grateful to all the sponsors, donors, and families of our patients/clients who have made our research possible.

The organizing committee: Jennifer Punt, VMD, PhD; Phillip Scott, PhD, Kathryn Michel, DVM, MS, MSED; Michael Atchison, PhD. and the Penn Vet Student Research Club. Gayle Joseph, Margy Lindem, Sue Pilder, Reth Touch, and Carole Cloud provided the much-needed organizational and planning assistance.

The Kaplan Lectureship: A gift from the Kaplan Fund supports the Keynote Address for the 2021 School of Veterinary Medicine Student Research Day.

Faculty Judges:

Susan Bender, PhD, VMD
Francis Luca, PhD
Elizabeth Woodward, PhD
Deborah C Silverstein, DVM
Katrin Hinrichs, DVM, PhD

Clockwise L-R: Alexis Gale, Elizabeth Edgerton, Andrea Clause & Karlyn Cassel

Phil Scott, Vice Dean for Research
Student Renee Cotton
Jennifer Punt, Associate Dean of One Health
The Martin M Kaplan V’40 Lectureship

A gift from the Martin M Kaplan V’40 Lectureship enables support of our keynote lecture at the School of Veterinary Medicine.

Theresa Alenghat VMD, PhD
Associate Professor
University of Cincinnati
School of Medicine
Cincinnati Children’s Hospital
Department of Immunology
Center for Inflammation and Tolerance

Epigenetic Regulation of the Host-Microbiota Relationship

Theresa Alenghat, VMD, PhD. is internationally recognized for her work investigating epithelial cells, commensal microbes, and their impact on health and intestinal disease. She and her group have authored more than 30 publications in premier journals, which have garnered more than 3,000 citations. Dr. Alenghat was awarded the CCHMC 2020 Faculty “Research Achievement Award”. Dr. Alenghat participated in Student Research Day as a student at Penn Vet.
History of Phi Zeta

Phi Zeta was originated in 1925 by a group of senior veterinary students in the New York State Veterinary College at Cornell University. With the assistance of a group of faculty members, including the Dean of the College, Dr. Veranus A. Moore, the Society was formally organized, and Dean Moore was elected as the first president of the Alpha Chapter. The Society of Phi Zeta was organized in 1929 at a meeting in Detroit, Michigan, and Dean Moore became the first president of the Society. Also, in 1929, a charter was granted to the School of Veterinary Medicine at the University of Pennsylvania, and the Beta Chapter was established. In 1931, the Executive Committee approved the petition of a group from Iowa State College, and the Gamma Chapter was established. Since then twenty-four chapters have been chartered, bringing the total number of chapters to twenty-seven. Chapters of the Society may be formed at any recognized veterinary medical college or at any other institution of higher learning.

Name and Symbols of the Society—The organizers of the Society, when seeking a suitable name, sought the help of a learned Greek scholar, Professor George P. Bristol of Cornell University. Professor Bristol suggested a Greek word, which in the Latin form is spelled PHILOZOI and means “love for animals.” The abbreviation of Phi Zeta was adopted as the name of the society.

University of Pennsylvania Officers Beta Chapter
Dr. Margret Casal, President

Class of 2022
Kaitlyn Cassel, Lindsay Harris, Sarah Hessen-Schmidt, Devon House, Anna Jones, Erica Mathews, Lauren Palena, Ross Pillischer, Mirei Sakane, Hannah Warshawsky, Julia Weeder, Vickie Zhou

Class of 2021
Laura Badeski, Abigaile Frerotte, Audrey Ghanian, Tara Gleysteen, Elizabeth Harasym, Alexandra Hartzell, Brian Jacobs, Chelsea Jenner-Smith, Kayla Karn, Sondra Hope Calhoun Lavigne, Magdalena Marcinczyk, Emily Nelson, Greta Niedermeyer, Emily Nogay, Marina Relman, Rebecca Rosenthal, Justin Schumacher, Maya Sekhar, Elizabeth Snyder, Nathalie Suciu

Inducted as Juniors (V’21)
Bailey Baumann, Maura Carr, Victoria Convey, Natalie Dean, Abby Goldberg, Kaylynn Johnson, Kayla Kownurko, Karalyn Lonngren, Kimberly Hildreth Martin, Amy Middleton, Kavita Shroff
Martin M. Kaplan V’40

Penn Vet has a global future built on its global past

Martin M. Kaplan, V’40, a virologist, international public health officer, and humanitarian. Dr. Kaplan played an integral role in leading an international effort to restock livestock in Europe after World War II. He was an authority on the transmission of certain diseases from animals to humans, including rabies and influenza. For many years, he was an official of the World Health Organization, where he was chief of veterinary public health and later chief of medical research, promotion, and development. It was here that Dr. Kaplan helped develop a safer rabies vaccine. He continued doing research and was part of a team at the Wistar Institute in Philadelphia that in the 1960s and 1970s developed new rabies vaccines for humans and animals. He served as secretary general of the 1995 Nobel Peace Prize-winning Pugwash Conferences on Science and World Affairs. The Pugwash movement, along with its founder, Joseph Rotblat, was awarded the Nobel Peace Prize in 1995. As the organization’s secretary general from 1976 to 1988, Dr. Kaplan worked for nuclear, chemical, and biological disarmament. Penn Vet intends to build on this global legacy with the explicit goal for Penn Vet to be a Global One Health leader. Kaplan worked from a common belief: that the veterinarian is a vital component in protecting all of humanity from the threats of plague and famine.

2021 Student Research Day

Abstracts and Posters

Oral Presentations: *

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Dr. Benjamin Rush (1746—1813), a signatory of the Declaration of Independence and one of the four original professors of the nations’ first medical school at the University of Pennsylvania. He was a visionary proponent of comparative medicine. Rush was also one of the first to promote the study of veterinary medicine in North America. Rush was a civic leader in Philadelphia, where he was a physician, politician, social reformer, abolitionist, humanitarian, and educator. Moreover, he was the first American physician to become widely known at home and abroad. He also founded of Dickinson College in Carlisle, Pennsylvania. In 1806, in a plan for promoting veterinary knowledge, he introduced a series of lectures to his medical students at the University of Pennsylvania, on studying diseases of domestic animals. Dr. Rush was the most well-known physician in America at the time of his death. The founding of the School of Veterinary Medicine came about on October 2, 1884 through recognition of the need for a well-trained body of veterinarians to cope with the devastating toll of animal disease in a young country. Penn Vet is the only veterinary school in the United States that was a direct outgrowth of the University’s School of Medicine.