

Physiology News

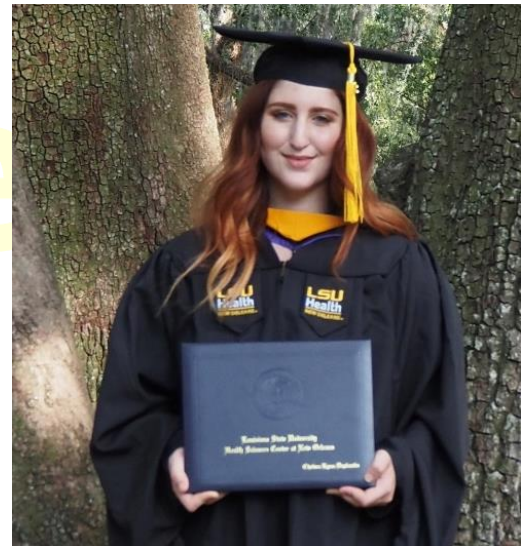
May-June 2022 Volume 5 Issue 2

To celebrate



Dr. Nicholas Fried, PhD defended his dissertation and graduated. Shown is Dr. Gardner hooding Nicholas. Nicholas was the **2022 Chancellor's Award** recipient for the School of Graduate Studies

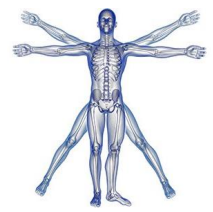
Chelsea Duplantis graduated with a Master's in Physiology from the Maiya lab.



Dr. Molina is the Inaugural Department of Physiology Alumna Awardee



Physiology News



Inside this edition:

To celebrate	1	New faces	6
Chair's message	2	Publications	6
Department Climate Survey and outcomes	2-3	Presentations	6-7
Featured story- Anna Whitehead	3-5	Professional Service	7
Graduate student milestones	6	Notable events	7
Recognition	6	Recycle	7

Editor: Liz Simon

Message from the chair

Patricia E. Molina, MD, PhD

The hot days of summer are here, and we had no warning! The summer heat came at the same time that we once again welcomed summer trainees to our laboratories. The next few weeks promise to be busy and fun! This month we observe Juneteenth and LGBTQ pride. As a department, we continue to work towards building diversity, equity, and inclusion. The Diversity Committee, led by Dr. Harrison-Bernard developed and deployed a climate survey to assess where we stand. This issue highlights the outcome of the survey and provides ideas for improvement and growth in several areas. I encourage you to read it, to reflect on it, and to consider ways in which each and every one can do their part to achieve our goals. I am optimistic about our future. I am confident that we are on an upward trajectory. I am proud of the accomplishments of our trainees, faculty, and staff, and I am honored to work with each and every one of you in achieving our research, teaching, and service mission. Best (cool) wishes,
Patricia

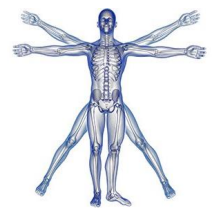
Department of Physiology Climate Survey Outcomes

Lisa M. Harrison-Bernard, PhD

The department of Physiology Diversity, Equity, and Inclusion Committee administered a survey in March 2022 to determine the current climate of the department. An email was sent to 74 members of the department and there were 43 responses indicating a 58% response rate. The responses were from 6 Faculty, 7 Staff, 10 Trainee, 15 Prefer not to answer, and 5 No response. The sex assigned at birth was 17 Female, 7 Male, 0 Intersex, 14 Prefer not to answer, 5 No response. Respondents selected a score from 1 to 5 in favor of specific characteristics of the department. A score of 5 indicated agreement with the term. For the following terms: Friendly, Non-racist, Diverse, Respectful, Collegial, Non-sexist, Non-genderist, Collaborative, Cooperative, Non-homophobic, Non-transphobic, Supportive, Non-ageist, Welcoming, Non-ableist, Anti-racist, Welcoming of all body types, the average score was ≥ 3.5 . For the term Non-elitist the average score was 2.9. For a scale ranging from Strongly agree, Agree, Neutral, Disagree, Strongly disagree, respondents selected strongly agree and agree >50% for the following characteristics: Feel valued as an individual, Strong commitment to DEI, Treated with respect, Perform up to my full potential, Opportunities for professional success, Found one or more communities or groups where I feel I belong, Positive influence on my professional growth, Be myself, and Feel trusted. Four respondents provided positive comments regarding the above characteristics, while 3 respondents felt isolated, unwelcomed, bullied, or having to work harder than others to be valued equally. In response to the statement "I am valued in my department for my..." teaching, research scholarship and creativity, mentoring of trainees by faculty, mentoring of trainees (summer, medical, PREP, rotating) by trainees the majority strongly agree or agreed with these statements. However, in response to service contributions, extra time invested in my



Physiology News



professional life, and mentoring of faculty by faculty, the majority strongly disagreed or disagreed. An overwhelming majority of respondents indicated that they had never felt discriminated for the following: ability or disability status, sexual orientation, gender identity or gender expression, veteran status, marital status, national origin, religion/beliefs, political orientation, social class, racial or ethnic identity, sex, age, height or weight, other aspects of your physical appearance, use of the English language, family responsibilities, and medical status. However, between 5 and 9 individuals selected that they felt discriminated 1 or more times for the following: racial or ethnic identity, sex, age, height or weight, other aspects of their physical appearance, use of the English language, family responsibilities, and medical status. Strengths related to career opportunities, attempts to increase diversity, and feeling valued. There were some concerns regarding unclear expectations, lack of support for health struggles related to COVID, and experiencing microaggressions. The committee identified the following tangible strategies to improve the department climate. In response to people not feeling heard: refer to suggestion box more frequently, enhance the use of faculty meetings for faculty, fellow, and student to share successes and concerns. To increase recognition of all and increase a sense of value: individuals are encouraged to use existing venues for dissemination of successes (no matter how small) by sending information to Ms. Prestwood to post on the departmental monitor, mentors to send emails to “physiology all” of trainee successes, information sent to Dr. Simon for the departmental newsletter, and information sent to Dr. Primeaux to post to physiology Facebook page. To improve mentoring faculty who are mentors of trainees, mentors should be encouraged to attend a workshop on how to be better mentors and trainees should be encouraged to attend a workshop on becoming better mentees and developing the mentor/mentee relationship. To combat discrimination and bullying recommendations are to be mindful of how we speak to people about their appearance (looks/weight/height/dress/jewelry/etc.) and understand that though we may feel that we are being complimentary or feel like your comments are made in light-hearted manner, the recipient of the comment may not feel that way, be reflective of our own behavior, hold each other accountable for our actions – speak up, be mindful of giving unsolicited advice, think before we speak, and importantly just because we think it, doesn’t mean it has to be spoken aloud. Overall, the climate was viewed favorably, and the committee wants to support continued progression to the achieving the best environment possible for everyone’s success.

Strategies for overcoming obstacles and accomplishing goals

Anna Whitehead

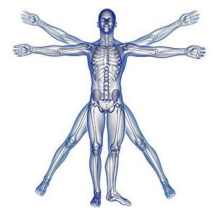
“To achieve goals you’ve never achieved before you need to start doing things you’ve never done before.” Stephen Covey.

Throughout their careers, scientists often face roadblocks on the path to accomplishing their goals, and the development of strategies to combat these complications are difficult even under ordinary circumstances. As we once again adjust our habits to navigate a return to normalcy in a post-pandemic world, we have an exciting opportunity to develop new and beneficial approaches to optimize our effectiveness moving forward. As such, the “well-being” seminars being incorporated into our summer seminar series are of impeccable timing. These seminars began with a “near-peer” panel session, which demonstrated that the obstacles we face in academics can differ depending on academic position (grad student, postdoctoral researcher, faculty, etc). Thus, the strategies and techniques most appropriate for maintaining well-being while accomplishing goals can also vary.

During the “near-peer” panel we first heard from the perspective of a junior faculty member, Dr. Amanda Pahng. Dr. Pahng shared with us the obstacles she faced as she navigated the transition to a truly independent researcher. This switch brought several changes, including working at a new institution, setting up new laboratory space, and hiring personnel. To accomplish her goals and maintain her productivity in the face of these challenges, Dr. Pahng has learned and developed several approaches she was kind enough to share with us. Dr. Pahng advises that **shifting your mindset away from that of a “trainee”** is a key factor during this stage of academia, and you must recognize that you are the primary driving force for setting and achieving your goals. In addition, she has learned that it takes too much time to do everything on your own and that **dedicating significant time to training personnel and developing strong collaborations** can be invaluable in



Physiology News

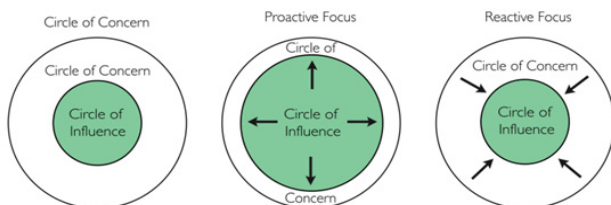


accomplishing goals. Furthermore, Dr. Pahng emphasized the importance of **not putting “all your eggs in one basket” and shared her strategy of engaging in a multiple research project approach**, having a plan for transition projects as well as new projects.

Next, Dr. Marcus Weera shared his perspective as a postdoctoral fellow, which he described as a transitional phase with four key components: 1. **Find a postdoc mentor** that you can work with and will take the time to truly mentor you. 2. **Integrate** into the new lab by learning how things are currently done, recognizing that you can learn from anyone, and being professional and communicative. 3. **Produce data** by being efficient, planning ahead, self-motivating, and carefully managing your resources (time, energy, and funding). 4. **Develop your research niche** and prepare for the transition to your next phase by learning to communicate your research, networking, writing fellowships/grants, and developing your mentoring and teaching skills. Dr. Weera also shared several practices that he applies to his work/professional life that help him to do good work and maintain happiness. He emphasized that you could think of yourself and your lab as businesses and focus on delivering good products. On that note, you must be efficient with your resources for those businesses, namely your time and energy. As with many business adventures you should also learn to expect that failure can happen and have “multiple irons in the fire”, ready to pivot if necessary. Lastly, Dr. Weera noted that you should know your own bandwidth and not bite-off more than you can chew.

Finally, I had the honor of being the third member of the “near-peer” panel, sharing my perspectives as a graduate student. At this stage in my academic career, I feel I strongly embody the title of “trainee/mentee”, and therefore my best advice to others at my academic level is to look for guidance from those with more experience. Recently, advice that I have found invaluable came from our Spitzer Award Lecturer, Dr. Merry Lindsey, who recommended the book “The 7 Habits of Highly Effective People” by Stephen Covey. This book presents a principle-centered approach for solving both personal and professional problems. After reading the book, I was able to reflect on times I unconsciously utilized these habits and found them to be extremely helpful. While all 7 habits are valuable, the first 2 serve as the foundation, or “roots”, of highly effective people. The 3 habits set the groundwork for becoming **independent**, while the remaining habits prepare you for success in **interdependence**, which is the ability to combine your talents with others to create something greater together. Only independent individuals can become interdependent, whereas attempting to skip the first three habits leads only to a state of dependence. Therefore, the focus of this story is on the first three habits of highly effective people.

Habit 1 is “Be Proactive”. At its core, this habit tells us that we control our own lives. Proactive people recognize they have responsibility — or “response-ability,” which Covey defines as the ability to choose how you respond to a given stimulus/situation. One way to be proactive is by focusing on things we can control. There is a wide array of things in our lives that we have mental or emotional involvement with (e.g., our health, our work, our families, politics, wars, etc.). These things can be grouped together into one Circle of Concern. Within this Circle of Concern exists another circle, our Circle of Influence, which encompasses everything in our Circle of Concern that we have the power to affect. Our Circle of Influence will always be smaller than our Circle of Concern, because there are always aspects of our lives we cannot change. However, proactive people put their energy into their Circle of Influence, focusing on the things they can do something about. As a result, their Circle of Influence can begin to expand. In contrast, reactive people focus on things within their Circle of Concern but outside their Circle of Influence, leading to blaming external factors, emanating negative energy, and a shrinking of their Circle of Influence. Amazingly, we can often increase our effectiveness simply by proactively changing our attitudes and perceptions. Small changes in the way we think, such as going from the reactive statement “I HAVE to” to the proactive statement “I CHOOSE to” can drastically alter our motivations and ultimately our effectiveness at accomplishing tasks.

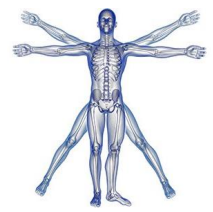


Jefferson-Harvey, T. (2021, March 1). *How to Manage in Times of Uncertainty*. Seed Accounting Solutions.

<https://seedaccounting.solutions/2021/01/27/how-to-manage-in-times-of-uncertainty/>



Physiology News



Habit 2 is “Begin with the end in mind”. This habit focuses on starting every journey with a clear destination in mind. This way, we know the steps we take are in the right direction toward our goals. While this habit can be useful for goals of any length, Covey believed that truly effective people maximize this habit by developing a life mission statement. Effective people ensure that every choice they make, which they are empowered to make due to proficiency in Habit 1, is aligned with their life’s mission. Oftentimes, habit 2 starts by understanding what your roles are; for example, my roles include being an individual, a daughter, a friend, a significant other, and an MD/PhD student. Therefore, my life mission should incorporate aspects important for all of these roles. A mission statement can keep you on track, and your outlook can change when you know everything you do, every step you take, is climbing towards your ultimate goal. Now, it is important to remember that habit two can be applied to shorter goals. I set my goals for my first year of graduate school early on, which included: submit a predoctoral fellowship application, learn the critical techniques for my experiments, pass my qualifying exam, and get the review from my rotation published. This list of goals was indispensable when personal life stressors came in to play, and I was able to consider my first year a success because I had predetermined goals to strive towards.

Habit 3 is “Put First Things First”. This habit tells us that we must prioritize our schedules based on what is important. All of our activities throughout the day can be categorized based on their importance and their urgency, which can best be visualized by the quadrant system:

	Urgent	Not Urgent
Important	<u>Q1 Necessity</u> Crisis Emergency meetings Last minute deadlines Unforeseen events	<u>Q2 Effectiveness</u> Important goals Creative thinking Relationship building Recreation/Exercise
Not Important	<u>Q3 Distraction</u> Irrelevant meetings Unimportant emails Menial tasks Irrelevant phone calls	<u>Q4 Waste</u> Excessive relaxation Gossip Avoidance activities (Mindless social media scrolling)

Adapted from: Covey, S., Foreword, C. J.-, Covey, S. R., & Audio, S. S. (2020). *The 7 Habits of Highly Effective People: 30th Anniversary Edition*. Simon & Schuster Audio.

If we focus our time predominantly in Quadrant I and are constantly managing crises and problems, that quadrant keeps getting bigger until it consumes us, leading to stress, burnout, and constantly putting out fires. If our focus is Quadrant III, we spend time reacting to matters that seem urgent, when their perceived urgency is based on the priorities of others, leading to feeling out of control and shallow or broken relationships. If we focus on Quadrant IV, we are basically leading irresponsible lives, which often results in being highly dependent on others. Ultimately, a focus on Quadrant II is the best measure for effective personal management. This quadrant contains the activities we know we need to do, but we only seldomly get around to doing them because they don't feel urgent. To have more time in Quadrant II, we must take time from Quadrants III and IV, learning how to say "no" to these other activities even when they seem urgent. While we cannot steal time from Quadrant I, because these activities are both urgent and important, spending more time in Quadrant II will gradually decrease the size of Quadrant I, because we are completing those activities before they become urgent.

I have a long way to go to master even the first three habits of highly effective people, and I am far from an expert on well-being, effectiveness, or strategy development. However, I think we can all see a common theme among the advice and approaches I have described above: learning ourselves and making strides towards what works for use is critical to being effective people. My hope is that we can utilize what we have learned from our “near-peer” panel and what we will learn from the remaining “well-being” seminars, to help us focus on our priorities, develop new strategies, and accomplish our goals.

“The key is not to prioritize what's on your schedule, but to schedule your priorities” Stephen Covey.

Physiology News

May-June 2022 Volume 5 Issue 2

Graduate Student Milestones

Dr. Nathan Sharfman successfully defended his PhD dissertation. Congratulations to Dr. Sharfman and mentor Dr. Gilpin.

Josh Edevettal received his NIH F30 grant. Josh was elected VP of Public Relations, Student Government Affairs.

Anna Whitehead, Brianna Bourgeois, and Taylor Templeton successfully passed preliminary exams.

Recognition

Brianna Bourgeois won the Best Trainee Presentation at the 16th ADACE Scientific Retreat.

Danielle Levitt won the RSA Junior Investigator Meeting Award for the 2022 RSA Scientific meeting.

Elizabeth Avegno won a “virtual” travel award for International Union of Physiological Sciences, 2022.

New Faces

Isabella Liano- 2022-23 PREP Scholar. Will be working under the mentorship of Drs. Molina and Alejandra Jacotte. She earned a bachelor's in Neuroscience, University of Texas at El Paso in May 2022.



Hannah Smith is pursuing MPH at Tulane University in Social, Behavioral, and Population Science with a concentration in Maternal and Child Health. Hannah is a graduate research assistant, CARC.

RoxAnna Prior is pursuing MPH at Tulane University in International Health and Sustainable Development, with a focus on HIV and Family Planning. RoxAnna is a graduate research assistant, CARC.



Publications

Anna K Whitehead, Nicholas D Fried, Zhen Li, Kandasamy Neelamegam, Charlotte S Pearson, Kyle B LaPenna, Thomas Sharp, David J Lefer, Eric Lazartigues, Jason D Gardner, Xinpeng Yue. Alpha7 Nicotinic Acetylcholine Receptor Mediates Chronic Nicotine Inhalation-Induced Cardiopulmonary Dysfunction. *Clinical Sciences* PMID: 35678315

Patrick McTernan, Danielle Levitt, David Welsh, Liz Simon, Robert Siggins, Patricia Molina (2022). Alcohol Impairs Immunometabolism and Promotes Pro-Inflammatory CD4+ T Cell Differentiation. *Frontiers in Immunology*. PMID: 35634279.

Presentations

Andrea Jones. Targeting cortical somatostatin signaling for the treatment of chronic neuropathic pain. **Virtual Presentation**, Greater New Orleans Society for Neuroscience Trainee Seminar Series. April 2022.

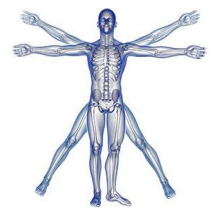
Brianna Bourgeois. Chronic binge alcohol-administration and *in vitro* ethanol impair SIV-infected female macaque myoblast differentiation. **Poster** at RSA, Orlando, FL (June 2022).

Brianna Bourgeois. Expression of miRNA Cargo in Adipocyte and Myotube Extracellular Vesicles of Chronic Binge Alcohol-administered SIV-infected Male Macaques. **Oral presentation** at Gordon Conference on Alcohol-Induced End Organ Damage, Ventura, CA (April 2022).

Danielle Levitt. At-risk alcohol and myoblast bioenergetic function in SIV/HIV. **Oral presentation and poster** at Gordon Research Seminar (GRS) & Conference on Alcohol-Induced End Organ Damage in Ventura, CA (April 2022).

Danielle Levitt. Fat-free body mass protects against frailty in people living with HIV” **Poster** at RSA in Orlando, FL (June 2022).

Eden Gallegos. Chronic binge alcohol, SIV and liver injury-what happens before lipid accumulation? **Poster** at Gordon Conference on Alcohol-Induced End Organ Damage in Ventura, CA (April 2022)



Physiology News

Elizabeth Avegno. Alcohol dependence activates ventral tegmental area-central amygdala circuitry in mice and rats. **Oral Presentation**, International Union of Physiological Sciences, May 2022.

Jonquil Poret. Circulating adipokines in people living with HIV: association with alcohol use. **Poster** at RSA, Orlando, FL (June 2022).

Michael Dubic. Differential antinociceptive gene expression patterns in PBMCs and frontal cortex of chronic binge alcohol administered SIV-infected rhesus macaques. **Poster** at RSA, Orlando, FL (June 2022).

Professional Service

Andrea Jones joined the Greater New Orleans Society for Neuroscience Outreach Committee.

Danielle Levitt was a discussion leader at the GRS on Alcohol-Induced End Organ Damage (April 2022) and was elected to Chair next year's GRS. She was also an invited speaker for a 7th & 8th grade Girls in STEM and Healthcare Careers event at Berkner High School (April 2022, virtual).

Lauri Byerley hosted the nutrition table at the UMC Health Fair, April 2022.

Notable Events

Elizabeth Avegno won the ADACE Team RSA Fun Run t-shirt design contest. Special acknowledgment to Sydney Vita for inspiring color scheme for Pride month. Below is the team at the Markwood Run, Orlando, FL.



Kimberly Edwards announced her retirement from science and transition to full-time artist. Kim will be spending time between New Orleans and Arizona to showcase her creative designs. Ghost (pictured) will be staying behind to keep **Dr. Edwards** sane.



Jessi Cucinello-Ragland and their partner Justin welcomed their bundle of joy, Rory James Ragland, on May 19.



Rory made a guest appearance at Danielle's farewell celebration and met his science grandmother Dr. Molina.



Brianna and team hosted a "Sweet ending to a new beginning" celebration for Danielle. Danielle's last day at LSUHSC is June 30



When possible, please **recycle glass** items in the lab. Please wash with water (3-5 times) and dry. A box is available in front of MEB 7242. Idea conceived and primary contact **Dr. Elizabeth Avegno**.