



Physiology News

April – June 2019 · Volume 2 · Issue 2

A message from the Chair

Without realizing where time went we are now in the Midsummer 2019! So much has happened since I last wrote for the spring newsletter. In May we celebrated the graduations of Vahn (PhD), Elia (PhD), Katie (MS) and Elia's recognition as Outstanding Graduate Student for 2019. Vahn moved on to Post-doc in California and Elia and Katie will still be around as medical students at LSU.



We have had continued success with funding and awards for excellence. Just last week Dr. Avegno received the 2019 RSA Gordis Award for Basic Science. It was great to be recognized as "there goes LSU" by our colleagues at the RSA.

At the home front we have also been quite successful. Five of 6 basic scientists to get promoted this year were from Physiology. Drs. Gilpin, Harrison-Bernard (Professors), and Edwards, Primeaux, and Simon (Associate Professors). Dr. Weera received funding for his NRSA, and we are keeping our fingers crossed for Dr. Pahng's VA Career Development Award. We are waiting for notice that the T32 will be renewed and on July 30th, ten of us CARC investigators will be at NIAAA for our reverse site visit. So, lots of excitement and preparation does not stop for summer recess!

Our Department continues to thrive. We have added several graduate students. I hope to learn their names and faces by the end of the summer.

In the meantime, we are hosting over 20 summer students ranging from high school to medical school. They are all amazing and have impressed us all in their short tenure. Our picnic brought them together on a hot summer afternoon at the Dental School. I hope they will have a transformative experience that will enrich their professional development.



Finally, on a personal note of achievement, we opened the doors to the balcony on July 3rd, 2019!! Little, big steps towards wellness!! Yes, we work hard, we are successful, and yes, we deserve to enjoy the little things in life. As always, keep in mind. You are part of a team. Our goal is to achieve EXCELLENCE in everything we do! Drink the KOOLAID! And have a fun and safe summer.

Wishing you nothing but health, success, and happiness!

Patricia





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Recognition

Taylor Templeton was elected Student Government Association (SGA) President for the School of Graduate Studies. She took the oath of office at noon on Monday, May 13th at the School of Graduate Studies Commencement Brunch.

Dr. Patricia Molina was elected Vice President/President Elect of the Research Society on Alcoholism (RSA). Her term as President Elect began at the 2019 RSA closing Ceremony, and she will assume the office of President at the 2020 Closing Ceremony here in New Orleans!

Dr. Elizabeth Avegno was selected as the Enoch Gordis Award recipient for Basic Science at RSA 2019. She was also selected for an oral presentation at GRS Amygdala.



Above: RSA attendees celebrating the Enoch Gordis Basic Science award winner (**Dr. Avegno**) and incoming RSA President Elect (**Dr. Molina**) at the RSA 2019 closing ceremony.

Drs. Marcus Weera and Danielle Levitt were selected for the 2019 RSA Junior Investigator Award.

Dr. Elia El Hajj was selected for the 2019 School of Graduate Studies Chancellor's Award. This award is presented annually to the top graduating PhD student based upon research performance as demonstrated by the quality of the dissertation and related achievements.

The following faculty members were promoted:

- **Scott Edwards, PhD**- Associate Professor
- **Nicholas Gilpin, PhD**- Professor
- **Lisa Harrison-Bernard, PhD**- Professor
- **Stefany Primeaux, PhD**- Associate Professor
- **Liz Simon, PhD**- Associate Professor
- **David Welsh, MD**- Professor

Dr. Lucas Albrechet-Souza attended the Interdisciplinary Research Training Institute Summer Program at the University of Southern California, Los Angeles, CA, as part of the one-year fellowship award from National Hispanic Science Network (NHSN) (June 5-9).



Above: 2019 Fellows - Interdisciplinary Research Training Institute, Los Angeles, CA.



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Dr. Lauri Byerly was awarded Outstanding Professional Poster at the Sports, Cardiovascular, and Wellness Nutrition (SCAN)'s annual meeting.

Dr. Danielle Levitt was selected to submit a Fellowship application to the American Physiological Society.

New Faces

Dr. Elizabeth Delery joined the department as a post-doc in the Edwards laboratory. She received her B.S. in Biology & Psychology from Randolph College, and her PhD in Biomedical Sciences from Tulane. Her past experience includes studying HIV neuropathogenesis in rhesus macaques at Tulane National Primate Research Center.



Nicholas Fried has joined the Gardner laboratory. Nicholas is an MD/PhD student and has completed his first two years of the medical curriculum. He goes by Nicholas and his last name is pronounced "Freed".

Meryl Hahne earned her B.A. in Biology and Theatre at Lafayette College and graduated this May from Tulane University with an MPH in Epidemiology. She has previously worked on a clinical trial analyzing treatment of hypertension in the Gulf South as well as GWAS on histiocytosis. Meryl will be working as a Clinical Trials Coordinator on the NOAH study.



Thomas Bielawski joined the laboratory of Dr. Nick Gilpin as a graduate assistant. He received his M.A. in Biology and Psychology from the University of Wroclaw, Poland. He is currently a Ph.D. student

in the Department & Clinic of Psychiatry at Wroclaw Medical University in Poland. His past research focuses on the epigenetic background of trauma and altered reinforcement learning in patients with psychotic disorders.

Patrick Connolly has joined the Gilpin laboratory as a student worker.

Welcome to our 2019-2020 PREP Scholars: **Chelsea Callicoatte, Shana Littleton, Diego Vargas, and Anita Waye.**

Our 2019 Physiology Department Summer Students began in June. Welcome all! (pictured below)



Graduate Student Milestones

Katie Adler graduated with her MS in Physiology and **Drs. Van Ninh and Elia El Hajj** graduated with their PhDs in Physiology.

Jessica Cucinello, Taylor Templeton, and Jonquil Poret successfully completed Medical Physiology and will take their qualifying exams this fall. They all attended the Research Society on Alcoholism Annual Meeting, which was Taylor and Jessica's first conference as graduate students!

Grants

The Role of Amygdala Outputs in Stress-Induced Escalation of Alcohol Drinking. NIH/NIAAA F32AA027145. **PI: Dr. Marcus Weera.** Sponsor: Dr. Nick Gilpin.

Taylor Templeton's first submission of her F31, titled "The role of dorsal raphe projections to



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amygdala in post-stress escalation of alcohol drinking,” was scored.

Publications

Adler, K, Molina, PE, and Simon, L. Epigenomic mechanisms of alcohol-induced impaired differentiation of skeletal muscle stem cells; role of Class IIA histone deacetylases. (accepted for publication). *Physiological Genomics*.

Avegno, EM, and Gilpin, NW. Inducing Alcohol Dependence in Rats Using Chronic Intermittent Exposure to Alcohol Vapor. *Bio-protocol* 9(9): e3222, 2019. DOI: 10.21769/BioProtoc.3222.

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Harrison-Bernard, LM, Naljayan, MV, Mercante, DE, Gunaldo, TP, Edwards, S. Longitudinal interprofessional education in a graduate physiology course. *Adv. Physiol. Educ.* 43(2): 241-245, 2019. PMID: 31088161

Kumar, V, Torben, W, Mansfield, J, Alvarez, X, **Vande Stouwe, C**, Li, J, Byrareddy, SN, Didier, PJ, Pahar, B, **Molina, PE**, and Mohan, M. Cannabinoid attenuation of intestinal inflammation in chronic SIV-infected rhesus macaques involves T cell modulation and differential expression of micro-RNAs and pro-inflammatory genes. *Front Immunol.* 10:914, 2019. PMID: PMC6503054

Luk, H-Y, **Levitt, DE**, Boyett, JC, Rojas, S, Flader, S, McFarlin, BK, and Vingren, JL. Resistance exercise-induced hormonal response promotes satellite cell proliferation in untrained men but not in

women. *American Journal of Physiology-Endocrinology and Metabolism*. Ahead-of-print, 2019. PMID: 31237450

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Ruden, JB, Quick, KL, Gonzales, ER, Shah, AR, Park, TS, Kennedy, N, Dugan, LL, and **Gidday, JM**. Reduction of leukocyte microvascular adherence and preservation of blood-brain barrier function by superoxide-lowering therapies in a piglet model of neonatal asphyxia. *Frontiers Neurol.* 2019, doi: 10.3389/fneur.2019.00447

Weera, MM, and Gilpin, NW (Review). Biobehavioral Interactions between Stress and Alcohol. *Alcohol Res*, In Press.

Welsh, DA, Ferguson, T, Theall, KP, Simon, L, Amedee, A, Siggins, RW, Nelson, S, Brashear, M, Mercante, D, and Molina, PE. The New Orleans Alcohol Use in HIV Study: Launching a translational investigation of the interaction of alcohol use with biological and socioenvironmental risk factors for multimorbidity in people living with HIV. *Alcohol Clin Exp Res*. 43(4):704-709, 2019. PMID: 30748025.

Presentations

Dr. Patricia Molina gave an NIH/NIAAA Research Seminar titled “Translational approach to the study of alcohol interaction with HIV” in Rockville, MD on April 25, 2019; was a keynote speaker and organizer at the California State University – Long Beach 2019 BUILD Commencement in Long Beach, CA on May 3, 2019; was a keynote speaker with her talk titled “Alcohol Interaction with HIV Disease: Translational



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approach to understanding mechanism & comorbidities” at the 2nd PanAmerican Congress of Physiological Sciences in Havana, Cuba May 29, 2019; was the Discussant for the symposium titled “Ethanol and adipose tissue: What do we know now and where are we going in the future?” at the Research Society on Alcoholism (RSA) Annual Meeting on June 23, 2019; and presented a talk titled “Mechanisms underlying risk for comorbidities associated with at-risk alcohol consumption: Metabolic instability in persons living with HIV (PLWH)” at RSA on June 25, 2019.

Dr. Jeff Gidday presented a poster titled “Probing the molecular phenotype of the transgenerational ischemia-resilient retina by mass spectrometry” at the Association for Research in Vision and Ophthalmology (ARVO) annual meeting in Vancouver, Canada (May 2019).

Jarrod Harman presented a poster titled “Using mass spectrometry to elucidate sex-dependent electroretinogram variability” at the ARVO annual meeting in Vancouver, Canada (May 2019).

Dr. Elizabeth Avegno presented a poster and an oral presentation titled “Ventral tegmental area projections to central amygdala are activated in alcohol-dependent mice and rats” for the Enoch Gordis Post Doc poster and oral sessions at RSA (June 2019).

Dr. Marcus Weera presented a poster titled “Central amygdala signaling in stress-induced escalation of alcohol drinking and avoidance behavior in rat” at RSA (June 2019).

Dr. Danielle Levitt presented a poster titled “Predictors of fat-free body mass in people living with HIV and hazardous alcohol use” at RSA (June 2019).

Dr. Liz Simon presented a talk titled “Chronic alcohol and HIV contributes to metabolic dysregulation: Impact of impaired insulin secretion” at RSA (June 2019).

Drs. Liz Simon and Danielle Levitt chaired/co-chaired a symposium at RSA titled “Alcohol-induced

skeletal muscle metabolic dysregulation.” (June 2019).

Connie Porretta presented a poster titled “Alcohol Attenuates Senescent T-cell Activation-Induced Cell Death” at the annual meeting of the International Society for Advancement of Cytometry in Vancouver, BC Canada (June 2019).

Dr. Lauri Byerly presented a poster titled “Dietary Quality of Muscle Builders Who Do or Do Not Consume a Protein Supplement: A Pilot Study” at the Sports, Cardiovascular, and Wellness Nutrition (SCAN)’s annual meeting. She also presented a poster titled “Dietary Walnuts Effect on the Gut Microbiome of Cachectic Tumor-Bearing Rats” at the American Institute for Cancer Research’s Annual Meeting.

Dr. Scott Edwards gave a talk titled “Glucocorticoid Receptor Regulation of Alcohol Dependence-Related Behaviors” at the 2nd Pan-American Congress of Physiological Sciences in Havana, Cuba (May 2019).

Professional Service

Dr. Michael Levitzky served as SACSCOC Onsite Chair of the University Tennessee Health Sciences Center in April.

Dr. Amanda Pahng and Muhammad Farooq discussed issues pertaining to alcohol and drug misuse on behalf of ADACE at the PAL Resource Fair at LSU Health New Orleans Dental School (pictured below).





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On June 20, **Dr. Lisa Harrison-Bernard** served as an Ad Hoc Reviewer for NIH-NIGMS Training, Workforce, Development and Diversity (TWD), Review of PREP Applications, Subcommittee – D.

Dr. Lauri Byerly served as Chair for the SCAN Annual Meeting titled Navigating the Pathway of Wellness in Phoenix, AZ (April 2019). She also served as the Past Chair for the Research Dietetic Practice Group.

Drs. Patricia Molina and Flavia Souza-Smith organized Pre-Congress Course 1: Fundamentos en Taller de Investigación Fisiológica (Basics in Physiological Research Workshop) for the 2nd PanAmerican Congress of Physiological Sciences at the Instituto de Ciencias Básicas y Preclínicas in Havana, Cuba on May 27, 2019.

Dr. Liz Simon went to the U.S. Capitol as part of the Animal and Experimentation Committee of the American Physiological Society.



Above: Drs. Liz Simon, Sue Bodine, and Cory Reynolds at the Capitol.

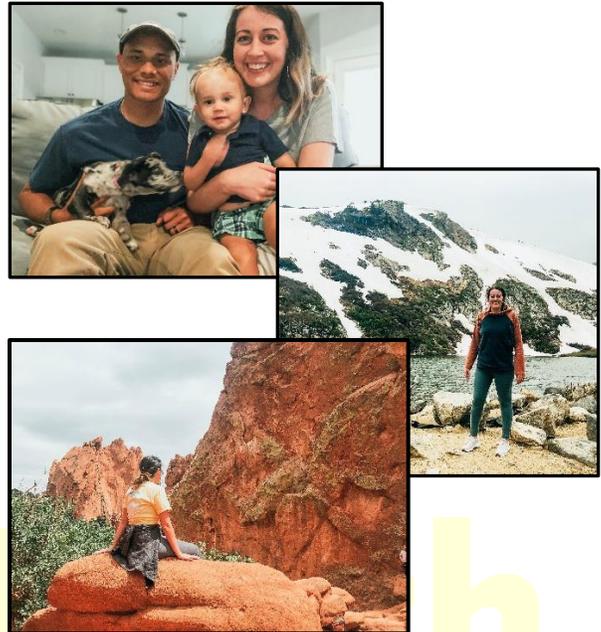
Notable Events

Dr. Elizabeth Avegno has a baby due in December!

Dr. Elizabeth Delery was invited to be Gibco's Cell Culture Hero for July, where she will be hosting a seminar on July 31 on the cell culture work she did during her PhD. Free with LabRoots registration:

<https://www.labroots.com/ms/webinar/choroid-plexus-cell-2d-modified-3d-cell-culture-models>

Sarah Mozingo adopted a puppy, Lola, from the animal shelter. She also traveled to Colorado to visit her sister and go hiking at St. Mary's Glacier and Garden of the Gods.



Top: Mozingo family with new puppy, Lola. Middle: St. Mary's Glacier. Bottom: Garden of the Gods.

Taylor Templeton, Jessica Cucinello, and Jarrod Harman volunteered at a Student Government Association outreach event cleaning up City Park Couturie Forest (pictured right).

