



SIERRA



ANGUERA



BOYLE

GRANTS

Alexander Reiter, Dr med vet, Dipl. Tzt., gave invited presentations during the Annual Meeting of the Edwin and Fannie Gray Hall Center for Human Appearance (CHA) in Ardmore, Pennsylvania, last November; an Oral and Maxillofacial Trauma Surgery Course in Halmstad, Sweden in February; the Congress of the Austrian Society of Veterinary Dentistry (OEGTZ) in Innsbruck, Austria in February; the Vetmadrid-Propet Congress in Madrid, Spain in March; the Penn Multi-Disciplinary Consortium (Personalized Dental, Oral and Craniofacial Tissue Regeneration) Research Retreat in Philadelphia in March; the European Congress of Veterinary Dentistry in Dublin, Ireland in May; and the Eurocongress of the Federation of European Companion Animal Veterinary Associations (FECAVA) in Vienna, Austria, in June.

Lila K. Sierra, CVT, VTS (ECC), will be stepping down after 16 years serving as the assistant nursing supervisor of ICU to become the first newly appointed Nursing Coordinator of Penn Vet Cardiology.

Charles Vite, DVM, PhD, was recognized this month as part of the 2016 Champions of Hope in Collaborations in Science and Technology. He was honored for his work with the SOAR-NPC Collaborative of parents and scientists, striving to find therapies for Niemann Pick type C disease. Each year, Global Genes—a leading global rare disease patient advocacy organization—asks for nominations for those deserving of recognition for their extraordinary efforts in rare disease; Vite was recognized at an awards ceremony and also at the annual Tribute to Champions of Hope Gala. In addition, he spoke in June at the Ara Parseghian Medical Research Conference on autophagy in Niemann-Pick type C disease, and at the ACVIM Forum in Denver, Colorado, on developing new therapies for globoid cell leukodystrophy. He published the following: *Crowdsourcing reproducible seizure forecasting in human and canine epilepsy*. Brinkmann BH, Wagenaar J, Abbot D, Adkins P, Bosshard SC, Chen M, Tieng QM, He J, Muñoz-Almaraz FJ, Botella-Rocamora P, Pardo J, Zamora-Martinez F, Hills M, Wu W, Korshunova I, Cukierski W, Vite C, Patterson EE, Litt B, Worrell GA. *Brain*. 2016 Jun;139:1713-22.

Jackie Watson, Research Specialist at New Bolton Center, received a Master of Science in Laboratory Animal Science from Drexel University in May.

Victor Absalón-Medina, DVM, PhD, received a \$1,749,448 grant from Li Animal Health for *Evaluation and optimization of culture media for in vitro embryo purposes using mammalian eggs*. The grant spans from January 1, 2016, to December 31, 2018.

Montserrat Anguera, PhD, received a two-year, \$250,000 grant from Research Careers in Women's Health for K12 BIRCHWH Scholars. The grant spans from January 1, 2016, to December 31, 2018.

Michael Atchison, PhD, received a \$1,401,161 NIH/NIAID/R01 grant for *Control of B Cell Development by YY1*. The grant spans from December 1, 2015, to November 30, 2020.

William Beltran, DVM, PhD, received a \$1,876,891 NIH-NEI grant for *Translational Gene Therapy for Rhodopsin*. The grant spans from March 2016 to February 2017. Collaborators include Drs. Cideciyan and Jacobson, Scheie Eye Institute, and Drs. Hauswirth and Lewin, University of Florida. Beltran also received a \$1,113,049 grant from AGTC, Inc. for *SRA Amended Canine GLP-like ocular toxicology and efficacy studies in dogs*. The grant spans from January 2016 to September 2019, and he is collaborating with **Gustavo Aguirre, VMD, PhD**.

Ashley Boyle, DVM, received a one-year, \$22,330 grant from Grayson Jockey Club for *Validation of stall-side strangles diagnosis using LAMP*. The grant spans from April 1, 2016 to March 31, 2017. She also received a one-year, \$15,000 grant from Boehringer Ingelheim for *Validation of a point-of-care self-heating, microfluidic cartridge for isothermal nucleic acid amplification of Streptococcus equi subsp equi*. The grant spans from December 1, 2015, to November 30, 2016.

Allison Bradbury, PhD, received a \$226,800 grant from Legacy of Angels Foundation for *Lentiviral-mediated Hematopoietic Stem Cell Gene Therapy for Canine Globoid Cell Leukodystrophy*. The grant spans from November 1, 2015, to December 31, 2018.

Rumela Chakrabarti, PhD, received a three-year, \$574,501 NCI-K22 award to explore the tumor suppressive role of Elf5 in different subtypes of breast cancer; identify genes and pathways in preneoplastic mammary gland and tumors affected by Elf5 loss; and evaluate the pathological role of loss of Elf5 in human patient derived xenograft (PDX) tumors.



GALLIGAN



GUHA



KRICK

GRANTS, CONT'D

David Galligan, VMD, MBA, received a three-year, \$339,750 grant from Wharton China Center for the Penn Vet & Wharton Dairy Training Program. The grant spans from December 1, 2015, to November 30, 2018.

Urs Giger, Dr med vet, and **Keiji Mizukami, DVM, PhD**, received a \$106,000 grant from the AKC Canine Health Foundation for the study of the *Genetic Predisposition to Avian Tuberculosis in Miniature Schnauzers*. Mizukami also received a prestigious postdoctoral fellowship from the Japanese Society for the Promotion of Sciences to work in Giger's Laboratory on this and other canine genetic conditions.

Manti Guha, PhD, received a \$50,000 grant from University Research Foundation for *Establishing the Contribution of mtDNA Depletion Towards Metastasis Using a Novel PDX Model*. Guha also received a two-year, \$125,000 grant from the Breast Cancer Alliance for *Reduced mitochondrial DNA copy number is a determinant of breast cancer metastasis*. The grant spans from February 1, 2016, to January 31, 2018.

Karina Guziewicz, PhD, received a \$959,074 grant from the Foundation Fighting Blindness for *AAV-Mediated Therapy for Best Vitelliform Macular Dystrophy*. The grant spans from January 1, 2016, to December 31, 2017. Collaborators are **Gustavo Aguirre, VMD, PhD**, and **William Beltran, DVM, PhD**; Samuel Jacobson, MD, PhD, and Artur Cideciyan, PhD, Scheie Eye Institute at Penn Medicine; Drs. Hauswirth and Lewin, University of Florida; and Dr. Gamm, University of Wisconsin.

Erika Krick, VMD, received a one-year, \$5,000 grant from Cytosorbents Corp. for *Effects of hemoabsorption on cytokine removal and quality of life in cats with cancer*. The grant spans from September 15, 2015, to September 14, 2016.

Christopher Lengner, PhD, received a \$1,448,252 NIDDK R01DK106309 grant for *Control of intestinal regeneration by an Msi-mTorc1 signaling axis*, spanning from May 15, 2016, to April 30, 2020. The grant investigates the molecular mechanisms governing intestinal stem cell activation with the goal of manipulating these mechanisms to address pathological conditions affecting intestinal regeneration, including ischemia-reperfusion injury and radiation enteropathy.

Nicola Mason, BVetMed, PhD, received a one-year, \$186,219 grant from the Richard Lichter Charity for Dogs for *Re-Directed T Cell Therapy in Dogs with B Cell Lymphoma*. The grant spans from December 1, 2015, to November 30, 2016. She also received a one-year, \$40,955 Animal Cancer Foundation Comparative Oncology Grant. She will be building on current work that has led to the first clinical trial evaluating the safety and therapeutic effect of CD20 targeted CAR T cell therapy in client-owned dogs with relapsed B cell lymphoma. Mason aims to investigate the use of alternative intracellular signaling domains that may lead to improved CAR T cell engraftment and persistence in vivo, factors that have contributed to the unprecedented success of this approach in human patients. The work continues a strong collaboration between the Schools of Veterinary Medicine and Medicine at the University of Pennsylvania, where the use of CAR T cell technology has led to durable remissions and potential cures for human patients with B cell malignancies. Mason is affiliated with the laboratory of Carl June, MD, and she is collaborating with Avery Posey, PhD, both from Penn's Perelman School of Medicine.

Sue McDonnell, PhD, received a \$12,500 grant from Merck for a Merck 2015 IN Applicator Behavior Clinical Trial, from January 1, 2016, to June 30, 2016.

Keiko Miyadera, DVM, PhD, received a \$50,000 grant from University Research Foundation for *Molecular Characterization of a Multigenic Canine Model of Retinal Degeneration*. The grant spans from May 1, 2016, to April 30, 2017. Miyadera also received a one-year, \$69,934 grant from Burrows Enterprises for *Clinical & Safety Evaluation of Burr-1 Drops for the Treatment of Dogs with Cataracts*. The grant spans from November 9, 2015, to November 8, 2016.

Angelica Ortiz, PhD, received a two-year, \$110,412 NIH/NCI F32-CA-206431 grant for *IFNARI downregulation in melanoma cells and stromal cells promotes melanoma progression and pulmonary metastasis*. The grant spans from September 1, 2016, to August 31, 2018.

Cynthia Otto, DVM, PhD, received a one-year, \$11,340 grant from AKC-CHF for *Medical Surveillance of Dogs Deployed to the World Trade Center and the Pentagon 2015-Completion*. The grant spans from December 1, 2015, to November 30, 2016.



PITTA



SUNYER



WATSON

Dipti Pitta, PhD, received a \$300,000 grant from Purina Animal Health for the Honey Bee Gut Microbiome Project. The grant spans from March 1, 2016, through February 28, 2019.

Shelley Rankin, PhD, received a one-year, \$16,500 grant from the American College of Veterinary Dermatology for *A Molecular Bead-Based Assay for Molecular Detection of Cutaneous Infectious Organisms*. **Stephen Cole, VMD**, is a project collaborator.

Thomas Schaer, VMD, received a \$49,800 grant from the Orthopaedic Association for *Evaluation of Local Tissue Concentrations and Bioactivity of Vancomycin Eluted from PMMA Implants in an Ovine Fracture Healing Model*. The grant spans from January 1, 2016, to December 31, 2017.

Dieter Schifferli, PhD, Dr med vet, received a \$275,000 NIH R21-AI-112713 grant for *Genetic determinants of systemic host-adapted Salmonella*. The grant spans from February 15, 2016, to January 31, 2018.

Phillip Scott, PhD, received a \$1,166,248 U01 A1088650 grant for *The role of innate cells in the pathogenesis of Leishmania braziliensis infection*. The grant spans from January 1, 2016, to December 31, 2019.

James Serpell, PhD, received a \$20,356 grant from Tufts University for the Animal Ownership Interaction Study, from January 1, 2016, to October 31, 2017.

Karin Sorenmo, DVM, and **Susan Volk, VMD, PhD**, received a \$28,235 grant from the Greater Good Foundation for *The role of collagen in directing canine mammary tumor progression*. The grant spans from January 1, 2016, to December 31, 2016.

Oriol Sunyer, PhD, received a three-year, \$500,000 USDA NIFA award for *Collaborative Immune Reagent Network: Aquacultured Species to generate antibody reagents*. The award spans from May 1, 2016, to April 30, 2019. Sunyer also received a \$420,665 NSF IOS-1457282 grant for *Evolution of Mucosal B Cell Immunity: Novel Roles of IgT+ B Cells in the Control of Host-pathogen Interactions*. The grant spans from August 15, 2015, to July 31, 2018.

Charles Vite, DVM, PhD, received a five-year, \$2,747,191 NIH – NINDS grant. The R01 grant focuses on the development of new therapies for globoid cell leukodystrophy, which occurs in both dogs and human patients. He also received a one-year, \$45,000 grant from the Institute for Translational Medicine and Therapeutics for the ITMAT Pilot Program in Comparative Animal Biology, cell-based therapy for seizures by transplantation of human stem cell-derived inhibitory interneurons modified for rapid maturation-study in dogs. The grant spans from February 1, 2016, to January 31, 2017. In addition, he received a one-year, \$8,000 grant from the University of Pittsburgh (Legacy of Angels Foundation flowdown) for *Treatment of Krabbe Disease Using Intravenous Adeno-Associated Virus Gene Therapy*. The grant spans from December 1, 2015, to November 30, 2016. He also received a \$53,500 grant and a \$50,500 grant from the Million Dollar Bike Ride Program for *Targeted AAV gene therapy for vertical supranuclear gaze palsy and dysphagia* and *Natural history study and biomarker development in the large animal model of mucopolidosis II*, respectively. The grants span from January 1, 2016, to December 31, 2016.

Jeremy Wang, PhD, MD, received a \$2,797,601 NIH MIRA R35GM118052 grant for *Regulation of meiosis in mice*. The grant spans from May 2016 through April 2021.

Brittany Watson, VMD, PhD, received a one-year, \$206,422 grant from PetSmart Charities for the Penn Vet Shelter Medicine Surgical Program. The grant spans from December 1, 2015, to November 30, 2016.