



August Department Newsletter



Switzer, Alexa L.



Department Newsletter: August 2024

Awards & Accomplishments

CONGRATULATIONS!

MAYDAY FUND ANNOUNCES 2024-2025 RECIPIENTS OF
THE MAYDAY PAIN AND SOCIETY FELLOWSHIP



Dr. Raj Khanna

Congrats to Dr. Khanna for his recent selection into this prestigious fellowship program that is very highly competitive.

CONGRATULATIONS!

Congratulations to several of our doctoral students for being appointed as Fellows to the Training Program in Chemosensory Sciences T32.



Zach Markovich



Amelia Bunnell



Maria Ramirez

Stem Cell Reports Best of 2023-2024

Congratulations to the Russ Lab for receiving this recognition from the International Stem Cell Community for their paper titled, "Generation of functional thymic organoids from human pluripotent stem cells."

Top Updates from the Department

We are thrilled that you have joined us on this exciting new journey for you. Your unique perspectives and passion will undoubtedly enrich our scientific community. We are committed to supporting your growth and success, and we encourage you to embrace every opportunity to learn, collaborate, and question. Welcome to the department of Pharmacology!

- Jeff & Gemma

Hi, I'm Melissa Watson. I've spent most of my life in Florida and am a huge Gator fan—actually, I'm a die-hard sports fan. I love the fall for its weather and football season. I have two sons: one has graduated, and the other is a senior this year. We also have a rescue dog named Pete. I've worked at UF for 18.5 years, all of it in the Pediatrics department. A lot of my time goes into driving my son to his football, basketball games. When I'm not shuttling him to tournaments or games on weekends, you can usually find me at home enjoying a good football game or working in my garden. I love spending quality time with my family, whether it's at the beach or in Kentucky.

I am very excited to start this next chapter of my career in the Dept of Pharmacology. I am even more excited about getting to know the trainees and working with them. If any trainees ever need academic coordination or just want to talk sports, my door is always open R5-250.

Newly Awarded Grants

Dr. Aline Oliveira

- Sponsor: NIH R00
"Neuroimmune axis contribution to the pathophysiology of pulmonary hypertension"

Dr. David Hammers

- Sponsor: DoD – US Army Medical Research Acquisition
"MRI/MRS Markers of Skeletal Muscle Disease Progression and Vascular Function in Non-Ambulatory Individuals with DMD"

Dr. Heather Allen

- Sponsor: NIH NINDS F32
"Neuropeptide Y1 Receptor-Expressing Neurons in the Lateral Parabrachial Nucleus in Neuropathic Pain"

Dr. Rajesh Khanna

- Sponsor: NIH NINDS R01
"Genetic and Pharmacological Validation of CRMP2 Phosphorylation as a Novel therapeutic Target for Neuropathic Pain"
- Sponsor: NIH NINDS R61
"Antagonists of CRMP2 Phosphorylation for Chemotherapy-Induced Peripheral Neuropathy"

Dr. Tyler Nelson

- Sponsor: American Neuromuscular Foundation
"Analysis of a Novel Primary Periodic Paralysis SCN4A Mutation with Pain as a Major Phenotype"

Dr. Yan Bowen

- Sponsor: Ocala Royal Dames For Cancer Research
"Developing Innovative Therapeutic Strategies to Overcome Chemotherapy Resistance in Elderly Acute Myeloid Leukemia Patient"

Recent Publications

From the Moehle Lab:

"Neuron specific quantitation of $G\alpha_{olf}$ expression and signaling in murine brain tissue"

Millett M, Heuberger A, Martin Castosa E, Comite A, Wagner P, Hall D, Gallardo I, Chambers NE, Wagner L, Reinhardt J, Moehle MS
Brain Res

"Anticholinergic drugs for parkinsonism and other movement disorders"

LeWitt PA, Hong L, Moehle MS
Journal of Neural Transmission

From the Casadesus Lab:

"Neuroprotective effects of G9a inhibition through modulation of peroxisome-proliferator activator receptor gamma-dependent pathways by miR-128"

Bellver-Sanchis A, Ávila-López PA, Tic I, Valle-García D, Ribalta-Vilella M, Labrador L, Banerjee DR, Guerrero A, Casadesus G, Poulard C, Pallàs M, Griñán-Ferré C
Neural Regen Res

"Therapeutic benefits of central LH receptor agonism in the APP/PS1 AD model involve trophic and immune regulation and are reproductive status dependent"

Mey M, Bhatta S, Suresh S, Labrador LM, Piontkivska H, Casadesus G
Biochimica et Biophysica Acta

From the Urs Lab:

"Enhanced cognitive flexibility and phasic striatal dopamine dynamics in a mouse model of low striatal tonic dopamine"

Delaney J, Nathani S, Tan V, Chavez C, Orr A, Paek J, Faraji M, Setlow B, Urs NM
Neuropsychopharmacology

From the Hammers & Sweeney Lab:

"Spatiotemporal transcriptomic mapping of regenerative inflammation in skeletal muscle reveals a dynamic multilayered tissue architecture"

Patsalos A, Halasz L, Oleksak D, Wei X, Nagy G, Tzerpos P, Conrad T, Hammers DW, Sweeney HL, Nagy L
Journal of Clinical Investigation

"Myospreader improves gene editing in skeletal muscle by myonuclear propagation"

Poukalov KK, Valero MC, Muscato DR, Adams LM, Chun H, Lee YI, Andrade NS, Zeier Z, Sweeney HL, Wang ET

From the Harrison Lab:

"Systemically targeting monocytic myloid-derived suppressor cells using dendrimers and their cell-level biodistribution kinetics"

Littrell CA, Takacs GP, Sankara CS, Sherman A, Rubach KA, Garcia JS, Bell CA, Lnu T, Harrison JK, Zhang F

Journal of Controlled Release

"KR158 Spheres Harboring Slow-Cycling Cells Recapitulate High-Grade Glioma Features in an Immunocompetent System"

Chakraborty A, Yang C, Kresak JL, Silver AJ, Feier D, Tian G, Andrews M, Sobanjo OO, Hodge ED, Engelbart MK, Huang J, Harrison JK, Sarkisian MR, Mitchell DA, Deleyrolle LP

Cells

From the Guryanova Lab:

"Overcoming ABCB1 mediated multidrug resistance in castration resistant prostate cancer"

Ishov A, Sarwar S, Morozov V, Newcomb M, Guryanova O

Research Square

From the Russ Lab:

"Cryopreservation of stem cell-derived beta-like cells enriches for insulin-producing cells with improved function"

Barra JM, Kratz AT, Castro-Gutierrez R, Proia J, Bhardwaj G, Phelps E, Russ HA

Diabetes

From the Chapman Lab:

"Bis-sulfonamido-2-phenylbenzoxazoles Validate the GroES/EL Chaperone System as a Viable Antibiotic Target"

Godek J, Sivinski J, Watson ER, Lebario F, Xu W, Stevens M, Zerio CJ, Ambrose AJ, Zhu X, Trindl CA, Zhang DD, Johnson SM, Lander GC, Chapman E

Journal of the American Chemical Society

From the R. Khanna Lab:

"Small molecule targeting Nav1.7 via inhibition of CRMP2-Ubc9 interaction reduces pain-related outcomes in a rodent osteoarthritic model"

Hestehave S, Allen HN, Gomez K, Duran P, Calderon-Rivera A, Loya-López S, Rodríguez-Palma EJ, Khanna R

Pain

"Peptide and Peptidomimetic Inhibitors Targeting the Interaction of Collapsin Response Mediator Protein 2 with the N-Type Calcium Channel for Pain Relief"

Perez-Miller S, Gomez K, Khanna R

ACS Pharmacology & Translational Science

"Regulating neuronal excitability: The role of S-palmitoylation in Na_v1.7 activity and voltage sensitivity"

Tang C, Duran P, Calderon-Rivera A, Loya-Lopez S, Gomez K, Perez-Miller S, Khanna R

PNAS Nexus

New Additions to the Department

Upcoming Events

A note from the University:

Welcome to the new semester! As we begin, be aware that social engineering attacks, including sophisticated deepfake phishing scams, are on the rise. Cybercriminals use AI to impersonate trusted figures, potentially deceiving you into sharing sensitive information or funds. For example, a scammer might use deepfake technology to mimic a familiar voice and trick you into divulging confidential details.

Given our access to critical data, it's crucial to stay informed and vigilant. Please complete the updated "[Protecting UF: Information Security Awareness](#)" training. You can learn more about deepfakes by visiting UFIT's webpage [here](#). UFIT also has two [YouTube playlists](#) dedicated to faculty and staff IT services.

Have a fantastic Fall semester, and GO GATORS!

Have news to be featured?

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