



Physiology News

July – September 2019 · Volume 2 · Issue 3

A message from the Chair

Faster than we anticipated, the second half of the year is here. We have continued to have many accomplishments that are summarized in this newsletter. Notably, we continue to have much success with funding of individual and institutional training grants (T-32, 2 F-32's, and a new R-25). In addition, Amanda Pahng will be the first LSUHSC recipient of a NOLA VA Career Development Award (NOA pending). She will start her new adventure of setting up her lab at the VA in the spring of 2020.

We have welcomed several new faces to our department and now have 5 MD/PhD students, 5 PhD students and 2 MS students. We have also welcomed 2 of the PREP scholars to our department. The efforts of the Wellness Committee continue, and the new initiative led by Danielle Levitt-Budnar and Elizabeth Delery to bring promising post-docs for seminar visits is moving along quite nicely. We will be hosting the NHSN Conference soon, as well as 2 ADACE sponsored events. One dealing with the opiate crisis in the city (October 31st) and the other focusing on non-neuro effects of unhealthy alcohol use (December). On a personal note, I was relieved that we completed the reverse site visit for the CARC and now have our fingers crossed that it will be funded by the end of the year!



"Angels Unaware" boat by Canadian artist Timothy P. Schmalz depicts 140 migrants ranging from a Jewish man escaping Nazi Germany to a Syrian refugee fleeing the civil war.

As many of you know I just came back from vacation. Our last stop was Rome. I have so many beautiful pictures but wanted to share this one. This sculpture was unveiled last week at St. Peter's Square in Vatican City. It is a tribute to immigrants. It is a moving depiction of the suffering, hope, and resilience of those that for one reason or another must seek new lands to survive, succeed, or reunite with loved ones. It moved me and wanted to share it with you to encourage you to reflect on the turbulent times we are living through. I always end up coming to the same place. I enjoy working with you! We are blessed to have a shared vision for advancement of science and wellbeing of our students, staff, and colleagues. Let me once again reiterate my sincere desire to provide support for you to achieve your goals.



Finally, on a lighter note, I loved this picture captured during our recent photo session. Shows that even when I am not watching, you are all having fun!

Best wishes for a successful Fall 2019!

Patricia



Physiology News



Inside this edition of Physiology News:

Message from the Chair.....	1
Featured story.....	2
Recognition.....	4
New Faces.....	4
Graduate Student Milestones.....	4
Grants.....	4
Publications.....	4
Presentations.....	5
Professional Service.....	5
Notable Events.....	6

Featured story: 10 Keys to Scientific Success

Dear Physiology colleagues:

Earlier this year, I was asked by the LSUHSC Physiology Wellbeing committee to talk about “keys to scientific success.” The first thing I realized in this exercise is that I have no idea what the keys to scientific success are. There are many external forces and circumstances that can and will impact your career trajectory. Foresight and resilience are key when mitigating or leveraging the impact of these external forces. That said, I do think there are a few lessons that I personally have learned over the last 18 years that put me in a position to achieve some scientific success.

Success can be defined in many different ways, and it should be defined by each scientist based on their own professional and life goals. For the purpose of this exercise, I will define success in a few ways: 1) the benchmarks that scientists think of as defining success (i.e., becoming a PI, publishing, getting grants funded, etc.), 2) the benchmarks that our employers think of as defining success (again, grants and publications, but also mentoring students to degrees, teaching, service, visibility & recognition as a leader in a specific field), 3) being a good colleague to those we work for, those we work with, and those that work for us, and 4) achieving a desirable work-life balance and paying attention to your own wellbeing.

I hope you find at least some of these thoughts useful in setting yourself up scientific success, however you define it.

Nick

1. Work efficiently.

- When you are working, work. Hard. This is not the same as “being at work.” Being at work does not mean you are working, and it certainly does not mean you are working efficiently.
- Define what is “work” for you: What is the best use of your time? This will change as career progresses.
- View your time as your most valuable resource/commodity. Know when you do specific things well. For example, I do my best scientific writing in the morning, so I try to protect that time whenever possible.

2. Unplug.

- When you are not working, do not obsess about work. This same as not working at all. Try to avoid feeling guilty about doing work or not doing work.
- Some strategies that have helped me to unplug are not keeping my phone in the bedroom, turn off email notifications, and making a conscious effort to minimize work during vacation, becoming obsessed with something other than science, finding activities that give me a mental & physical cleanse.
- Accept that there is no “end” to your to-do list. Once I accepted this, I stopped feeling guilty about having work waiting for me.
- Establish and recognize which modes of communication do and do not require immediate response.





Physiology News



3. Leverage technology.

- Google Slack has changed my life.
- Get things on your calendar in real time and set up recurring events.
- Use reminders & notifications.
- Twitter is not all good but it can be incredibly useful for some things.
- Find and try apps aimed at improving efficiency.
- For me, writing things down frees up my mental space.

6. Be deliberate in your communication with others.

- Communicate frankly without being confrontational, diplomatically, and in real time as issues arise. It is much easier to work with those that have a clear modus operandi.

7. Be flexible.

- One size does NOT fit all for funders, grants, courses, colleagues, etc.
- Different personalities require different approaches to collaboration and/or different management styles.
- Think creatively about ways to achieve a specific goal.
- Do not put yourself inside an imaginary box. No one was born knowing how to do that fancy technique you envy. Even the world experts knew nothing about it at one point.

9. Network!

- Networking is an essential component of scientific success. Your peers will:
 - evaluate your work (grants, manuscripts, talks).
 - compete with you for funding & awards.
 - support you as you go through career jumps.
- Embrace the idea that you can compete with anyone. All scientists at all levels has imposter syndrome!
- Build a peer support system composed of locals and non-locals. Use conferences to meet people!

4. Know yourself.

- Know your inclinations, limitations and preferences. What works for me may not work for you.
- Outsource the parts of your job you are least “good at” if others have those strengths.
- Try different strategies to find what works for you and this is key: Abandon strategies that don’t work!

5. Have a plan.

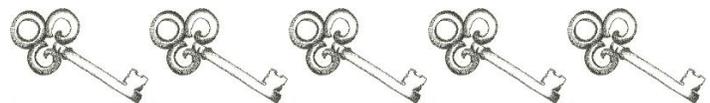
- Better yet, have a few. Understand what is needed to achieve that plan.
- Know the competition and the competitive landscape.
- Have a philosophy about life and work. One should not conflict with the other.
- Have a philosophy about managing people. What kind of colleague do you want to be? What kind of lab do you want to lead?

8. Be picky.

- Say “No” to some things so you can “Yes” to other things. Admittedly, this gets easier over time due to experience and leverage.
- If you are passionate about a topic, become a leader in that area. It is better to invest your time in what you enjoy than what you are assigned. Find like-minded individuals to help you lead these initiatives, and go find the resources to support your initiative.
- Identify who you can/like to work with and work with those people.

10. Be a squeaky wheel

- You cannot receive what you do not ask for.
- Others cannot read your mind if you are unhappy or want something.
- Recognize that different situations call for different strategies.





Physiology News



Recognition

Physiology was well-represented well at the Summer Research Internship Program Poster Day! Winners included:



Jasmin Elnaggar (2nd place, High School category, mentors: **Levitt & Simon**)

Corinne Martin (3rd place, High School category, mentor: **Primeaux**)

Diego Vargas (1st place, Post-baccalaureate category, mentor: **Gardner**)

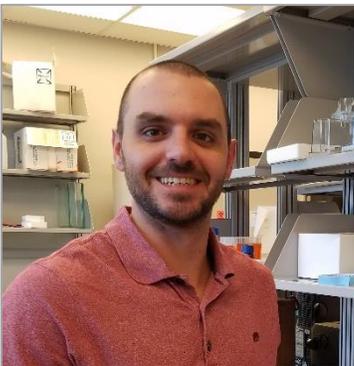
Jessica Cucinello won the Fall 2019 AWIS Outstanding Young Scientist Award (pictured, right).

Dr. Liz Simon's first senior-author paper from her K01 was selected for the October 2019 APS*select* list! PMID: 31398085.



Dr. Elizabeth Avegno earned an honorable mention for the best poster award at GRC Amygdala.

New Faces



David Woods joined the laboratory of **Dr. Xinping Yue** on August 1st as a PhD student after completing his IDP coursework over the past year. He earned a B.S. in business administration, an

M.B.A., and completed a post-baccalaureate program in biology from Nicholls State University in Thibodaux, LA.



Nathan Sharfman (MD/PhD trainee) joined **Dr. Nick Gilpin's** laboratory in July. Nathan holds a BS from Rhodes College and an MS from Tulane University.

Graduate Student Milestones

Dr. Adrienne McGinn successfully defended her dissertation!

Jonquil Poret passed her doctoral qualifying exams!

Krystal Belmonte submitted her first first-author paper titled "Intra- and inter-generational changes in the cortical DNA methylome in response to therapeutic intermittent hypoxia in mice" to *Physiological Genomics*.

Grants

Alcohol-induced skeletal muscle dysregulation in SIV/HIV: Mitochondrial-mediated mechanisms. NIH/NIAAA F32AA027982-01A1. **PI: Dr. Danielle Levitt**. Sponsor: **Dr. Liz Simon**. Co-Sponsor: **Dr. Patricia Molina**.

Alcohol & Metabolic Comorbidities in PLWHA; Evidence-Driven Interventions. NIH/NIAAA 4UH3AA026198-03. **PI: Dr. Patricia Molina**.

Biomedical Alcohol Research Training Program. NIH/NIAAA T32AA007577. **PI: Dr. Patricia Molina**.

Publications

Avegno EM, Middleton JW, and Gilpin NW. Synaptic GABAergic transmission in the central amygdala (CeA) of rats depends on slice preparation and recording conditions. (accepted for publication). *Physiological Reports*.

Delery, EC and MacLean, AG. Culture model for non-human primate choroid plexus. *Frontiers Cellular Neuroscience*, 2019. (online pre-print).

Samuelson DR, Gu M, Shellito JE, Molina PE, Taylor CM, Luo M, and Welsh DA. Intestinal microbial products from alcohol-fed mice contribute



Physiology News



to intestinal permeability and peripheral immune activation. *Alcohol Clin Exp Res*, 2019.

Souza-Smith FM, Simon L, Siggins R, and Molina PE. Alcohol-induced mesenteric lymphatic permeability: Link to immunometabolic modulation of perilymphatic adipose tissue. *Int J Mol Sci*, 20(17):E4097, 2019 Aug 22. PMID: 31443389.

Watt J, Schuon J, Davis J, Ferguson TF, Welsh DA, Molina PE, and Ronis MJJ. Reduced serum osteocalcin in high-risk alcohol using people living with HIV (PLWH) does not correlate with systemic oxidative stress or inflammation: Data from the New Orleans Alcohol Use in HIV (NOAH) study. *Alcohol Clin Exp Res*, 2019.

Presentations

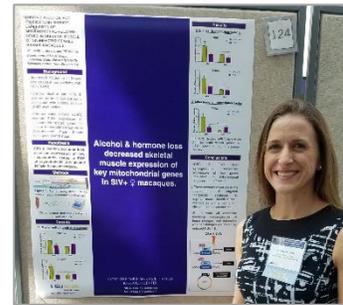
Zach Stielper presented a poster titled "Traumatic Brain Injury and Alcohol Alter Basolateral Amygdala Endocannabinoids in Female Rats" at the annual meeting of the International Cannabinoid Research Society in Bethesda, MD (July 2019).

Dr. Lucas Albrechet-Souza presented a poster titled "Predator odor stress alters reactivity to acoustic stimuli and endocannabinoid levels in the amygdala of female rats" at the annual meeting of the International Cannabinoid Research Society in Bethesda-MD (July 2019) and at the Gordon Research Conference on Amygdala Function in Emotion, Cognition and Disease in Easton-MA (August 2019).

Dr. Marcus Weera presented a poster titled "Central amygdala signaling in stress-induced escalation of alcohol drinking and avoidance behavior in rats" at Gordon Research Conference on Amygdala Function (August 2019).

Dr. Patricia Molina gave a talk titled "Alcohol-SIV/HIV-ART interactions & risk for comorbidities" in Session IX: HIV-Infections and drug abuse at the 7th International Drug Abuse Research Society: Recent Advances in Drug Addiction held in Casablanca, Morocco (September 2-6, 2019).

Dr. Danielle Levitt presented a poster titled "Chronic alcohol and ovariectomy reduce expression of mitochondrial-related genes in



skeletal muscle of SIV-infected female rhesus macaques" at the National Heart, Lung, and Blood Institute 5th Annual Mitochondrial Biology Symposium on Mitochondrial Networks and

Mitochondrial Energetics, Bethesda, MD (September 2019).

Dr. Liz Simon gave an invited seminar at Tulane School of Medicine (department of Pharmacology) on "Epigenomic mechanisms of alcohol-mediated impaired muscle function" on September 27, 2019.

Professional Service

Dr. Lisa Harrison-Bernard was appointed to serve a three-year term on the American Physiological Society Diversity and Inclusion Committee. She was also invited to serve as the Chairperson of the American Heart Association CardioRenal Study Section.

Dr. Michael Levitzky went to the National Board of Medical Examiners to serve on the Step 1 Interdisciplinary Review Committee October 2-4. This is his 8th year on the committee. He previously served on the Step 1 Physiology and Cell Biology Question Writing Committee for 5 years (2007-2011).

Dr. Elizabeth Delery, Shana Littleton, Muhammed Farooq, and Taylor Templeton volunteered at Xavier's Recovery Awareness Day (pictured below).





Physiology News



Notable Events

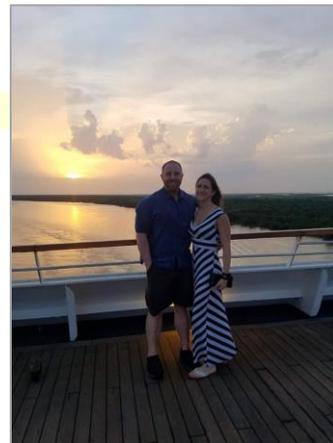
We bid farewell to **Dr. Joshua Oakes** (below):



Many of our department members participated in the LSUHSC Comprehensive Alcohol-HIV/AIDS Research Center team at the Chevron Walk to End HIV (September 2019). Pictured above (left to right): **Dr. Tekeda Ferguson, Dr. Elizabeth Delery, Aneisha Simon, Alice Yeh, Dr. Liz Simon, Dr. Lucas Albrechet-Souza, and Pedro Neto.**



Above: Annual meeting of the International Cannabinoid Research Society in Bethesda, MD: **Zachary Stielper, Dr. Lucas Albrechet-Souza and Dr. Jason Middleton.**



Dr. Danielle Levitt and Ron Budnar went on a cruise to Roatan, Belize, and Cozumel in July. Left: Leaving New Orleans. Below: Ziplining in Roatan.

