

Pharmacology News

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TULANE UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF PHARMACOLOGY

Message from the Chair: Dr. David Busija

The Pharmacology Department continues to prosper and to make advances in collaborative research and funding, graduate student education, service, and medical student instruction. I want to highlight several, recent, noteworthy achievements. *First, Dr. Sarah Lindsey*, Associate Professor and Dr. Barbara B. Beckman Professor in Pharmacology, was awarded the **2024 Student/Trainee Research Mentoring Award** by Tulane University on November 1, 2024, at a ceremony held in the Ritz Carlton Hotel. This annual award recognizes an exceptional research mentor of postdoctoral fellows, graduate students, and undergraduate students. *Second, Dr. Partha Chandra*, Research Assistant Professor, was approved for transfer from the research to the tenure track effective December 1, 2024 based upon his high level of research productivity and recent NIH funding (see below). *Third, Dr. Rebecca Solch-Ottaiano*, Research Instructor, and new to the department, was promoted to Assistant Professor January 1, 2025. Dr. Rebecca Solch-Ottaiano is funded by the American Heart Association (AHA) Career Development Award and is an LaCaTS Roadmap Scholar. *Fourth*, I was awarded the **Distinguished Service Award** by the American Medical School Pharmacology Chairs Association (AMSPC). Over my 8 year tenure as Treasurer, as stated by the award, I restored the financial health of the association. And *fifth*, under the direction of **Dr. Craig Clarkson**, with the aid of our faculty, our **Masters in Pharmacology students** continue to see success in their professional careers.

The Pharmacology Department hosted Dr. Luis Gabriel Navar for the Twenty-Fourth Annual James W. Fisher Distinguished Lectureship in Pharmacology

Dr. Luis Gabriel Navar, Ph.D. delivered the Distinguished Lecture in Pharmacology on Friday, November 1st. The title of his lecture was *Paradigm Shift in Regulation of Renal Vascular Resistance in Hypertension*. In the audience were members of the Tulane and LSU scientific community. Gabby presented retrospective research with new insights about the future of renal vascular resistance in hypertension. Gabby has trained scores of scientists, who lead or are



members of departments across the globe. He has called Tulane his academic home for 36 years. His findings recognized the role

of intraluminal and renal cellular angiotensin II formation in regulating renal function and in mediating the progressive development of hypertension. Gabby has written 450 peer reviewed articles, reviews, and book chapters. He has received the Cannon Award from APS, the Excellence Award from the Hypertension Council, and the inaugural Tulane Hall of Fame Award. The lecture was followed by an excellent luncheon where members of the local scientific community congratulated and spoke with Dr. Navar.

Dr. Partha Chandra received an NIH-NINDS R01 grant for \$2,380,035 for "The effects of HIV-associated extracellular vesicles on mitochondrial dysfunction in brain microvessels"



We will elucidate the role of extracellular vesicles (EVs) on brain microvascular endothelial mitochondria in the development of *HIV-1 Associated Neurocognitive Disorders* (clinically called HAND) and evaluate the clinically tested mesenchymal stem cell-derived EVs to prevent neuropathogenesis in the HIV-1 infected humanized mice.

In the US, 54% of HIV-infected patients are at least 50 years old (CDC 2022). *Aging plus combined antiretroviral therapy (cART) and neuroinflammation, increase vascular brain injury and cognitive dysfunction in HIV patients*. Despite the efficacy of cART, the development of HAND is a serious clinical complication in 30–60 percent of AIDS patients. The mechanisms underlying HAND are underexplored, and the current cART regimens are insufficient to inhibit the progression of HAND. Every cell in our body releases small vesicles (EVs), which are nanometer in size and filled with proteins, RNAs, and other cellular substances. *Our preliminary research suggests that EVs circulating in the blood or brain of HIV-infected patients accelerate dysfunction in the brain microvessels of the microcirculation (composed of small brain blood vessels: arterioles, capillaries, and venules) as well as in the blood-brain barrier (BBB) by inducing mitochondrial dysregulation in microvascular endothelium*. Our focus on brain microvessels is appropriate since this segment of the circulation is increasingly recognized as an initiation site for the progression of many neurological diseases, including HAND.

We will determine the effects of EVs that are not contaminated with viruses (HIV-free EVs) on mitochondrial and BBB dysfunction both in cell culture models and in immunocompromised mice (mice with defects in one or more immune components [such as T, B, NK cells] in the immune system). We will also establish that the EV-containing host protein, fibrinogen, and the HIV-containing protein, Tat, will dysregulate mitochondrial and BBB functions in the immunocompromised mice. In this pre-clinical study, we will test the therapeutic efficacy of mesenchymal stem cell-derived EVs to prevent the development and the progression of HAND in the immunocompromised mice. *Successful control of mitochondrial-dependent microvasculature dysfunction, in vivo, will facilitate translation of our findings into novel treatments for HIV.*

Pharmacology welcomes Dr. Rebecca Solch-Ottaiano



Dr. Rebecca Solch-Ottaiano joined the department in October 2024 as a Research Instructor and was promoted to Assistant Professor on the Research Track on January 1, 2025. Rebecca earned a BS in Food Science and Human Nutrition and then a Ph.D. in Nutritional Science from the University of Florida (UF). Her UF research focused on probiotic supplementation in gastrointestinal health. She transitioned from clinical to translational science with a Postdoctoral Fellowship in the Department of Neurology at Tulane University under the mentorship of Dr. Maraganore and expanded her skillset in rodent neurobehavior, gut microbiota, and neuroinflammation. In Neurology, Rebecca was named Director of the Clinical Neuroscience Research Center Rodent Behavior Core and promoted to Research Instructor. Additionally, Dr. Solch-Ottaiano is a member of the Tulane Brain Institute Outreach Committee and leverages her human nutrition background through discussions about the relationship between diet and brain aging with community members.

"My research program aims to explore the role of diet on cognitive aging across the lifespan through mechanisms such as the gut-brain axis. I am interested in how two contrasting diets, the Mediterranean and the Western, modulate the gut microbiota and its downstream effects on neuroinflammation and cognition. My work is currently funded by the AHA Career Development Award and the Louisiana Clinical and Translational Sciences Center Roadmap Scholars Award. *"I am honored to have joined the Department of Pharmacology and look forward to*

creating multi-disciplinary collaborations that will advance our knowledge of the gut-brain axis."

Faculty News

Dr. David Busija

- **Award:** received the **Distinguished Service Award from the AM-SPC**. The Chair of AMSPC commented that, "Dr. Busija served as Treasurer of the organization for 8 years and recently was elected as one of three Councilors. During his time as Treasurer, he placed the organization on a firm financial footing."
- **Grant Submissions:** (1) NIH/NIA, 6/24; and (2) NIH/NIA, 11/24
- **Invited Speaker:** (1) "Mitochondrial Mechanisms in Health and Disease," Symposium honoring Prof. Dr. Ferenc Bari, Dean of Medicine, University of Szeged, Szeged, Hungary, 9/2/24; and (2) "Cerebrovascular Mechanisms," two hour elective, University of Mostar, Federation of Bosnia and Herzegovina, 10/11/24
- **Professional Service:** (1) American Physiological Society (APS) Finance Committee; (2) member of the Editorial Board: *American Journal of Physiology-CV and Heart Physiology*, (3) Secretary Treasurer of the Cardiovascular Section of APS, (4) Elected as Councilor for Association of Medical School Pharmacology Chairs

Dr. Stephen Braun

- **Grant Award:** UTSW contract extension: R01, "Directed evolution of novel AAV capsids for Global CNS Delivery in Rodents and Primates," 7/1/24–9/30/24, \$50,657
- **Grant Submissions:** NIH NIAID, R01, 9/2024
- **Grant Reviews:** (1) 2024 NIAID Study Section 2024/10 ZAI1 VS-A (S1) 1 R34: Planning for Product Development Strategy; and (2) 2024 NIAID Study Section, Special Emphasis Panel RFA-AI-24-011: Tailoring HIV Curative Strategies to the Participant
- **Outreach:** Great American Teach-In, Zoom meeting with Woodbridge Elementary School in Tampa, FL

Dr. Jorge Castorena

- **Invited Speaker:** (1) "TRPV4-Expressing Tissue Resident Macrophages Regulate the Function of Collecting Lymphatic Vessels: Implications in Breast Cancer-Related Lymphedema," Federation

of American Societies for Experimental Biology, Tucson, AZ, 8/24 (FASEB 2024); and (2) "TRPV4-Expressing Tissue Resident Macrophages Regulate the Function of Collecting Lymphatic Vessels: Implications in Breast Cancer-Related Lymphedema," LSU Cardiovascular Center of Excellence, New Orleans, LA, 9/24

- **Grant Submissions:** NIH, Role: Co-I, 11/24 (Sponsor: Cornell University); (2) NIH, Co-I, 11/24 (Sponsor: St. Louis University)
- **Grant Reviewer:** NIH Cardiovascular Differentiation and Development (ZRG1 CDD 81) Special Emphasis Panel (SEP), 11/6/24
- **Journal Reviewer:** *Scientific Reports*
- **Editorial Boards:** *Frontiers in Physiology* (Research Topic Guest Editor)
- **Professional Service:** (1) Council and Membership Committee Member - The Microcirculatory Society, Inc., and (2) Awards Committee - APS Cardiovascular Section

Dr. Partha Chandra

- **Grant Award:** "The effects of HIV-associated extracellular vesicles on mitochondrial dysfunction in brain microvessels," Role: PI, 7/10/24–6/30/29, \$2,380,035
- **Award:** *GeroScience* outstanding original research paper award from The American Aging Association & *GeroScience*, on 6/3/24 for "Effects of aging on protein expression in mice brain microvessels: ROS scavengers, mRNA/protein stability, glycolytic enzymes, mitochondrial complexes, and basement membrane components," *GeroScience*. 2022 Feb;44(1):371-399. doi: 10.1007/s11357-021-00468-1. Other authors on this paper from the department of Pharmacology included: *Drs. Ibolya Rutkai-Green, Prasad Katakam, Ricardo Mostany, and David Busija*.
- **Invited Speaker:** "Circulating plasma extracellular vesicles indicate dysregulation of synaptic signaling in SHIV-infected rhesus macaque," American Society for InterCellular Communication 4th Annual Meeting, North Bethesda, Maryland, 10/18/24
- **Grant Submission:** (1) NIH R21, 9/24, Role: PI, Co-PI: Dr.

Faculty News continued

Manesh Panner-Selvam

- **Service to SOM:** Poster Judge at the Tulane BMS Retreat, 10/24
- **Grant Reviewer:** NIH Special Topics in Clinical Neuroscience/Scientific Review Group 2025/01 ZRG1 CN-A (81) S Meeting, 11/4/24
- **Journal Reviewer:** *Molecular Psychiatry, Viruses*
- **Professional Service:** Chair, Membership Committee, American Society for Interpersonal Communication, 10/19/24

Dr. Prasad Katakam

- **Invited Speaker (1)** "Regulation of Mitochondrial Respiratory Function by Nitric Oxide Synthase," University of Szeged, Hungary, 9/2/24; and **(2)** "Impact of Hypoglycemia on Mouse Brain Microvasculature," Center for Cardiovascular Diseases and Sciences, LSUHSC, Shreveport, LA, 6/3/24
- **Grant Submissions:** Co-investigator on four NIH R01 grants.
- **Grant Reviewer:** **(1)** NIH Study Section: Acute Neural Injury and Epilepsy Study Section (ANIE), Member, 6/13/24; **(2)** NIH Study Section: Brain Injury and Neurovascular Disorders (BIND), Member, 10/24/24; and **(3)** Veterans Health Administration Office of Research & Development, Merit Review Special Emphasis Panel ZRD1 NURC-H (01) Subcommittee Neurobiology-C, Member, 12/5/24
- **Professional Service:** Chairman, Nominating Committee, Microcirculatory Society, USA

Dr. Sarah Lindsey

- **Award:** received the **2024 Tulane Student/Trainee Research Mentoring Award** at the Annual Tulane Research, Scholarship, and Artistic Achievement Awards ceremony, 11/1/24
- **Grant Submissions:** Submitted three grants as PI: **(1) a.** R01, 6/24, **b.** R01, 7/24, and **c.** R01, 11/24; and **(2)** submitted two grants as Co-I with faculty members Caroline Bayer (R01, 2/24) and Stryder Meadows (R01, 7/24); and **(3)** submitted five grants as Co-I with Lindsey laboratory postdoctoral fellows and students (*Please see Dr. Sarah Lindsey Laboratory on Page 5*)
- **Invited Speaker:** "Vascular Changes in a Mouse Model of Menopause," Tulane OB/Gyn Grant Rounds, 10/25/24
- **Journal Reviewer:** *American Journal of Physiology, Biology of Sex Differences, Endocrine Research, Hypertension*
- **Grant Reviewer:** **(1)** AHA, Transformational Project Awards – Vascular, 4/24; **(2)** Graduate Women in Science, National Fellowships, 5/24; **(3)** NIH Study Section, NIH Director's New Innovator

Award Program (DP2), 11/24

Dr. Ricardo Mostany

- **Grant Submissions:** **(1)** NIA, 7/24, PI: Mostany; **(2)** NIA, 7/24, Role: Co-I, PI: Engler-Chiurazzi; **(3)** National Institute on Drug Abuse, 9/24, Role: Co-I, PI: Norton; **(4)** NIA, Role: PI, 9/24
- **Grant Reviewer:** Sensory-Motor Neuroscience Study Section, 10/24
- **Outreach:** Walk to End Alzheimers, Tulane Brain Institute Table, 10/19/24

Dr. Ibolya Rutkai-Green

- **Invited Speaker:** "Aging and sex impact on the brain vasculature: a mitochondrial perspective," Tulane Center of Excellence in Sex-Based Precision Medicine, Tulane SOM, 10/17/24
- **Grant Reviewer:** **(1)** Ad-hoc member, NIH Brain Injury and Neurovascular Pathologies (BINP) Study Section, 6/17/24-6/18/24; and **(2)** Ad-hoc member, NINDS Special Emphasis Panel ZNS1SRB-M (19) ADRD Initiative, 6/11/24
- **Professional Service:** Committee Member: Physiology Faculty Professional Development Program at LSU for Dr. Janos Paloczi.

Dr. Rebecca Solch-Ottaiano

- **Grant Award:** PI, Louisiana Clinical & Translational Science Center Roadmap Scholars Award, U54 GM104940, Role: PI, "A Mediterranean Diet to Promote Brain Health in Aging Rats," approximately \$150,000, 07/01/24-06/31/26
- **Awards:** **(1)** NIH Loan Repayment Program Award, L60AG089835, "The Effect of Diet-modulated Gut Microbiota on Alzheimer's Disease Etiology, Role: PI, 7/1/24-6/30/26; and **(2)** Gwynn Akin Bowers Neurology Chair's Award, Tulane Neurology, 6/24
- **Invited Speaker:** **(1)** "Diet and Brain Health," Alzheimer's Association, Baton Rouge, LA, 6/2/24; and **(2)** "The Gut-Brain Axis," Tulane Graduate Neuroscience I, New Orleans, LA, 11/15/24
- **Poster Presentation:** "The effect of a Mediterranean and Western Diet on Cognitive Performance in Middle-Aged Rats" A Pilot Study," 2024 Alzheimer's Association International Conference, Philadelphia, PA, 7/28/24-8/1/24
- **Journal Reviewer:** *Brain and Behavior, Probiotics and Antimicrobial Proteins*
- **Outreach:** **(1)** Alzheimer's Association walk with the Tulane Brain Institute Outreach. Dr. Mostany was also there! **(2)** Tulane Brain Institute Outreach - Speaking with the New Orleans Jewish Community Center on Dietary Patterns and Brain Health

University and SOM Committees: **Dr. Braun:** Tulane Primate Research Center (TNPRC) Space Committee; **Dr. Busija:** Tulane Professionalism Program Advisory Board; **Dr. Castorena:** SOM Nominating Committee; **Dr. Clarkson:** SOM Curriculum Committee; **Dr. Lindsey:** University Senate, SOM Grievance, SOM Curriculum, SOM BMS Retreat Committee; Tulane Professionalism Program Peer Messenger; **Dr. Intapad:** Faculty Advisory, BMS Social Media-Recruiting; **Dr. Katakam:** BMS: MS and PhD Admissions Committee, Vice-Chair: GMF Personnel & Honors, Member: SOM Physician-Scientist Pipeline Program; Member: SOM BIRCWH Program; **Dr. Mostany:** : Director, Tulane Brain Institute Neuroscience PhD Program; Neuroscience PhD Program Doctoral Training Committee; Tulane Brain Institute Executive Committee; Graduate Studies Committee (SSE); **Dr. Solch-Ottaiano:** Tulane Brain Institute Outreach Committee, Tulane Brain Institute Seminar Committee

Master's in Pharmacology Graduate Spotlight: Uma Subrayan, T1, Tulane SOM



My grandmother lived in India where she suffered an ischemic stroke. Unfortunately, her physicians misdiagnosed her and did not administer a potentially life-saving therapy (tissue plasminogen activator [tPA]). By the time they realized their mistake, it was too late. My grandmother was declared brain-dead and placed on life support. Through this tragedy, I developed a passion for medicine and a desire to become a physician.

After graduating from college, I searched for graduate programs to enhance my understanding of life-saving therapies like tPA. Tulane's Master of Science in Pharmacology program transformed my life. *The program's curriculum was rigorous; however, support from my mentors, Drs. Katakam, Clarkson, Mostany, and Chandra fueled my motivation to succeed. Through the program, I gained valuable insight into drug mechanisms and realized the importance of personalized medicine. The small class size, collaborative environment, and commitment to community service solidified my desire to pursue medicine. The preparation of the MS program and support of these mentors led to my acceptance to the Tulane University School of Medicine, ten years to the day that my grandmother passed.*

The program gave me an enriched understanding of pharmacology's role in health-care, equipping me with knowledge to contribute meaningfully. *Also, the unconditional support from the faculty and staff, especially Ms. Linda Martin in the Pharmacology office, has been invaluable and I am forever thankful.*

New Faces in Pharmacology



There have been many additions to the Pharmacology Laboratories. Pictured left to right are: **Madison Prats**, who earned a B.S. in Animal Science and Technology at LSU. She is a Medical Research Technician in the **SOLCH-OTTAlaNO** Lab studying nutrition and cognitive function, specifically the effect of diet on microbiota, cerebral microvascular endothelial function, and cognition in aging rats, as well as mediterranean diet fecal microbiota transplantation to promote brain health in aging rats. **Claire Alexander** is a Neuroscience Ph.D. student working in the **MOSTANY** Lab. She earned her B.S. in Biology from LSU and an M.S. in Biology from Lamar University in Beaumont, TX. **Dr. Keith Keane** joined the **CASTORENA** Lab as a Postdoctoral Fellow. Keith earned his Ph.D. in Cellular Molecular Microbial Biology from the Department of Gastrointestinal Sciences

at the University of Calgary, Canada. He is studying lymphatic vessel function in health and disease in the metabolic syndrome. **Victor Hernandez** earned a B.S. from Tulane and an M.S. degree in Neuroscience also from Tulane. He is the Lab Technician in the **MOSTANY** Lab and supports lab operations while transitioning to a research project. **Neha Ramaswamy** joined the **RUTKAI-GREEN** Lab as Medical Research Technician. Neha earned her degree in Biochemistry from Binghamton University (NY). She is doing microvessel isolation and staining while researching the effects of aging on mitochondria. **Raed Ageeli** earned a B.S. degree from Jazan University School of Applied Medical Sciences, Saudi Arabia, and an M.S. from The University of Memphis (TN) School of Applied Medical Sciences. He is a Ph.D. student in Biomedical Sciences and works in the **KATAKAM** Lab on the impact of nitric oxide during cerebral ischemia/reperfusion injury.

Thank you to those who have donated to The Dr. Krishna C. Agrawal Education Fund to support our students

This endowed fund supports students in the Department of Pharmacology.

To read the biography of Dr. Krishna please go to: [Agrawal Fund](#)

To support Pharmacology students through The Dr. Krishna C. Agrawal Education Fund or to make a gift to the Department of Pharmacology,

contact Jean Paul Perrilliat, Senior Development Officer for Tulane University School of Medicine,
504-314-7380, or jperril@tulane.edu

Tulane University School of Medicine Office of Development #8745, 1430 Tulane Avenue, New Orleans, Louisiana 70112

Laboratory News: Pharmacology (Pharm), Brain Institute (BI), Biomedical Sciences (BMS), Neuroscience Undergraduate (NU), Neuroscience Program (NP), School of Science and Engineering (SSE), Biomedical Engineering (BE), Tulane National Primate Research Center (TNPRC), Public Health and Tropical Medicine (PHTM), Public Health Undergraduate (SPHU), Cell and Molecular Biology (CMB)

Laboratory of Dr. Castorena

Mary Schulz (BMS Ph.D. student) (1) received a Travel Award to attend FASEB 2024; (2) to present a poster, which was selected for (3) an oral presentation: "TRPV4-Mediated Lymphatic Contractile Dysfunction: Unraveling Sex differences in Collecting Lymphatic Vessels;" (4) passed her Preliminary Ph.D. Exam, 10/24; and (5) submitted an NIH Predoctoral F31 Grant proposal, 11/24. ***Congratulations Mary!***

Rea Banks (BMS), a Pharmacology Master's student, has joined the Castorena lab.

Laboratory of Dr. Prasad Katakam

Raed Y Ageeli (BMS Ph.D. student) has been awarded an AHA Predoctoral grant for two years, 1/1/25–12/21/26, \$34,774. ***Congratulations Raed!***

Laboratory of Dr. Sarah Lindsey, [Our webpage](#)

Dr. Bruna Visniauskas, Instructor, (Pharm) (1) was awarded a Pilot Project - Tulane COBRE in Sex-Based Precision Medicine, "Impact of Sleep Restriction and Estrogen Loss in Cardiovascular Health," 9/24–8/25, \$50,000; (2) submitted an R21 grant (3) submitted a grant to the American Diabetes Association for a Junior Faculty Development Grant, 11/24; (4) submitted a grant for an AHA Career Development Award; and (5) has a first-author paper, please see page 6. ***Congratulations Bruna!***

Richard Chase (SSE) (1) received the 1st Place Award for a Student Presentation at the Tulane Brain Institute Retreat on 3/2/24; (2) presented a poster, "Divergent Effects of Estrogen on Peripheral Versus Brain Vascular Health" at Neuroscience 2024 (10/5–9/24); and (3) submitted an NIH F31 Predoctoral Fellowship Grant, 12/24. ***Congratulations Richard!***

Ariane Imulinde Sugi (BMS) (1) received a Tulane Biomedical Sciences Travel Award; to (2) present a poster, "Impact of Altered Receptor Expression on the Cardiovascular Response to Estrogen," at the AHA Hypertension Scientific Sessions, Chicago, IL, 9/5–8/24 (#Hypertension24); and (3) completed her Ph.D. Prospectus on 10/8/24. ***Congratulations Ariane!***

Ridhi Mohan (SPHU) (1) received a Travel Award from Newcomb Institute to attend the Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS), Pittsburgh, PA, 9/13–16/24 (2) to present a poster, "Impact of Testosterone on Female Cardiometabolic Health;" and (3) received a grant for \$2,918 from the Center for Engaged Learning & Teaching (CELT) to support her research

project, "Impact of Testosterone on Female Cardiometabolic Health." ***Congratulations Ridhi!***

Dr. Ana Paula de Oliveira Leite, Postdoctoral Fellow (Pharm), (1) presented a poster, "Estrogen Worsens Kidney Function in Hypertensive Menopausal Rats;" which (2) received an AHA Hypertension Trainee Poster Award; and (3) submitted and was awarded an AHA Postdoctoral Fellowship grant for "Estrogen, Hypertension, and the Postmenopausal Kidney," 1/1/25–12/31/26, for \$170,896. ***Congratulations Ana!***

Laboratory of Dr. Ricardo Mostany [Our website](#)

Cemo Semmedi, Ph.D. student (NP), (1) defended her Doctoral Thesis Dissertation: "Amyloid- β pathology impairs molecular and structural mechanisms of plasticity in the cortex," 10/12/24. ***Congratulations Cemo!***

Alexis Ducote (NP) has published a first-author paper. *Please see page 6.*

Zach Plumley (NP) was first author on a poster, "Metabolic dysfunction impedes estradiol treatment-mediated potentiation of neurovascular coupling in middle-aged ovariectomized female mice," at Neuroscience 2024.

Dr. Irene Fernandez Ugidos Iguidos (Pharm) (1) was first-author on a poster: "Ketamine-induced structural plasticity in dendritic spines of the dorsomedial prefrontal cortex is hindered in aged mice," at Neuroscience 2024; and (2) was an author on a publication, of which, all authors except one have been trainees in the **Mostany lab** and have gone on to further training at other institutions. *Please see Page 6.*

Other authors from the **Mostany Lab** on the posters cited above include: A. Walker, I. Pires Dos Santos, and H. Taylor.

Laboratory of Dr. Ibolya Rutkai-Green

Neha Ramaswamy (Pharm) has been accepted at Arkansas College of Osteopathic Medicine and has several other opportunities still available. She will be starting her DO program in July. ***Congratulations Neha!***

Laboratory of Dr. Rebecca Solch-Ottaiano

Madison Prats (Pharm) has joined the Solch-Ottaiano Lab in Pharmacology as a Medical Research Technician. Madison holds a B.S. in Animal Science and Technology from Louisiana State University. She has been working with Dr. Solch-Ottaiano for two years.

Undergraduate Laboratory Members: Jessica Dinh (NU), Aidan Leit (NU), Elin Phillips (NU), Nicholas Prus (CMB), Malaika Subramanian (NU), Sunjukta Vaidhyathan (NU)

Neuroscience Masters Program: Irene Yu (BI, NP)

Publications

Mauvais-Jarvis F and **Lindsey SH**. (2024) Metabolic benefits afforded by estradiol and testosterone in females and males: Clinical considerations. *Journal of Clinical Investigation*, 134(17):e180073. doi: 10.1172/JCI180073

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Sakamuri A, **Visniauskas B**, Kilanowski-Doroh I, McNally A, Imulinde-Sugi A, Kamau A, Sengottaian D, McLachlan J, Anguera M, Mauvais-Jarvis F, **Lindsey SH**, Ogola BO. (2024) Testosterone Deficiency Promotes Arterial Stiffening Independent of Sex Chromosome Complement. *Biol Sex Differ.*, 15(1):46. doi: 10.1186/s13293-024-00624-0

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Editorial commentary: This article, "Hypertension disrupts" was chosen for *APSselect*, the best recently published articles in physiology.

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Panner Selvam MK, **Chandra PK**, Bakhtary Z, **Busija DW**, Sikka SC. Untargeted Metabolomic Profiling of Extracellular Vesicles Isolated from Human Seminal Plasma. *Biomolecules*, 2024 Sep 26;14(10):1211. doi: 10.3390/biom14101211

Harlow RC, Pea GA, Broyhill SE, Patro A, Bromert KH, Stewart RH, Heaps CL, **Castorena-Gonzalez JA**, Dongaonkar RM, Zawieja SD. Loss of anoctamin 1 reveals a subtle role for BK channels in lymphatic muscle action potentials. *J Physiol.* 2024 Jul;602(14):3351-3373. doi: 10.1113/JP285459. Epub 2024 May 5.

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Departmental Mission Statement:

We will educate and train medical and graduate students in the principles of pharmacology using modern techniques and will conduct state-of-the-art research in pharmacology-related fields in order to expand the frontiers of science and medicine.