

Pharmacology News

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TULANE UNIVERSITY SCHOOL OF MEDICINE DEPARTMENT OF PHARMACOLOGY

Message from the Chair, Dr. David Busija

As I finish my 6th year as Chair on December 31, it is a pleasure to reflect upon our accomplishments. Our teaching program remains strong with awards from the Owl Club for our Pharmacology Course awarded T2 Course of the Year and **Dr. Craig Clarkson** awarded T2 Professor of the Year. We continue to recruit high quality students into our Masters in Pharmacology Program and our graduates enjoy a high rate of success in getting into medical school. We have recruited our sixth Assistant Professor, **Dr. Suttira (Joy) Intapad**, who joined us on July 1. Dr. Intapad is supported by two large foundation awards and brings a new research direction. Laboratory space is being renovated for Dr. Intapad and this effort will cap the renovation of virtually all of the offices and laboratories in the department. *We now have 5 NIH R01, or equivalent, awards in the department* as well as several other types of grant awards. The first of our new faculty, **Dr. Prasad Katakam**, has been approved for promotion to Associate Professor with tenure. **Dr. Barbara S. Beckman**, Professor and Associate Dean for Admissions, will retire on December 31. Dr. Beckman has been an integral and important part of our department and the university and we will miss her presence. However, she will continue to be represented by the ongoing Barbara S. Beckman Endowed Professorship, which is currently held by **Dr. Sarah Lindsey**. I want to thank all of the faculty, staff, and students for contributing to the success of our department.

NIH R01 Award to Dr. Prasad Katakam

Dr. Prasad Katakam, Principal Investigator, has received a four year, \$1,316,876 grant from the National Institute of Neurological Disorders and Stroke and General Medical Sciences to study the endothelial expression of neuronal nitric oxide synthase. Recent evidence has implicated cerebral microvascular dysfunction in brain injury following

stroke. Nitric oxide synthase (NOS) has endothelial (eNOS) and neuronal (nNOS) isoforms that were named after the locations where they were first identified. Dr. Katakam's preliminary studies have identified nNOS in freshly isolated rat brain microvessels and brain microvascular endothelial cells from rat, mouse, and humans. He has found that endothelial nNOS is functionally distinct from the nNOS expressed in the neurons and eNOS. This form: enNOS, is the focus of his studies. His funded studies will test the hypothesis that enNOS is functionally distinct from nNOS of neuronal origin and eNOS and also that enNOS is the primary mediator of anoxic/ischemic injury in endothelial cells and brain. His proposed studies will fundamentally advance the mechanistic understanding of NOS, the single most important regulator of the neurovascular unit, and will provide breakthrough findings to target enNOS for treating microvascular dysfunction in stroke.

NIH R01 Award to Dr. Ricardo Mostany

Dr. Ricardo Mostany, Principal Investigator, has received a five year, \$1,542,625 grant from the National Institute on Aging (NIA) to study the mechanisms of age-related changes in synaptic plasticity in brain circuits and investigate their impact in memory and learning. He will study the poorly defined neural mechanisms that mediate the decline of brain performance with aging and which affect many aspects of normal aging. The study will focus on differences in synaptic plasticity of cortical excitatory neurons during learning between young and aged mice, and on the decay of inhibitory interneuron activity in the cortical circuits of aged mice. The results will provide a foundation for the development of therapeutic strategies to ameliorate the progression of age-related brain performance decline. In addition, as a complicating factor, healthy brain aging may obscure underlying deficits that are substrates, or primers, for the occurrence of neurodegenerative disorders, such as Alzheimer's disease. The results of this investigation will also serve as the basis for the study of age-related cognitive disorders. Dr. Mostany received funding for the past two years from Tulane's COBRE in Aging and Regenerative Medicine (P20GM103629) in the form of two pilot projects that produced a large portion of the preliminary work.

Dr. Barbara Beckman Announces Retirement



Dr. Barbara Beckman, Associate Dean of Admissions and Professor of Pharmacology, leads the student procession at the 2016 Tulane Medical School graduation, an honor she has performed every year since becoming Associate Dean.

Dr. Barbara Beckman will retire at the end of the fall, 2016, academic term. Dr. Beckman has deep roots in Tulane academics and has led a life of service to science and the Tulane community. She completed her undergraduate degree at Tulane in Biology in 1968, left to complete her education, and returned to Tulane in 1978. She completed a M.A. degree at University of Texas, Austin and completed her Ph.D. at Johns Hopkins School of Medicine after serving as a Research Associate in Medicine at Harvard University Medical School. At Tulane, Dr. Beckman assumed many different roles: Assistant, Associate, and Full Professor of Pharmacology, Adjunct Professor in the Department of Physiology; Adjunct Professor in Otolaryngology; Program Member at Tulane Cancer Center; Director: Interdisciplinary Molecular and Cellular Graduate Program; Fellow: Center for Bioenvironmental Research; Interim Chairman of the Department of Pharmacology; and from 2004 to the present, Assistant and then Associate Dean of Medical School Admissions. She has mentored more than 62 students for their theses and she has been a strong supporter of women in science. In 2012 she created the Barbara S. Beckman Professorship in Pharmacology to encourage diversity and propel the careers of women scientists and to encourage women to take leadership roles in the basic sciences. Also, in 1991 she established the James W. Fisher

Distinguished Lectureship in Pharmacology, which sponsors annual lectures by distinguished scientists. Dr. Beckman has received many honors and awards during her professional career, including: Fellow of the American Association for the Advancement of Science, Owl Club Outstanding Second-Year Teaching Award, Reviewer for the National Research Council, Hughes Predoctoral Fellowship, and served on several NIH Study Sections. She also maintained a stellar research laboratory supported by grants from the National Institutes of Health, the Department of Defense, the American Heart Association, the American Cancer Society as well as training grants to train the next generation of scientists. The Department of Pharmacology and Tulane Medical School will miss Dr. Beckman. However, as Professor Emerita she will continue service to Tulane for the next several years by advising students about how to achieve their career goals. She will be available to meet once a week and can be contacted by email at bbeckman@tulane.edu

NIAID R21/R33 Award to Dr. Stephen Braun

Dr. Stephen Braun, Principal Investigator, has been awarded \$1,517,469 from NIAID for his grant, "Modifying CMV-specific T cells towards HIV" to link the CMV-specific immune response, which is directed at a persistent virus and maintains a T_{cm} and T_{em} phenotype in the tissues, with an HIV targeted response. Rhesus CMV-specific T cells will be co-transduced with retroviral vectors expressing a CD4-CAR (chimeric antigen receptor) with intracellular T cell signaling domains in a rhesus challenge model.

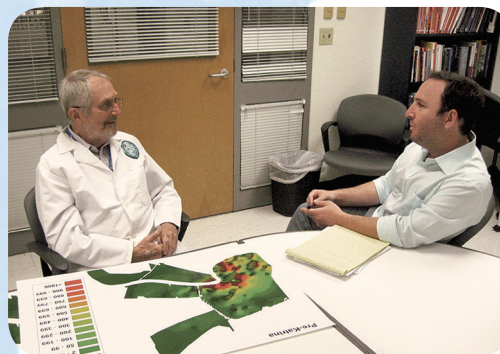
Dr. Suttira Intapad, Assistant Professor, joins Pharmacology Faculty



Dr. Intapad moved from the University of Mississippi Medical Center. Her research projects focus on the mechanisms of the fetal programming of adult diseases, specifically cardiovascular-renal physiology, hypertension, and obesity associated with low birth weight. Early fetal insult

and/or an adverse fetal environment can lead to adaptive changes that result in fetal survival, but also in structural and physiological changes with long term consequences. These projects are funded by an AHA SDG Award: "Maternal preeclampsia programs hypertension in mouse offspring," and a Kidney Council New Investigator Award: "Role of Sphingosine-1-phosphate signaling pathway on the blood pressure and kidney function of intrauterine growth restricted mouse."

Environmental Signaling Laboratory



Dr. Mielke, met with **Dr. Joseph Kanter**, Medical Director of the New Orleans Health Department on Aug. 18, 2016 to discuss the transference of the research of the Environmental Signaling Laboratories, in particular the

results of their ten year study of New Orleans soil lead contamination pre- and post-Hurricane Katrina and the positive effects on the soil from the hurricane, into public policy to promote medical intervention on lead exposure. <http://dx.doi.org/10.1016/j.envint.2016.06.017>

Faculty News

Dr. David Busija

- **Invited Speaker:** Plenary Lecture, "Mitochondrial dynamics during health and disease," 8th Croatian Congress of Pharmacology, Split, Croatia, Sept. 2016.
- **Professional Service:** (1) 2014 - present, Treasurer: Association of Medical School Pharmacology Chairs; (2) 2016 - present, ASPET Division of Pharmacology Education APS Liaison; and (3) Editorial Board Member, American Journal of Physiology.

Dr. Stephen Braun

- **Grant Award:** PI: NIAID R21/R33: Please see article, above.
- **Submitted Grants:** (1) Department of Defense, and (2) National Institute of AIDS and Infectious Diseases (NIAID).
- **Moderator:** Co-Chair: 34th Annual Symposium on Nonhuman Primate Models for AIDS, New Orleans, October 11-14, 2016.
- **Journal Reviewer:** (1) Molecular Therapy, (2) Meta Gene.
- **Grant Reviewer:** 2016 NIAID: (1) Special Emphasis Panel/Scientific Review Group 8/2016 ZRG1 AARR-J 13; (2) AIDS Discovery and Development of Therapeutics (ADDT); (3) Small Business: HIV/AIDS Innovative Research Applications ZRG1 AARR-J 13.

Dr. Bruce Bunnell

- **Publications:** Please see Publications Section on Page 6.

Dr. Suttira Intapad

- **Grant Awards:** (1) PI: AHA Scientist Development Award, "Maternal preeclampsia programs hypertension in mouse offspring," \$308,000, 01/2016-12/2019, and (2) PI: Career Development

Grant (Norman Siegel Research Scholar Grant), American Society of Nephrology, "Role of Sphingosine-1-phosphate signaling pathway on the blood pressure and kidney function of intrauterine growth restricted mouse," \$200,000, 7/2016-6/2018.

- **Invited Speaker:** Experimental Biology: "Origins of adult cardiovascular and metabolic disease," April 2016, San Diego, CA.
- **Grant Submission:** PI: NIH (NHLBI), R01.
- **Reviewer:** Thieme Medical Publishers, October 2016, Hypertension, July 2016.

Dr. Philip Kadowitz

- **Publications:** Please see Publications Section on Page 6.

Dr. Prasad Katakam

- **Grant Awards:** (1) R01 Award, please see Page 1.
- **Moderator:** Poster Professor, Abstract Poster Session: Cerebrovascular Disease/Stroke (Basic & Clinical) II, AHA Scientific Sessions, New Orleans, LA, 11/14/16.
- **Reviewer:** Grants: American Heart Association: Endothelial Biology 2 and Brain 2 Panels; LA CaTS Center Pilot Project. *Manuscripts:* Adhoc reviewer for: Circulation, Circulation Research, Hypertension, Diabetes, American J of Physiology, British J of Pharmacology, Neurochemistry International, Cerebral Blood Flow and Metabolism, J of Alzheimer's Disease, J of Cardiovascular Pharmacology; *Abstracts:* BRAIN 2017 (April 1-4 in Berlin, Germany), 23rd Annual Meeting of the Society for Redox Biology and Medicine, (November 16-19, 2016 in San Francisco, California USA).

Faculty News continued

Dr. Sarah Lindsey

- **Award:** Research Career Enhancement Award, American Physiological Society.
- **Invited Speaker:** (1) Tulane Pharmacology In Progress (PiP): "Impact of G Protein-Coupled Estrogen Receptor Deletion on Angiotensin II-induced Hypertension," 5/25/16; (2) PiP: "Lessons Learned at NIH Study Section: Premise and Rigor and Transparency, Oh My!" 6/28/16; (3) Tulane Physiology Renal and Vascular Workshop, "Menopause and Arterial Stiffening," 8/22/16; and (4) Tulane Genetics Seminar Series, "Extranuclear Estrogenic Signaling Cardiovascular Disease," 9/23/16.
- **Submitted Grants:** (1) NIH R01; (2) CoPI: NIH R03; (3) CoPI: Dept. of Defense (DOD); and (4) CoPI: COBRE pilot funds.
- **Moderator:** Vascular Biology and Dysfunction, AHA Council on Hypertension, 9/16/16. Orlando, FL.
- **Reviewer:** (1) AHA Peer Reviewer, Vascular BioBP-BSc 1, Spring 2016, and (2) NIH Early Career Reviewer Program, Hypertension & Microcirculation Study Section, June 2016.

Dr. John McLachlan

- **Recently on the NIH Campus, Bethesda, MD:** Featured participant in the international meeting (September 18-20, 2016): *Twenty-five Years of Endocrine Disruption Research*, co-sponsored by the Endocrine Society and the National Institute of Environmental Health Sciences. (1) Delivered evening lecture to participants on key events in the formation of the discipline that studies how environmental chemicals can mimic hormones and disrupt the reproductive health of multiple species; (2) Delivered the opening address on the past and future of this field of study; (3) After the formal meeting, Dr. McLachlan was invited to the Dirksen Senate Office Building on Capitol Hill to brief congressional staffers on this important topic in environmental health sciences.

Dr. Howard Mielke

- **Invited Speaker:** (1) 13th International Symposium on Recent Advances in Environmental Health Research, RCMC Center for Environmental Health, Jackson State University, "Getting the Lead In, Out, and Beyond: Hurricane Katrina and dynamic temporal/spatial changes in New Orleans," Jackson, MS, 9/13/16; (2) 12th Nursing and Healthcare Congress, Keynote Address: "Pediatric lead exposure intervention: Official statements vs. scientific review." Vancouver, BC, Canada, 10/4/16; and (3) 26th Annual Meeting, The International Society of Exposure Science, "Bridging the Ineffective Lead Treatment Gap: Lessons from Hurricane Katrina in New Orleans, USA for Establishing an Effective Lead Intervention Strategy" Utrecht, Netherlands, 10/10/16.
- **Outreach:** (1) Interviewed for an article: "Finding poison on our play grounds," *The Magazine of Tulane University School of Medicine*, 43(2):8-11; (2) Revised environment and health section of the New Orleans Master Plan which also included three meetings with city officials about reducing lead exposure to enhance health outcomes for New Orleans children.

Dr. Debasis Mondal

- **Grant Award:** NIH/NCATS, approved for UH3 Phase, Dr. D. Mondal (CoPI), Dr. A.B. Abdel-Mageed (PI), "Targeting Tumor-Derived exRNA-Containing Microvesicles by High Throughput

Screening," approximately \$1,000,000 for November 2016 through 7/30/18.

- **Invited Speaker:** (1) Tulane Structural & Cell Biology, "Targeting ER-stress and Proteasome Function in Aggressive Cancers: Utility of Phytochemical-Pharmaceutical Combinations," 9/28/16, and (2) Tulane Primate Center, "ASCs migrate to HIV-1 reservoirs and reactivate latency," presented by **Dr. Partha Chandra** (Research Scientist II), Covington, LA, 5/14/16.
- **Grant Submissions:** (1) NIH R21; (2) DOD; and (3) NIH R01.
- **Reviewer:** (1) Grants: DOD Grant Reviewer, CDMRP PCR/DEV-CET panel member, 09/14/16 - 09/16/2016; (2) *Manuscripts*: PLoS One; Oncology Letters; Toxicology; and Biochimie.
- **Professional Service:** (1) Board of Directors: American Association of Indian Scientists in Cancer Research (AAISCR), and (2) Vice President of AAISCR, May, 2016.

Dr. Ricardo Mostany

- **Grant Awards:** (1) *R01 Award. Please see Page 1*; (2) CoPI: Tulane Brain Institute Research Fund Award, Schrader and Mostany, "Orchestration of thalamic oscillations by Shox2 and its role in experience-dependent cortical plasticity," 7/1/2016 - 6/30/2017, \$25,000; (3) PI: 2016 Spring Carol Lavin Bernick Faculty Grant, Tulane Office of Research - Research Bridge Funding, "Cortical plasticity during the estrous cycle: implications for learning," \$11,500, 07/01/16 - 06/30/17.
- **Invited Speaker:** (1) Anatomy and Cell Biology, University of Illinois, Chicago, IL, "Synaptic instability in the aged cerebral cortex: role of interneurons," Oct. 2016; (2) School of Pharmacy, Universidad Francisco de Vitoria, "Two-photon excitation microscopy: general concepts and applications in neuroscience," Madrid, Spain, Sept. 2016; (3) Tulane Office of Academic Affairs and Provost, Discussion Panel: "Planning and submitting a successful Board of Regents grant," Aug. 2016; (4) Aging COBRE Interest Group, Tulane, "Synaptic instability in the aged cerebral cortex: role of interneurons." Sept. 2016; (5) Tulane Physiology Seminar Series, "Synaptic instability in the aged cerebral cortex: role of interneurons," June 2016; (6) The Buck Institute for Research on Aging: (1) Postdoc Association Discussion Panel: "Transition from Postdoc to PI in Academia," and (2) Seminar: "Synaptic instability in the aged cerebral cortex," Novato, CA, May 2016.
- **Submitted Grants:** (1) NIH/NIA R01; (2) 2016 Spring Carol Lavin Bernick Faculty Grant - Research Bridge Funding; and (3) Tulane Brain Institute Research Fund Award; (4) COBRE in Aging and Regenerative Medicine, Junior PI.
- **Reviewer:** Grants: Fondazione Cariplo, Milano, Italy. Biomedical research on aging-related diseases panel, 2016; *Journals*: Acta Neuropathologica, Brain Research, Cellular and Molecular Neurobiology, and Scientific Reports.
- **Outreach:** (1) Organized by *The Greater New Orleans Chapter of the Society for Neuroscience*: Brain Awareness Week event for Children: Your Sensational Brain with lab members, 3/16/16, and (2) *Activities sponsored by Puentes New Orleans for STEM NOLA*: with lab members, provided guidance at Youth Events: Career Round Table, (June 2016) and Career Day: Mock Interviews and Career Fair, (April 2016).

Service to Tulane and SOM: **Dr. Bunnell:** Research Advisory Comm, Executive Comm; Tulane National Primate Research Center, Chair: Promotions and Honors Comm; **Dr. Busija:** Head: Basic Science Chairs; **Dr. Mondal:** Nominating Comm; **Dr. Lindsey:** Faculty Advisory Comm, BMS Admissions Comm, Nominating Comm, Mentor: Tulane Building Interdisciplinary Research Careers in Women's Health; **Dr. Katakam:** Member: Faculty Advisory Committee, BMS Steering Comm; **Dr. Hamblin:** University Senate; **Dr. Clarkson:** Curriculum Comm; BMF Steering Comm; **Dr. Kadowitz:** Promotions and Honors Comm; **Dr. Mostany:** Tulane Brain Institute Executive Comm.

Trainee News: Trainee Affiliations: Pharmacology (Pharm), Brain Institute (BI), Neuroscience Undergraduate (NU), Neuroscience Program (NP), Cell & Molecular Biology Program (CMB)

Laboratory of Dr. David Busija

Dr. Ibolya Rutkai (Pharm) Postdoctoral Fellow, (1) submitted an AHA Association Wide Scientist Development Grant, 7/27/16; (2) was appointed to the American Physiological Society Cardiovascular Section Trainee Committee, 5/1/16 - 5/1/19; and (3) interviewed a graduate student and co-wrote a blog for PharmTalk - A Blog for Young Scientists, as member of the Young Scientists Committee, American Society of Pharmacology and Experimental Therapeutics (ASPET), posted 11/14/16. <https://www.aspet.org/Blog.aspx?id=9004&blogid=400>

Dr. Ivan Merdzo (Pharm) Postdoctoral Fellow, (1) published a first authored manuscript: Please see Publication Section on Page 6; and (2) presented a poster: "Impaired Mitochondrial Respiration in the Large Cerebral Arteries in Rats With Type 2 Diabetes," AHA Scientific Sessions, 11/13/16, New Orleans.

Laboratory of Dr. Prasad Katakam

Venkata (Ram) N. Sure (Pharm) (1) has been awarded a pre-doctoral American Heart Association (AHA) grant, "Role of Neuronal Nitric Oxide Synthase in Brain Microvascular Endothelial Cells, \$52,000, 7/01/16-6/30/18, and (2) has a first authored paper, please Publications Section on Page 6.

Laboratory of Dr. Sarah Lindsey

Dr. Margaret Zimmerman (Pharm) Postdoctoral Fellow, published a first-authored manuscript. Please see the Publications Section on Page 6.

Dillion Hutson (CMB) (1) was awarded an ASPET Summer Undergraduate Research Fellowship, and (2) was interviewed by PharmTalk - A Blog for Young Scientists (ASPET), posted on 11/14/16, <https://www.aspet.org/Blog.aspx?id=9004&blogid=400>

Hallie Spooner (CMB) (1) received the Newcomb-Tulane College Dean's Award; and (2) a Tulane University Summer Research Fellowship in Neuroscience.

Jen Duong (Pharm), **Margaret Zimmerman** (Pharm), and **Dr. Lindsey** co-authored a poster, "Aging Decreases Vascular GPER Expression and Function," presented by Dr. Lindsey at the AHA Council on Hypertension, 9/15/16, Orlando, FL.

Laboratory of Dr. Ricardo Mostany

Drew Davidson (CMB) (1) presented a poster, "Long-term, in vivo imaging of dendritic spine dynamics of layer V pyramidal neurons in the young and aged primary motor cortex," Tulane Health Sciences Research Days (THSRD), 4/6/16, and (2) gave a seminar to Downtown Uptown Neuroscience Krewe (D.U.N.K.), "Aging-related changes in structural plasticity of layer 5 neurons of primary motor cortex," 9/2016.

Marissa Heffler (BI/NU) received a \$905 grant from Newcomb College to build an optogenetic stimulator for the study of synaptic plasticity in the aged brain, 3/17/16.

Kathy Le (BI/NU) (1) received a Tulane Summer Undergraduate Research Program in Neuroscience (TURN) Award, April 2016, and gave a TURN poster: "Age-related changes to inhibitory synaptic inputs onto pyramidal neuron subtypes in the primary somatosensory cortex," August, 2016, and (2) received a Dean's Grant from

the Newcomb-Tulane College to attend Neuroscience 2016, San Diego, CA, Sept. 2016.

Dr. Ion R. Popescu (Pharm) a Postdoctoral Fellow, (1) presented a poster, "Age-related excitation-inhibition imbalance of synaptic inputs in the primary somatosensory cortex," THSRD, 4/6/16, (2) gave a presentation, "Synaptic transmission in the aging somatosensory cortex," March 2016; (3) received a Travel Grant from the Office of Graduate and Postdoctoral Studies (OGPS) for Neuroscience 2016 to present a poster, "Hyperpolarized resting membrane potential of fast spiking neurons: a putative cause of decreased activity-dependent IPSCs in pyramidal neurons of the barrel cortex of aged mice," San Diego, CA, 11/12-16/2016; and (4) gave a D.U.N.K. presentation, "Synaptic transmission in the aging somatosensory cortex, March, 2016; and (5) a Pharmacology in Progress (PiP) presentation, "The effect of synaptic activity on the stability of dendritic spines in the aged cortex," Tulane, 8/29/16.

Rebecca Voglewede (BI/NG) (1) has a first authored manuscript. Please see Publications Section on Page 6. She (2) presented two posters: Cold Spring Harbor Laboratory Neuronal Circuits meeting, NY "Age-dependent differences in dendritic spine dynamics within the primary somatosensory cortical barrel field following sensory manipulation," 04/07/16; and Society for Neuroscience 2016, "Age-dependent alterations in dendritic spine dynamics in the somatosensory cortex following whisker stimulation," San Diego, CA, 11/12-16/2016 for which she received a Travel Award from Tulane OGPS and a Tulane School of Science and Engineering Dean's Travel Award; (3) gave four seminars: D.U.N.K. (3/18/16), LSU Cell Biology & Anatomy (3/23/16, 9/14/16), and Pharmacology PiP (3/30/16); (4) invited to serve on the NOLA Brain Awareness Week, "Careers in Neuroscience" panel by the Tulane University Neuroscience Association, 3/16/16; (5) served as the Tulane graduate student representative for the Greater New Orleans Society for Neuroscience, 4/16/16; (6) received a travel grant and a grant to cover living accommodations to attend the Summer Workshop on the Dynamic Brain and present "Extracting preferred spatial frequency and orientation from Ca²⁺ imaging responses to natural scenes in the visual cortex," 9/3/16; received "Best Collaboration" Award for Team Final Project Presentation.

Kaeli Vandemark (BI/NU) (1) received a Newcomb College Institute Research Grant of \$2,500 to study the changes in volume and morphology of dendritic spines associated with learning in young and aged mice, 4/6/16, (2) received a TURN Award, April 2016, and gave a TURN poster presentation, "Age-Related Changes in Dendritic Spine Volume and Morphology After Sensory Stimulation in the Primary Somatosensory Cortex," August, 2016.

Annie Dewitt (BI/NU) gave a poster, "Age-dependent differences in dendritic spine dynamics within the somatosensory cortical barrel field following sensory manipulation," THSRD, 4/6/16.

Michael Langhardt (BI/NP) participated in (1) LatiNOLA STE(+A)M: Mock Interviews and Career Fair (4/2016), and Career Round Table, both organized by Puentes New Orleans (6/2016); with (2) Brain Awareness Week, sponsored by The Greater New Orleans Chapter of the Society for Neuroscience (4/16/16), and (3) the Bayou Regional Robotics Championship, (3/19/16).

Master's Graduate Spotlight: Letter from Nick Hahn



Dr. Katakam and Pharmacology,

Medical school has been stressful and exciting all at the same time. I have to say the Masters Program in the Pharmacology Department really helped me to have a competitive edge and to be better prepared for medical school. I recently took my first big exam and I did really well. I just recently talked to another student from the Pharm program and he just finished one of the big anatomy exams at Tulane and he also did very well. I hope everything is going well in the Pharmacology Department and the new masters class. Now that school has started and I have finished my first exam I just wanted to say that I am very grateful for all the people that have helped me along the way to get where I am.

Sincerely,

Nick Hahn, Tulane School of Medicine, Class of 2020

Master's in Pharmacology Class of 2017



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

This is an endowed pool of resources to support students in the Department of Pharmacology. To read the biography of Dr. Krishna please go to:

<http://www2.tulane.edu/som/departments/pharmacology/agrawalfund.cfm>

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

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mmckeown@tulane.edu

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

In Memoriam: Dr. James W. Fisher

Dr. James W. Fisher, former Regents Professor and Chairman of Pharmacology at Tulane University School of Medicine from 1968 to 1996, passed away on May 1, 2016 after a short illness. In recognition of his scientific accomplishments, Dr. Barbara Beckman established the James W. Fisher Distinguished Lectureship in Pharmacology in 1991. Dr. Fisher was the first to show that the kidney is the primary source of erythropoietin. Erythropoietin is now widely used to treat the anemia which often follows cancer chemotherapy, AZT treatment in AIDS patients, dialysis in patients with end-stage renal disease, and many other conditions.

Publications

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