

## JULY-AUGUST 2018 - Robert Wood Johnson Medical School Research Report

- **Shawna Hudson, PhD** (Professor of Family Medicine and Community Health at the Robert Wood Johnson Medical School), together with contact PI **Cristine D Delnevo, PhD, MPH** (Professor of Social and Behavioral Health Sciences, School of Public Health) received a 5-year R01 grant from the National Institutes of Health to study “Adoption diffusion, and implementation of Tobacco 21 policies to address health disparities” (\$3,157,179). The grant received a 1<sup>st</sup> percentile ranking on first submission.
- **Hatem Sabaawy MD, PhD** (Associate Professor of Medicine at the Robert Wood Johnson Medical School and the Cancer Institute of New Jersey) received a 5-year R01 grant from the National Institutes of Health to study “Mechanisms of targeting cellular self-renewal in glioblastoma” (\$2,362,180)
- **John Langenfeld, MD** (Associate Professor of Surgery at the Robert Wood Johnson Medical School) was awarded a 5-year R01 grant from the National Institutes of Health for “Developing bone morphogenic receptor II inhibitors for the treatment of cancer” (\$1,818,565)
- **Zhaohui Feng, MD, PhD** (Associate Professor of Radiation Oncology at the Robert Wood Johnson Medical School and the Cancer Institute of New Jersey) was awarded a second 5-year R01 grant from the National Institutes of Health this year, to study “SEN6, a novel p53 negative regulator, is an important new player in cancer” (\$1,818,565).
- **Andrew Zloza MD, PhD** (Assistant Professor of Surgery at the Robert Wood Johnson Medical School and the Cancer Institute of New Jersey) was awarded a 5-year multi-PI R01 grant from the National Institutes of Health, together with **Ahmed Lasfar, PhD** (Assistant Professor of Pharmacology and Toxicology at the Ernest Mario School of Pharmacy), to investigate “Role of IFN-Lambda in promoting breast cancer metastasis” (\$1,818,565)
- **Peter Yurchenco, PhD** (Professor of Pathology and Laboratory Medicine at the Robert Wood Johnson Medical School) received a 5-year competitive renewal R01 grant from the National Institutes of Health to investigate “Basement membrane self-assembly and structure” (\$1,788,750). With this new grant, Dr. Yurchenco becomes the only PI at RBHS and at Rutgers to currently have an active NIH grant awarded for 38 consecutive years in duration.
- **Cheryl Dreyfus, PhD** (Professor and Chair of Neuroscience and Cell Biology at the Robert Wood Johnson Medical School), together with contact PI **Terri Wood, PhD** (Professor of Pharmacology, Physiology & Neuroscience and Rena Warshow Endowed Chair in Multiple Sclerosis at the New Jersey Medical School) were awarded a 3-year grant from the National Multiple Sclerosis Society to study “Cooperative functions of mTOR and TrkB/Erk signaling in remyelination. (\$788,614)
- **Michael Matise PhD** (Associate Professor of Neuroscience and Cell Biology at the Robert Wood Johnson Medical School) is recipient of a 3-year grant from the National Multiple Sclerosis Society to study “Role of Shh-responsive astrocytes in blood-brain barrier integrity” (\$523,634)
- **Nancy Woychik, PhD** (Professor of Biochemistry and Molecular Biology at the Robert Wood Johnson Medical School) is recipient of a 2-year R21 grant from the National Institutes of Health

for “Genome-scale tracking of Mycobacterium tuberculosis VAPC toxins” (\$469,528)

- **Nancy Woychik, PhD** (Professor of Biochemistry and Molecular Biology at the Robert Wood Johnson Medical School) also received another 2-year R21 grant from the National Institutes of Health to study “Molecular triggers of persistent Mycobacterium abscessus infections” (\$437,250).

- **Zhiping Pang, MD** (Assistant Professor of Neuroscience and Cell Biology at the Robert Wood Johnson Medical School and the Child Health Institute of New Jersey), together with contact PI **Prabhas V Moghe, PhD** (Distinguished Professor of Biomedical Engineering in the School of Engineering and Vice Chancellor of Research & Innovation), received a 2-year multi-PI R21 grant from the National Institutes of Health to study “Microglial-targeted nanotherapeutics for inhibition of alpha-synuclein aggregation and inflammation in neurodegenerative diseases” (\$434,898)

- **Zhiping Pang, MD** (Assistant Professor of Neuroscience and Cell Biology at the Robert Wood Johnson Medical School and the Child Health Institute of New Jersey), together with contact PI **Prabhas V Moghe, PhD** (Distinguished Professor of Biomedical Engineering in the School of Engineering and Vice Chancellor of Research & Innovation), **Jean S. Baum, PhD** (Distinguished Professor of Chemistry in the School of Arts and Sciences) and **Kathryn E Uhrich, PhD** (University of California, Riverside), received a 3-year grant from the National Science Foundation for “Collaborative research: How to foil synuclein aggregation? Nanotechnology for inhibition of neurodegenerative brain plaques” (\$429,511)

- **Shengkan (Victor) Jin, PhD** (Associate Professor of Pharmacology at the Robert Wood Johnson Medical School) is the recipient of a 2-year R21 grant from the National Institutes of Health for “Prevention and treatment of ALD by inducing hepatic mitochondrial uncoupling” (\$427,850)

- **Federico Sesti, PhD** (Professor of Neuroscience and Cell Biology at the Robert Wood Johnson Medical School) received a grant from the National Science Foundation for “PFI-TT: development of a C. elegans-based technology to enhance the drug discovery process and to predict preclinical efficiency” (\$200,000)

- **Shengkan (Victor) Jin, PhD** (Associate Professor of Pharmacology at the Robert Wood Johnson Medical School) received a 1-year award from Rutgers TechAdvance for “A Novel Base Editing Technology for Treatment of Genetic Diseases: Proof-of-Concept in Cellular Models of Cystic Fibrosis, Gaucher's Disease, and Duchenne Muscular Dystrophy” (\$100,000)

- **Daniel Herranz Benito, PhD** (Assistant Professor of Pharmacology at the Robert Wood Johnson Medical School and the Cancer Institute of New Jersey) received a 1-year new investigator grant from the Leukemia Research Foundation for “Dissecting the role of PKM2 in NOTCH1-induced T-ALL” (\$100,000)

- **Unnati Chauhan, PhD** candidate in the laboratory of **Nancy Woychik, PhD** (Professor of Biochemistry and Molecular Biology at the Robert Wood Johnson Medical School) was awarded a 1-year predoctoral fellowship grant from the New Jersey Commission on Cancer Research (\$50,000)

### **Other noteworthy news**

**Alexey Ryazanow, PhD** (Professor of Pharmacology at the Robert Wood Johnson Medical School) is co-author of a publication in the Journal of Neurochemistry that was selected for the cover and editorial highlight. The results suggest that functional interaction between the signaling pathways controlling different phases of the mRNA translation process is necessary for long-term plasticity in the hippocampus.

Zimmerman HR, Yang W, Beckelman BC, Kasica NP, Zhou X, Galli L, Ryazanov AG and Ma T. (2018) Genetic removal of eIF2a kinase PERK in mice enables hippocampal L-LTP independent of mTORC1 activity. *J. Neurochem* 146: 133-144.