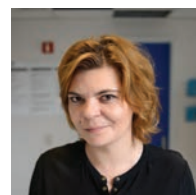




CHAKRABARTI



GUZIEWICZ



HASKINS

## FACULTY AND STAFF NEWS

**Gustavo Aguirre, VMD, PhD**, was awarded the 2017 Proctor Medal for his research in ophthalmology from the Association for Research in Vision and Ophthalmology (ARVO). He is the first veterinarian to be granted the Medal in its 67-year history. The Proctor Medal honors excellence in the basic or clinical sciences as applied to ophthalmology. The award will be presented at the 2017 ARVO meeting, where Aguirre also will deliver the Proctor Lecture. Aguirre's research area is the molecular basis of inherited blindness. His team uses dog models to study the genetic mechanisms behind vision impairment. His research spans several vision disorders, including Leber's congenital amaurosis, Best disease, and retinitis pigmentosa. Aguirre's approach to developing genetic therapies for dogs with Leber's congenital amaurosis has paved the way to clinical trials in humans, currently underway.

**William Beltran, DVM, PhD**, received a 2016 Pfizer Ophthalmics Carl Camras Translational Research Award from the Association for Research in Vision and Ophthalmology (ARVO).

**Rumela Chakrabarti, PhD**, was an invited speaker at the Stem Cell Niche and Cancer Microenvironment meeting at Cedars-Sinai Medical Center, University of California, Los Angeles, last November. In April, she spoke at the 7th International p63/p73 Workshop in Boston.

**Raimon Duran-Struuck, DVM, PhD**, was awarded the Premi Extraordinari de Doctorat en Immunologia Avançada in April from the Autonomous University of Barcelona. The award is given to the best PhD thesis within each specific academic discipline. Duran was the recipient of the advanced immunology award based on his long-term work focused in hematopoietic stem cell transplantation and immunological tolerance.

**Amy Durham, VMD**, was invited to give a four-hour lecture series in June at the University of Perugia, Italy, on the WHO classification system for hematopoietic neoplasms and subtyping lymphomas in dogs, cats, and horses. Durham was also the invited keynote speaker at the Australian Society of Veterinary Pathology Annual Meeting, which took place from July 15 to 17 in the city of Townsville in Queensland, Australia. She spoke on multiple topics in hematopoietic pathology.

**Karina Guzewicz, PhD**, delivered a talk on AAV-mediated Therapy for Best Vitelliform Macular Dystrophy in March at

the Translational Research Acceleration Program Meeting in Baltimore.

**Mark Haskins, VMD, PhD**, gave two talks in April at "The Brain and MPS: Today and Tomorrow" event in Stockholm, Sweden. His topics were *What can we learn from animal models* and *Gene therapy*. He published the following [vet students' names in bold]: *Peck, SH, O'Donnell, P, Kang, JL, Malhotra, NR, Dodge, GR, Pacifici, M, Shore, EM, Haskins, ME, Smith, LJ (2015) Pinpointing the Earliest Manifestations of Bone Disease in Mucopolysaccharidosis VII Dogs. J Mol Genet Metab. 2015 Nov;116(3):195-203. doi: 10.1016/j.ymgme.2015.09.008. Epub 2015 Sep 26. He also published: Flanagan-Steet H, Aarnio M, Kwa, B, Guihard P, Petrey A, Haskins M, Steet R (2016) Cathepsin-mediated alterations in TGF-related signaling underlie disrupted cartilage and bone maturation associated with impaired lysosomal targeting. J Bone Miner Res. 2016 Mar;31(3):535-48. doi: 10.1002/jbmr.2722. Epub 2015 Oct 13. Additionally, he published: Gurda, BL, De Guilhem De Lataillade, A, Bell, A, Wang, P, Ponder, KP, Bagel, J, Hinderer, C, Yox, AD, Steet, RA, Louboutin, J-P, Casal, M, Wilson, JW, and Haskins, ME (2016) Evaluation of AAV-mediated gene therapy for canine mucopolysaccharidosis VII. Molec Therapy Oct 8. doi: 10.1038/mt.2015.189. [Epub ahead of print]. He also published: Pang, B, Yee, KK, Lischak, FW, Rawson, NE, Haskins, ME, Wysocki, CJ, Craven, BA, Van Valkenburgh, B (2016) The influence of nasal airflow on respiratory and olfactory epithelial distribution in the domestic cat (Felis catus) and bobcat (Lynx rufus). J Exp Biol. 2016 Apr 4. pii: jeb.131482. [Epub ahead of print].*

Haskins also published the following: *Ruane, T, Haskins, M, Cheng, A, Aguirre, G, Knox, VW, Qi, Y, Tompkins, T, O'Neill, CA (2016) Pharmacodynamics, Pharmacokinetics and Biodistribution of Recombinant Human N-Acetylgalactosamine 4-Sulfatase after 6 Months of Therapy in Cats using Different IV Infusion Durations. Molecular Genetics and Metabolism 117 (2016) 157-163. Additionally, he published: Callan, MB, Haskins, ME, Wang, P, Zhou, S, High, KA, Arruda, VR (2016) Successful phenotype improvement following gene therapy for severe hemophilia A in privately owned dogs. PLoS One. 2016 Mar 24;11(3):e0151800. doi: 10.1371/journal.pone.0151800. Lastly, he published the following: Simonaro, CM, Tomatsu, S, Sikora, T, Frohbergh, M, Guevara Morales, JM, Wang, RY, Vera, M, Smith, L, Kang, J, Schuchman, EH, Haskins, ME, (2016) Pentosan Polysulfate: Oral Versus Subcutaneous Injection in Mucopolysaccharidosis Type I Dogs. PLoS One. 2016 Apr 11;11(4):e0153136. doi: 10.1371/journal.pone.0153136.*



BALE



LENGNER



LITTMAN

## DR. TRACY BALE RECEIVES NIH MERIT AWARD

Tracy Bale, PhD, Professor of Neuroscience and Director of Penn Vet's Neuroscience Center, received a MERIT (Method to Extend Research in Time) Award for her recently funded Ro1 MH108286 on *Paternal Stress Epigenetics*. The award converts a five-year grant into a ten-year grant. MERIT awardees cannot apply for the award; they are nominated by the funding NIH institute from a large pool of competing award recipients and then endorsed by an advisory council.

Less than five percent of NIH-funded investigators are selected to receive MERIT Awards, which are designed to give productive and creative scientists long-term support, without the burden of constantly devoting time and staff resources to applying for new grants to fund their research. NIH created the MERIT Award program in 1986, to support investigators whose research skills and productivity are "distinctly superior" and who are highly likely to continue to perform in an outstanding manner.

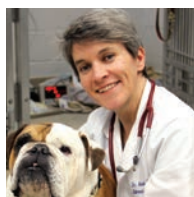
**Christopher Lengner, PhD**, provided invited seminars at the Center for Regenerative Medicine, Dongguk University, Seoul Korea; Mount Sinai Icahn School of Medicine Black Family Stem Cell Institute; Wistar Institute; and the Cold Spring Harbor Laboratory Stem Cell Meeting. He published the following [lab members' names in bold]: Park H, Kim HW, Yoo JS, Lee J, Choi H, Baek S, Lee CJ, Lengner CJ, Sung JS, and Kim J. "Homogenous generation of iDA neurons with high similarity to bona fide DA neurons using a drug-inducible system" *Biomaterials* 2015 Dec;72:152-62. doi: 10.1016/j.biomaterials.2015.09.002. Epub 2015 Sep 6. He also published: **Li N, Yousefi M, Nakauka-Ddamba A**, Li F, Vandivier L, **Parada K**, Woo DH, Wang S, Naqvi AS, Rao S, Tobias J, **Cedeno R**, Minuesa G, Katz Y, Barlowe TS, Valvezan AJ, **Shankar S**, Deering RP, Klein PS, Jensen S, Kharas MG, Gregory BD, Yu Z, **Lengner CJ**. "The Msi family of RNA binding proteins function redundantly as intestinal oncoproteins" *Cell Reports*, 2015 Dec 22;13(11):2440-55. doi: 10.1016/j.celrep.2016.03.025. Epub 2016 Mar 31. Lastly, he published: **Katlinskaya YV, Katlinski KV, Lasri A, Li N, Beiting DP, Durham AC, Yang T, Pikarsky E, Lengner CJ, Johnson FB, Ben-Neriah Y, Fuchs SY**. "Type I interferons control proliferation and function of the intestinal epithelium" *Mol Cell Biol*. 2016 Jan 25;36(7):1124-35. doi: 10.1128/MCB.00988-15.

Lengner also published: Taggart J, Ho TC, Amin E, Xu H, Barlowe TS, Perez AR, Durham BH, Tivnan P, Okabe R, Chow A, Vu L, Park SM, Prieto C, Famulare C, Patel M, **Lengner CJ**, Verma A, Roboz G, Guzman M, Klimek VM, Abdel-Wahab

O, Leslie C, Nimer SD, Kharas MG. "MSI2 is required for maintaining activated myelodysplastic syndrome stem cells" *Nature Communications* 2016 Feb 22;7:10739. doi: 10.1038/ncomms10739. PMID in process. In addition, he published: Cieply B, Park JW, **Nakauka-Ddamba A**, Bebee TW, Guo Y, Shang X, **Lengner CJ**, Xing Y, Carstens RP. "Multiphasic and dynamic changes in alternative splicing during induction of pluripotency are coordinated by numerous RNA-binding proteins" *Cell Reports* 2016 Apr 12;15(2):247-55. doi: 10.1016/j.celrep.2016.03.025. Epub 2016 Mar 31. Lastly, he published: **Li N, Nakauka-Ddamba A**, Tobias J, Jensen ST, **Lengner CJ**. "Mouse Label-Retaining Cells are Molecularly and Functionally Distinct from Reserve Intestinal Stem Cells" *Gastroenterology*, 2016 May 26. pii: S0016-5085(16)34493-6. doi: 10.1053/j.gastro.2016.04.049. [Epub ahead of print]

**Meryl Littman, VMD**, Chair of the American College of Veterinary Internal Medicine (ACVIM) Small Animal Lyme Consensus Update, presented the group's findings at the ACVIM National Forum in Denver, Colorado, in June.

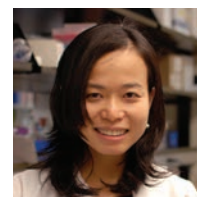
**Nicola Mason, BVetMed, PhD**, published the following: *Immunotherapy with a HER2 targeted Listeria induces HER2-specific immunity and demonstrates potential therapeutic effects in a phase I trial in canine osteosarcoma*. *CCR* 2016 Clin Cancer Res. 2016 Mar 18. Mason N, Gnanandarajah J, Engles J, Gray F, Laughlin D, Gaurner-Hausser A, Wallecha A, Huebner M, Paterson Y.



MASON



McGOWAN



MIYADERA

## FACULTY AND STAFF NEWS

**Erin McGowan, VMD**, was selected for the grand prize in BlackwellKing's *Resident of the Year* contest, out of more than 100 residents across the United States and Canada.

**Keiko Miyadera, DVM, PhD**, published the following: *Canine genome assembly correction facilitates identification of a MAP9 deletion as a potential age of onset modifier for RPGRIP1-associated canine retinal degeneration* in the journal *Mamm Genome*. 2016 Mar 26. The authors were Oliver P. Forman, Rebekkah J. Hitti, Mike Boursnell, Keiko Miyadera, David Sargan, and Cathryn Mellersh.

**Cynthia Otto, DVM, PhD**, has recently spoken at events for the North American Veterinary Community (NAVC), the Israel Companion Animal Veterinary Association, and the Working Dog Organizations of Israel (police, Army, Air Force, prison, and sport). She also testified before the Senate Homeland Security Committee. In addition, the Penn Vet Working Dog Center K9 Performance Medicine service—Dr. Otto and **Tracy Darling, RVT, VTS**—is providing conditioning and rehabilitation services for police, working, and performance dogs.

## PENN VET EDUCATORS HONORED

This year's Zoetis Distinguished Teacher Award was presented to **Mark Oyama, DVM**. The Zoetis Distinguished Teacher Award is the most prestigious teaching award in veterinary medicine. It is presented annually to a faculty member at each school of veterinary medicine in the United States. Its purpose is "to improve veterinary medicine education by recognizing outstanding instructors who, through their ability, dedication, character and leadership, contribute significantly to the advancement of the profession." The entire Penn Vet student body votes on the recipient.

**James "Sparky" Lok, DVM, PhD**, received the Dean's Distinguished Service Award. "The fundamental criterion for the Dean's Distinguished Service Award, which Sparky meets and exceeds, is that he has contributed beyond our ability to thank him throughout his long career at Penn Vet. He is a creative, committed, and passionate researcher in important areas of global health," said Penn Vet Dean Joan Hendricks. She added, "His impact is perhaps best captured by the response every student, faculty, or staff member had when I told them he was getting this award. They said, emphatically, 'I love Sparky!'"

**Nicole Scherrer, DVM**, received the William B. Boucher Award, which honors a house officer at New Bolton Center for excellent teaching, as was exemplified by William Boucher over four decades at Penn Vet.



MARK OYAMA, DVM



JAMES "SPARKY" LOK, DVM, PHD



NICOLE SCHERRER, DVM