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Issue 103
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Dr. Yasuko Rikihisa’s work featured in Nature Reviews Microbiology

Dr. Yasuko Rikihisa recently published a review article entitled "Anaplasma phagocytophilum and Ehrlichia chaffeensis: subversive manipulators of host cells" in the April 7, 2010 online edition of Nature Reviews Microbiology. This article details the evolution of these closely related obligate intracellular pathogens to adapt to host cells. A. phagocytophilum and E. chaffeensis primarily infect dogs and deer (E.c.) as well as horses, ruminants, rodents, and cats (A.p.). These agents also cause the important emerging zoonoses human granulocytic anaplasmosis and human monocytic ehrlichiosis, respectively. These diseases represent the most prevalent life-threatening tick-borne zoonoses in the US. Dr. Rikihisa’s pioneering work over the last 25 years has elucidated genomic features of these bacteria, detailed their vector-borne life cycle, and delineated how these bacteria have adapted to their host by deletion of many of the genes found in free-living bacteria and acquisition of host cell processes such as the cholesterol uptake pathway and Type IV secretion system.
Dr. Yasuko Rikihisa, PhD, received her advanced training at the University of Tokyo and Harvard Medical School. She currently is Professor of Microbiology in the College of Veterinary Medicine at the Ohio State University. She holds four patents relating to cultivation, characterization, and use of *Ehrlichia* spp. for the development of vaccines and diagnostic tests for ehrlichiosis. The diagnostic tests for canine and human ehrlichiosis, currently commercialized by IDEXX and distributed globally, generate approximately $400,000 per year in royalties to Ohio State.

**Dr. Prosper Boyaka’s Successful Partnership between VBS and AgroParisTech**

Dr. Prosper Boyaka’s successful joint venture between Veterinary Biosciences and AgroParisTech (http://www.agroparistech.fr/-English-version-.html) in Paris, France was instituted to foster current collaborations in the area of mucosal immunology and food allergy as well as to consider future programs investigating infectious disease, food safety, and public health. This agreement will facilitate the identification of research areas and laboratories for interactions and training of VBS and OSU students in AgroParisTech and the Paris Institute of Technology. It will also increase OSU’s exposure to some of the best French students and may help recruit them to our graduate program.

Currently, the project continues with two visiting scholars from AgroParisTech, Astrid Bonnegarde and Maelle Lenhardt. Astrid received her Masters degree from AgroParisTech in Human Nutrition and is pursuing a PhD with emphasis on mucosal immunology and food allergies. In particular, she is testing what happens in the lung when food causes an allergic reaction such as asthma. She and her husband Jeremy are enjoying Columbus. They especially like to take in the beauty of the open Midwestern yards and landscaping surrounding beautiful nearby homes. Maelle is pursuing her Masters degree and is halfway through her 6 month internship here at OSU. She is working on the immune response following a transcutaneous immunization. She is also enjoying Columbus, buckeye candies, and the large number of young people inhabiting her campus area neighborhood.

For more information about the agreement with AgroParisTech please contact Dr. Boyaka (boyaka.1@osu.edu).
Dr. Radin’s Team Takes 3rd place at the First Lego League World Festival

Dr. Radin guided her FIRST LEGO League (FLL) Robotics team to the First Lego League World Festival in Atlanta, GA on April 14-17. The team qualified for the event by winning the Ohio state championship in February. The festival was a three-day extravaganza which featured 500 teams from 30 countries demonstrating their research and problem skills and building robots out of Lego Mindstorms, a high-tech, programmable cousin of the familiar building blocks. Dr. Radin’s team (called the Cougars) took the third-place award in their age division for the overall quality of their work out of the 84 international teams. The team also was featured in an article in the Columbus Dispatch by columnist Joe Blundo on April 27. To read that article, go to http://www.dispatch.com/live/content/life/stories/2010/04/27/young-inventors-on-prowl-for-success.html?sid=101. To see pictures on the team’s website, go to http://www.cougarrobot.com/

Announcements:

Learn How To Succeed Financially: How to Invest Like an Institution Tuesday, May 11 from 12-1 pm held at 1590 N. High St., suite 430, room 425. Class description and registration available at http://hr.osu.edu/finseries

Campus conducting Operation Feed through May 21

This annual community-wide food drive to help feed homeless and low-income residents in central Ohio is held on the Columbus campus. Operation Feed is sponsored by the Mid-Ohio Foodbank and helps collect critically needed, non-perishable food for distribution to 228 food pantries and soup kitchens throughout central Ohio. All food and money donated is used to provide nutritious meals for children, senior citizens, and families who need assistance during the year. For more information about how you can support this important community outreach project, please contact the Operation Feed coordinator for your college, office, or department, or call the Office of Human Resources, Special Events at (614) 292-0641.

College of Veterinary Medicine will host the 3rd Annual Pink Week on May 10th-15th

College of Veterinary Medicine Komen Columbus Race for the Cure Team will have a week long of events that include lectures, bake sales, raffles, silent auctions, and so much more. On Wednesday, May 12th from 3-4pm in the Goss lobby we will have the KOMEN VBS Bake Sale. There will be coffee, tea, and yummy goodies available for a small donation and raffle tickets available for purchase. Please help
support a very good cause. If you would like to donate goodies for the bake sale, please email Sue Ringler at ringler.1@osu.edu our VBS Komen representative for more information. Stay tuned to more details of the Pink Week Activities in May.

Wellness News: May is National Stroke Awareness Month

May is National Stroke Awareness Month. A stroke or a “brain attack” occurs when the blood supply to the brain is cut-off, either due to a blood clot or blockage or because of rupture of a blood vessel supplying a part of the brain. The part of the brain deprived of blood, begins to die and lose function. This in-turn results in loss of higher functions, such as speech, movement and memory. Stroke is the 3rd leading cause of death in America and the leading cause of adult disability. Most Americans do not treat stroke as an emergency and many are unaware of the symptoms. To learn more of the signs and symptoms of stroke, go to: http://www.cdc.gov/Features/Stroke/

Selected Publications/
Presentations/Awards

Publications:


Presentations:

Dr. Michael Oglesbee presented entitled “The Need for Veterinarians in Biomedical Research” at the American Association of Veterinary Medical Colleges 2010 Annual Meeting on March 11-14 in Alexandria, VA.

Dr. Eason Hildreth III won 2nd place in the Professional Biological Sciences Division at the 24th Annual Edward F. Hayes Graduate Research Forum on May 1st at the Ohio Union. He is a Ph.D. student in the laboratories of Drs. Ramiro Toribio and Thomas Rosol. His oral presentation was entitled, "Parathyroid Hormone-Related Protein Increases Bone Formation in vitro." Also, Dr. Robyn Haines from the Lairmore lab was selected to give her poster presentation at the same Forum entitled “Development and Characterization of HTLV-1 Infection via the Oral Route in the Rabbit Model".
Awards:

2010 Research Day Travel Award Recipients:

Immunology and Infectious Diseases: Dhohyung Kim, for his poster presentation, “Overcoming Maternal Antibody Inhibition in Measles Vaccination using a Recombinant Newcastle Disease Virus Expressing Measles Virus Hemagglutinin.” His mentor is Dr. Stefan Niewiesk of the Department of Veterinary Biosciences.

Structure/Function: Blake E. Hildreth III, for his poster presentation, “Parathyroid Hormone-Related Protein Increases Bone Formation in vitro.” His mentors are Drs. Tom Rosol and Ramiro Toribio of the Department of Veterinary Biosciences and Veterinary Clinical Sciences.

Staff Feature: Prakash Arumugam

is a Research Assistant working in Dr. Larry Mathes lab for the past four years. Before coming to VBS, he gained experience at the National Cancer Institute and the Department of Neuroscience at OSU. He currently works with Drs. Mathes and Hayes-Ozello and their ongoing research projects with Feline Immunodeficiency Virus and Influenza. Prakash was a Molecular Genetics major at OSU, graduating with Honors and Distinction in 2006. In the fall 2010, he will enroll in classes at Wright State University Boonshoft School of Medicine M.D./PhD program. When he is not working the lab, he enjoys reading history and biographies, learning economics, playing basketball, and walking his dog to the park. We are all happy to have Prakash in the VBS family and wish him much success in medical school!

For comments or suggestions for our newsletter, please contact Ms. Elizabeth Hope, Program Assistant at hope.18@osu.edu Department of Veterinary Biosciences.