

Pharmacology & Toxicology

Vol. 8, Issue 1

Winter 2022 Newsletter



Boonshoft
School of Medicine
WRIGHT STATE UNIVERSITY

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CHAIR'S CORNER



Dr. Jeffrey B. Travers

The Department of Pharmacology has a newsletter designed to keep our alumni, the Boonshoft School of Medicine, and Wright State University apprised of the happenings in the department. The newsletter will be issued three times per year and can be found on the departmental website: <http://medicine.wright.edu/pharmacology-and-toxicology>

Each issue will contain a "Spotlight" section that highlights a faculty colleague or a program. For this issue, we will be highlighting the recent external review completed in correlation with our Master's program 20th anniversary. To get on the Departmental Mailing list to receive an electronic version, or to provide suggestions as to content, please contact Ms. Catherine Winslow at Catherine.winslow@wright.edu.

DEPARTMENT UPDATES

External Review of Master's Program Completed

We are pleased to announce that the numbers of students in the Department has topped over 100! The faculty have been taking on extra teaching to address these historic numbers of students. The Department underwent a self-initiated and self-funded external review of the MS programs in November-December, 2021. Consultant, Dr. Beth Sorensen, and our Vice Chair, Dr. Terry Oroszi, led the process. Three external reviewers were chosen to represent three important areas of expertise needed to provide guidance to the Department. Jed Shumsky, PhD, Senior Associate Dean for Educational and Academic Affairs, Drexel University, was chosen to primarily provide guidance as to programmatic issues. Scientist Pranavkumar Shivakumar, PhD, Associate Professor of Pediatrics, Cincinnati Children's Hospital, was recruited to primarily provide guidance as to our educational program in the context of training capable scientists. Of note, Dr. Shivakumar and colleagues have considerable experience in hiring our program's alumni. To evaluate the merits of the proposed Healthcare and Homeland Security (HHS) degree, noted expert Mark Jarrett, MBA, MS, MD, Senior Health Advisor, Northwell Health, Professor of Medicine Hofstra University, and Vice Chair, US Healthcare and Public Health Sector Coordinating Council, was chosen. The external reviewers found the PTOX education programs to be highly successful. Suggestions, to include improvements were provided, and in great part stressed the need for more faculty. The group was highly positive about starting a new HHS degree. Overall, the MS program is thriving!

Dr. Rohan garners top Dayton dermatologist honors

It is with great excitement that we announce that Dr. Craig Rohan, a dermatologist-investigator in the Department, has been chosen by Dayton Magazine as "Dayton's Best Docs" in the field of dermatology. Please see link for details: <https://www.thedaytonmagazine.com/dayton-best-docs-2022/>



Look for more information about Dr. Rohan in this issue's Spotlight Section!

DEPARTMENT UPDATES (continued)



Dr. Yong-jie Xu

Dr. Xu obtains NIH R35 grant October 15th

We are pleased to announce that Yong-jie Xu MD, PhD, has been awarded a new National Institutes of Health R35 grant. The goal of the Maximizing Investigators' Research Award (MIRA). The goal of this special five year grant is to increase the efficacy of funding by providing investigators with greater stability and flexibility.

These awards are highly prized and are geared towards outstanding investigators. Dr. Xu meets this criteria well as he is a world-renowned specialist in yeast DNA repair mechanisms. Dr. Xu might be the first WSU investigator to receive such an award.

Congrats on maximizing your funding through this award!

Dr. Terry Oroszi adds acting to her many talents

Dr. Terry Oroszi recently starred in the movie, *Opportunity Cost*, written and directed by award-winning Orion Moore.



Dr. Oroszi played a chair of an economics department in this new movie.

Sounds like she might also need a bigger office to make room for her future Oscar...



New Studies Begin in the Pharmacology Translational Unit

One of the goals of the Department is to foster translational studies to facilitate the process where discoveries at the laboratory bench can be brought to the clinic. Moreover, the Pharmacology Translational Unit (PTU) located in the Wright State Physicians Building next to our campus is set up to conduct both translational research studies as well as pharmaceutical clinical trials. Regarding the latter, the PTU is currently conducting almost a dozen pharma-sponsored studies. These include testing a Phosphodiesterase-4 inhibitor in children with psoriasis, and two new studies testing novel agents for the challenging skin diseases prurigo nodularis and hidradenitis. We also have a novel study testing if high doses of oral vitamin D can treat psoriasis. In addition to these studies, we are particularly looking for healthy adults 18-45 years of age interested in some of our translational studies. If questions or for more details, please contact Dr. Travers or Christina Knisely, PTU Regulatory Specialist, at 937-245-7500.

KUDOS

Dr. Courtney Sulentic, who organized a Workshop Session, "Communicating Science in an Age of Misinformation" for the Annual Society of Toxicology for their national meeting in March, 2022.

Dr. Jeffrey Travers, who "celebrated" his 60th Birthday with a gala that included a Roast. Not only did he survive the ordeal, but over \$5000 was raised for the Department's 20th Anniversary Student Scholarship, and approximately \$3000 more was raised for Big Brothers Big Sisters of Miami Valley. [See link below for more details regarding BBBS: Three Generations of Bigs & Littles - Big Brothers Big Sisters - Miami Valley \(bbbsmiamivalley.org\)](https://www.bbbsmiamivalley.org)

Dr. Michael Kemp, who recently moved into new lab space on the first floor of BioSci II building. He recently served on the NIH Cancer Prevention Study Section in February, 2022.

Dr. Alex Carpenter, post-doctoral researcher in the Kemp Lab, recently was awarded a \$25,000 grant from Mary Kay Foundation to pursue her studies on UV damage.

More space for the Kemp Lab's big ideas and big accomplishments!



Former MS student, **Avinash Mahajan**, who was just accepted into the PhD program at the University of Connecticut.



Dr. Courtney Sulentic



Dr. Jeffrey Travers



Dr. Mike Kemp

SPOTLIGHT

Each issue of the Departmental Newsletter will “spotlight” an individual faculty or program in the Department. For this issue, we are taking the opportunity to our newest faculty, Craig A. Rohan MD, Assistant Professor of Pharmacology & Toxicology.



Though born outside of Chicago, Dr. Craig Rohan calls Colorado his home state. At age 2, his family moved to the small town of Rye. His father was a realtor and a car salesman; his mother a journalist who did free lancing with some of her articles published in the Washington Post. Dr. Rohan, with his older sister Cari, moved several times in Colorado ending up in Colorado Springs where he graduated from high school. Dr. Rohan had a strong interest in teaching, serving as a tutor when he was in junior high. He also volunteered at the local hospital as a high school student, cementing his plans to pursue medicine as a career. After graduating in 1997 with a BS in Biomedical & Chemical Engineering from the University of Southern California, he looked into either MD-PhD programs to match his interest in science, or MD programs through the Air Force. He chose the latter, and did his training at the University of Colorado School of Medicine, graduating with his MD in 2001. Dr. Rohan chose pediatrics as a field as he enjoyed and found highly impactful working with children as an Air Force physician. He did his pediatrics residency at UC Davis and worked at Oakland Childrens Medical Center. Dr. Rohan served as a general pediatrician in the Air Force in Colorado from 2004-2009, when he decided to pursue a second residency as a dermatologist.

He returned to USC, and after dermatology residency was transferred to Wright Patterson Air Force Base in 2011. This seemed to work perfectly for he and his wife, Joyce Rohan PhD, a neuroscientist who works as a scientist with her own laboratory at the base. Dr. Craig Rohan started attending the Wright State Dermatology monthly grand rounds, and soon, Dermatology Chair Dr. Julian Trevino wisely asked him to work part-time at the Dayton VA Medical Center supervising resident clinics. A skilled clinician and superb teacher, Dr. Rohan has been awarded the Dermatology Department's Top Teaching Award a record three times!

In 2019, Dr. Rohan agreed to work part-time in the Pharmacology & Toxicology Department assisting in pharma trials and investigator-initiated studies in the PTU. When he retired from the Air Force in 2021 after almost 25 years of service, Dr. Rohan joined the Department full-time with a secondary appointment in Dermatology. He is simply flourishing in his new position—currently is PI on multiple clinical trials as well as co-Investigator on an NIH R01 grant, teaching MD-MS students and publishing manuscripts at a strong clip also (~10 in past two years).

Dr. Craig Rohan is excited about his new job —“I have an amazing amount of diversity; doing research, interacting with PhD scientists, seeing patients, both formal and informal didactics—its everything I like doing”. When not following his work passions, Dr. Rohan enjoys spending time with wife of 22 years Dr. Joyce Rohan, and sons Carson (18) and Matthew (16). He also is passionate about bicycling, and enjoys the trails in the Dayton Metro area. In fact, he often bikes to work from his home in Oakwood. Dr. Rohan also enjoys gardening, reading, and watching NHL hockey.

When asked about his role models, he listed his father, who was also an Air Force veteran, who had an amazing work ethic but still found time for everything else in life. Additionally, a role model of his is Dr. David Peng, the Program Director at USC Dermatology, who is now Chair there—“Dr. Peng combined top-notch research, patient care and was a brilliant teacher and mentor.”

We are the ones who are quite fortunate to have Dr. Craig Rohan in our midst and are pleased to spotlight him and his accomplishments, and are expecting a bright future for our newest faculty colleague.

- Dr. Jeffrey Travers
Editor-in-Chief

2021 Departmental Publications

Last year was simply an amazing one for our faculty regarding publications. Please see a list of some of the manuscripts from faculty in the Department. **Bolded**-faculty; **Red**-MS students.

Liu L, **Awoyemi AA**, **Fahy KE**, **Thapa P**, Borchers C, Wu BY, **McGlone CL**, **Schmeusser B**, **Sattouf Z**, **Rohan CA**, Williams AR, Cates EE, Knisely C, Kelly LE, **Bihl JC**, **Cool DR**, **Sahu RP**, **Wang J**, **Chen Y**, Rapp CM, **Kemp MG**, Johnson RM, **Travers JB**. Keratinocyte-derived microvesicle particles mediate ultraviolet B radiation-induced systemic immunosuppression. *J Clin Invest*. 2021 May 17;131(10):e144963. doi: 10.1172/JCI144963. PMID: 33830943; PMCID: PMC8121517.

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