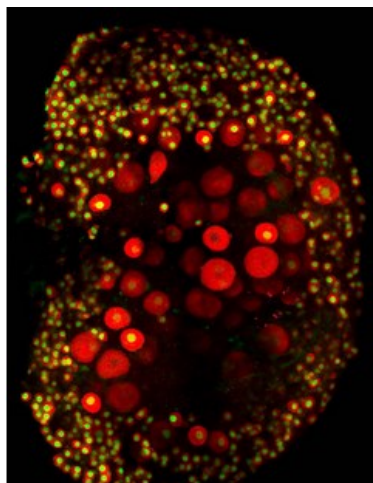


POINTS OF INTEREST

DEPARTMENT OF BIOMEDICAL SCIENCES



Study: Drug may curb female infertility from cancer treatments



Just another day of invaluable medical breakthroughs in the Schimenti Lab. Published last month in the Cornell Chronicle, this piece talks about the continued efforts of Dr. John Schimenti and the members of his team towards advancing our understanding of his previously identified “checkpoint protein” and effects of chemical suppression. Though there are still many questions to answer, might we be on the path to discovering a better treatment for a heartbreaking problem faced by many women?

(photo of highlighted proteins in a mouse ovary taken from the original article)
(link to the original article below)

<http://news.cornell.edu/stories/2017/08/study-drug-may-curb-female-infertility-cancer-treatments>

2017, 3RD QUARTER		SEPTEMBER 25, 2017	
In this issue:		Making the Headlines	6-7
Greetings from the Chair	2	Publications	8-9
Where are the Admins?	3	Birth Announcement	9
Welcome!	4-5	Interesting things to See and Do	10

NEW WEBSITE!



Cornell University
College of Veterinary Medicine

People Giving Emergencies

Biomedical Sciences

On July 24th the Department of Biomedical Sciences announced the launch of our newly formatted website in conjunction with the Vet Colleges website redesign.

Haven't seen it yet? Check it out at...

<https://www2.vet.cornell.edu/departments/biomedical-sciences>

GREETINGS FROM THE NEW CHAIR OF BIOMEDICAL SCIENCES



Dear Colleagues,

It's a privilege for me to join the Department of Biomedical Sciences, and the College of Veterinary Medicine! I'm grateful for the warm welcome many of you have shared. The talents in our community of scientists, clinicians, and instructors always impressed me when I was down-campus, and in the past couple of months, I've come to learn of many talents that I was not aware of previously. Much of my time lately has been spent learning more about our DVM and undergraduate instruction, our clinical activities, and many administrative details. These important elements of our department are less familiar to me than our research activities. Many thanks to those of you who have been helping with my remedial education. I'm eager to remain engaged in my own research (though there are a couple of papers on my desk waiting for submission), and welcome the opportunity to participate in joint lab meetings or journal clubs, especially those involving chromatin biology. Let me know if you are interested. Among my goals is to be available to all department members to hear about any concerns you may have, and to help address them; and also to hear of any successes you may have, and to help celebrate them.

Cheers!

Paul



WHERE ARE THE ADMINS?



Once again, the world is saved!



After a harrowing race against the clock at Escape Ithaca the crew retires to Ithaca Beer for a late lunch.

BMS Staff Retreat 2017



A good score is a thing of pride.

Paint and Sip with Clinical Sciences



Thank you to the staff of Clinical Sciences for the invitation to join them for a Paint and Sip get-together. We're all looking forward to the next one!



WELCOME!



Dr. Rachael Labitt

Rachael grew up in New Hampshire and attended Dartmouth College for her undergraduate degree in Biology with a minor in Chinese Language. She worked in a virology lab in New York City, where she learned how to walk quickly through crowds and met her husband. She received her DVM degree from Cornell University in 2017 and has still not left Ithaca, currently working as a resident veterinarian in the Center for Animal Resources and Education. Rachael and her husband enjoy hiking, watching cooking shows, attempting to recreate the food from cooking shows, and eating. She also endeavors to learn Hebrew and hang out with Peanut, an eight year old former teaching beagle that loves chewing on cardboard and being stubborn.

Timothy, or Timi as he is called, was born and raised in Plano, Texas. In the 9th grade, it was suggested by an acquaintance that he change the spelling of his name to end with an "i." He did so and has been too stubborn/lazy to change it back since. Following high school, Timi moved to New York and studied at NYU, where he received a BA and MS in Biology. He earned his DVM from Cornell in 2017 and is very excited to be starting his residency in Anatomic Pathology. He has particular interests in parasitology and aquatics. His other interests include dance, cooking, and taking pictures of his cat (who is the best). Timi is one of the few people who look forward to the winters in Ithaca, as they are his favorite time of year.



Dr. Timothy (Timi) Wu



Dr. Ileana Miranda

Ileana was born and raised in Brazil, where she earned her DVM and MS from Federal Rural University of Rio de Janeiro (UFRRJ). Before being accepted for the Anatomic Pathology residency at Cornell University, she first came to the US in 2015 as a research scholar at the University of Minnesota, where she definitively decided to pursue a career in Veterinary Pathology. In her home country, some of her hobbies included scuba diving and riding a bike for long distances. Nowadays, outside of work, she enjoys sunny days hiking to the fabulous Ithaca gorges, or just spending time hanging out with her husband and friends.

WELCOME! (CONT.)



Dr. Esther Crouch

Esther grew up in Adelaide, South Australia, and received her DVM from the University of Adelaide in 2013. She spent two years in small animal practice and a third year completing her MS in Conservation Medicine, through Murdoch University. Whilst completing her MS, she worked in emergency practice, shelter medicine and at the Australia Zoo Wildlife Hospital. She also enjoyed volunteering in remote indigenous community animal health programs. Esther looks forward to being able to contribute to wildlife management and One Health goals, following her Zoo Pathology residency with Cornell and the Wildlife Conservation Society. At present, she and her husband love exploring Ithaca's many waterfalls with their dog, and they hope to get out to see lots more of North America. She is also enjoying spending many an hour with her microscope and grumpy, glorious cat.

Viktoriya is a Technician III in Dr. Praveen Sethupathy's lab. She was born in the Far East of Russia and spent her childhood in Kamchatka, also known as the "land of fire and ice". Before coming to the United States, Viktoriya completed three years of her undergraduate studies in Moscow State University in Moscow, Russia in the Department of Developmental Biology. Viktoriya received her BS degree in Molecular and Cellular Biology and MS degree in Animal Sciences from the University of Illinois at Urbana-Champaign. Viktoriya's MS work was in the area of reproductive biology and focused on understanding the role of Basigin, an extracellular matrix metalloproteinase inducer protein, in early placental development. She then worked as a Research Associate in the Bioengineering Department at University of Illinois at Urbana-Champaign investigating the role of Notch ligands, TGF β , and extracellular matrix in liver progenitor cell fate specification. Outside of the lab, Viktoriya enjoys reading, listening to classical music, being outdoors, and traveling.



Viktoriya Ermilova



MAKING THE HEADLINES

CORNELL CHRONICLE

Embark donates to dogs uprooted by tropical storm Harvey

<http://news.cornell.edu/stories/2017/08/embark-donates-dogs-uprooted-tropical-storm-harvey>

'SCOPES

ROOTING OUT SKIN CANCER'S ORIGINS

<https://issuu.com/cornellvetmed/docs/scopes-summer-2017-web>

IN VIVO VERITAS:

DANKO LAB DISCOVERY PINPOINTS IMPORTANCE OF CANCER CELLS' HOME TURF

<https://issuu.com/cornellvetmed/docs/scopes-summer-2017-web>



CornellResearch

More Accurate Male Fertility Testing

Androvia Life Sciences licensed a new tool for diagnosing male infertility from Alexander Travis' lab. Soon it will help many infertile couples.

<https://research.cornell.edu/news-features/more-accurate-male-fertility-testing>



Drug may reduce female cancer patient infertility risk, according to study

Published on September 7, 2017 by Douglas Clark

<https://lifesciencedaily.com/stories/22723-drug-may-reduce-female-cancer-patient-infertility-risk-according-study/>



Your dog descended from Late Stone Age wolves, study says

<http://www.cnn.com/2017/07/19/world/ancient-dog-evolution-study/index.html>

BOSTINNO
Your Source for Local Innovation

Dog DNA Startup Backed by 23andme CEO Moves to Boston & Raises \$4.5M

<https://www.americaninno.com/boston/embark-raises-4-5m-from-founder-collective-23andme-ceo/>



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1. B. S. Choi, H. Moon, S. I. Suh and C. Hyun (2017). "Evaluation of Serum Symmetric Dimethylarginine in Dogs with Heartworm Infection." Can J Vet Res **81**(3): 228-230
2. E. Choi, A. D. Miller, E. Devenish, M. Asakawa, M. McConkey and J. Peters-Kennedy (2017). "Charcot-Leyden Crystals: Do They Exist in Veterinary Species? A Case Report and Literature Review." J Vet Diagn Invest: 1040638717725783
3. A. R. Coffey, T. L. Smallwood, J. Albright, K. Hua, M. Kanke, D. Pomp, B. J. Bennett and P. Sethupathy (2017). "Systems Genetics Identifies a Co-Regulated Module of Liver Micrnas Associated with Plasma Ldl Cholesterol in Murine Diet-Induced Dyslipidemia." Physiol Genomics: physiolgenomics.00050.02017
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5. C. J. Finno, H. J. Kaese, A. D. Miller, G. Gianino, T. Divers and S. J. Valberg (2017). "Pigment Retinopathy in Warmblood Horses with Equine Degenerative Myeloencephalopathy and Equine Motor Neuron Disease." Veterinary ophthalmology **20**(4): 304-309
6. J. C. Gomez, H. Dang, M. Kanke, R. S. Hagan, J. R. Mock, S. N. P. Kelada, P. Sethupathy and C. M. Doerschuk (2017). "Predicted Effects of Observed Changes in the Mrna and Microrna Transcriptome of Lung Neutrophils During S. Pneumoniae Pneumonia in Mice." Scientific reports **7**(1): 11258
7. M. C. Jager, E. A. Sloma, M. Shelton and A. D. Miller (2017). "Naturally Acquired Canine Herpesvirus-Associated Meningoencephalitis." Vet Pathol **54**(5): 820-827
8. M. Kent, E. N. Glass, A. D. Miller and A. de Lahunta (2017). "Neuroendodermal Cyst in the Fourth Ventricle of a Dog." Australian veterinary journal **95**(8): 294-298
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10. J. H. King, S. T. C. Kwan, J. Yan, K. C. Klatt, X. Jiang, M. S. Roberson and M. A. Caudill (2017). "Maternal Choline Supplementation Alters Fetal Growth Patterns in a Mouse Model of Placental Insufficiency." Nutrients **9**(7): 765
11. L. McEndaffer, A. Molesan, H. Erb and K. Kelly (2017). "Feline Panleukopenia Virus Is Not Associated with Myocarditis or Endomyocardial Restrictive Cardiomyopathy in Cats." Vet Pathol **54**(4): 669-675
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13. B. C. E. Peck, M. T. Shanahan, A. P. Singh and P. Sethupathy (2017). "Gut Microbial Influences on the Mammalian Intestinal Stem Cell Niche." Stem Cells Int **2017**: 5604727
14. M. R. Pennington, B. G. A. Cossic, G. A. Perkins, C. Duffy, G. E. Duhamel and G. R. Van de Walle (2017). "First Demonstration of Equid Gammaherpesviruses within the Gastric Mucosal Epithelium of Horses." Virus Res **242**: 30-36
15. V. D. Rinaldi, E. Bolcun-Filas, H. Kogo, H. Kurahashi and J. C. Schimenti (2017). "The DNA Damage Checkpoint Eliminates Mouse Oocytes with Chromosome Synapsis Failure." Molecular cell **67**: 1026-1036

PUBLICATIONS (CONT.)

16. V. D. Rinaldi, K. Hsieh, R. Munroe, E. Bolcun-Filas and J. C. Schimenti (2017). "Pharmacological Inhibition of the DNA Damage Checkpoint Prevents Radiation-Induced Oocyte Death." Genetics **206**(4): 1823-1828
17. V. D. Rinaldi, N. A. Lorr and K. Williams (2017). "Evaluating a Technology Supported Interactive Response System During the Laboratory Section of a Histology Course." Anat Sci Educ **10**(4): 328-338
18. E. Schmoeckel, A. A. Odai-Afotey, M. Schleissheimer, M. Rottmann, A. Flesken-Nikitin, L. H. Ellenson, T. Kirchner, D. Mayr and A. Y. Nikitin (2017). "Lef1 Is Preferentially Expressed in the Tubal-Peritoneal Junctions and Is a Reliable Marker of Tubal Intraepithelial Lesions." Mod Pathol **30**(9): 1241-1250
19. K. N. Smith, J. Starmer, S. C. Miller, P. Sethupathy and T. Magnuson (2017). "Long Noncoding Rna Moderates MicroRNA Activity to Maintain Self-Renewal in Embryonic Stem Cells." Stem Cell Reports **9**(1): 108-121
20. A. Vihervaara, D. B. Mahat, M. J. Guertin, T. Chu, C. G. Danko, J. T. Lis and L. Sistonen (2017). "Transcriptional Response to Stress Is Pre-Wired by Promoter and Enhancer Architecture." Nature communications **8**(1): 255
21. D. Villarnovo, A. L. McCleary-Wheeler and K. L. Richards (2017). "Barking up the Right Tree: Advancing Our Understanding and Treatment of Lymphoma with a Spontaneous Canine Model." Curr Opin Hematol **24**(4): 359-366

BIRTH ANNOUNCEMENT



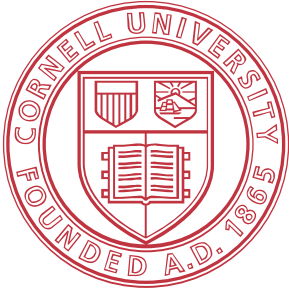
Congratulations to Dr. Jessica Hayward of the Boyko Laboratory on the birth of her twins Sarah and Peter!

Born May 28th just 16 minutes apart and at just over 6lbs each

DEPARTMENT OF BIOMEDICAL SCIENCES

Cornell University
College of Veterinary Medicine
T4-018 Veterinary Research Tower
Cornell University
Ithaca, NY 14853-6401
Phone: 607-253-3336

Have questions about this
publication?
E-mail: mr134@cornell.edu



Find us online!
<https://ecommons.cornell.edu/handle/1813/28352>

GIVING BACK IN THE FACE OF DISASTER

Donations are still being accepted to assist in the relief efforts following this summer's many devastating natural disasters. Please consider donating to one of the following groups previously suggested by Dean Lorin Warnick or one of many other dedicated relief agencies.

SUNY Strong fund to aid communities affected by Hurricane Harvey and other future natural disasters:

<http://www.suny.edu/impactfoundation/work/>

University of Florida Veterinary Emergency Response Team:

<https://www.uff.ufl.edu/OnlineGiving/FundDetail.asp?FundCode=013175&AppealCode=GZITO>

Want to know more? Follow the relief efforts on Facebook...

UF Veterinary Emergency Treatment Service (VETS)

<https://www.facebook.com/UFVETSDisasterResponseTeam/>

Texas A&M Veterinary Emergency Team

<https://www.facebook.com/TAMUVET/>



INTERESTING THINGS TO SEE AND DO!

Clinical Investigators' Day 2014

Friday, October 6, 9:00am - 5:00pm

<https://www2.vet.cornell.edu/about-us/events/clinical-investigators-day>

DeeDee Arrison Concert for the Animals

Saturday, October 7, 12:15pm - 1:00pm

http://events.cornell.edu/event/deedee_arrison_concert_for_the_animals_3874

2017 Fall NYS Veterinary Conference

Sunday, October 8, 7:30am - 5:00pm

<http://www.cvent.com/events/2017-fall-new-york-state-veterinary-conference/event-summary-c7ad0c15ae784ab0aa4493f272f7feda.aspx>

Homecoming Fireworks and Laser Light Show

Friday, October 20, 7:00pm - 9:30pm

<https://alumni.cornell.edu/come-back/homecoming/>