Icahn School of Medicine at Mount Sinai

Department of Pharmacological Sciences

2022 YEAR IN REVIEW

YR YEAR IN REVIEW 2022

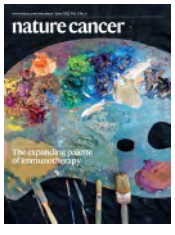
MESSAGE FROM THE CHAIR

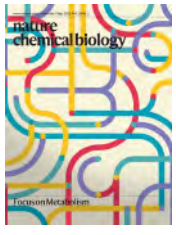
MING-MING ZHOU, PhD
Dr. Harold and Golden Lamport Professor & Chairman

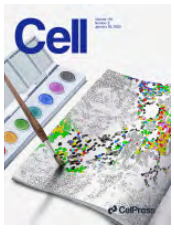
On behalf of the Department of Pharmacological Sciences (DPS), I wish you the very best for a healthy and prosperous 2023! 2022 was a very productive year for us. Because of your hard work and dedications, 2022 was another record year for our research and training programs with $25.2 million grant funding from the National Institutes of Health, an 8% increase over 2021. Our students, postdocs, scientists, and faculty made ground-breaking discoveries, published in the most impactful journals, and received noteworthy recognition by peers in the respective fields. We are constantly improving *"Diversity & Inclusion"* in the Department. We have also invested heavily in the strategic research areas through new faculty recruitments that bring new technologies to Mount Sinai including mass spectrometry, nanobody technology, and cryogenic electron microscopy (cryo-EM). For 2023, we continue new faculty recruitment in chemical biology and drug discovery, and invest in career development of students, postdocs, and junior faculty, as people are the most important asset of our research enterprise. I would also like to welcome all our new members who have joined the DPS family in 2022 and look forward to having you aboard in our journey of scientific discovery and innovation.

RESEARCH HIGHLIGHT

The DPS research labs with collective efforts of our students, postdocs and faculty have been making ground-breaking discoveries of mechanisms of biology and human diseases and are developing new chemical probes and therapeutic drug molecules for better disease treatment and prevention. These studies include structure-function of proteins/enzymes in DNA synthesis and repair and SARS-CoV-2 virus life cycle, novel chemical modulators and nanobodies for cellular processes, and new mechanistic insights into cancers, inflammation and Alzheimer's disease, just a few examples. These studies were made possible with robust grant funding from federal agencies, foundations and industry. Please see our **Publications** and **Grants** lists for 2022.







HONORS AND AWARDS

LAKSHMI DEVI, PhD
Professor

MARTA FILIZOLA, PhD
Professor

JIAN JIN, PhD
Professor

ZAIDI MONE, MD, PhD, MACP
Professor

The extraordinary academic accomplishments of our students, postdocs and faculty are highlighted by notable honors and awards they have received from the peers in respective fields. Among them, we are particularly pleased and honored to announce that Drs. Lakshmi Devi and Marta Filizola were awarded with the Jacobi Medallion, one of the highest honors that the Mount Sinai Health System bestows upon current or former colleagues, and that Drs. Jian Jin and Mone Zaidi have been elected to the National Academy of Inventors (NAI), and Dr. Ming-Ming Zhou was inducted as the NAI fellow in 2022. Additionally, Dr. Mone Zaidi was endowed as Mount Sinai Professor of Clinical Medicine and received the Austrian International Research Prize and the Special Recognition Award from the Alliance of Academic Internal Medicine (AAIM), as well as elected as an Honorary Fellow of the prestigious British Pharmacological Society. Please join us in congratulating our esteemed awardees on the recognition of their exceptional achievements that honor all of us in this Department.

NEW INVESTIGATORS

JINYE DAI, PhD
Assistant Professor

LAHOUARIA HADRI, PhD
Assistant Professor

YI SHI, PhD
Associate Professor

PENG YUAN, PhD
Professor

The Department of Pharmacological Sciences is pleased to welcome four new faculty members who have joined the DPS in 2022. All four new faculty members are establishing and developing their cutting-edge research programs at the forefront of their research fields. Specifically, Dr. Jinye Dai is investigating the basic molecular mechanisms of brain synaptic functions and neuropsychiatric disorders, Dr. Lahouria Hadri is elucidating cellular, molecular and epigenetic mechanisms in cardiovascular and lung diseases and pursuing drug discovery, Dr. Yi Shi's research focus is centered on developing new methods of mass spectrometry and apply them to protein engineering and nanobody drug discovery for SARS-CoV-2 and beyond, and Dr. Peng Yuan is studying structural and molecular mechanisms of ion channels and transporters in human physiology and diseases using cryo-EM biophysical technology. Please visit their research lab websites for further information.

EXTERNAL PAGES

Please visit our other pages for additional notable information from our department, click on the links below!

PUBLICATIONS | GRANTS | MEMBERS | PRESENTATIONS, SERVICES, HONORS & AWARDS | DPS TWITTER | DPS WEBSITE