

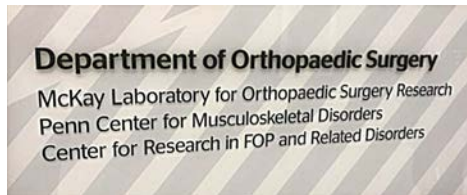


McKay Orthopaedic Research Laboratory

Robert L. Mauck, PhD and Louis J. Soslowsky, PhD



The McKay Orthopaedic Research Laboratory of the Department of Orthopaedic Surgery in the Perelman School of Medicine continues to explore important problems in musculoskeletal research. The research facility, including labs and offices, occupies over 22,000 sq. ft. of newly renovated space on the 3rd Floor of Stemmler Hall. There are more than 120 full- and part-time staff and trainees now in the labs. McKay is an active, thriving research and educational community committed to advancing basic and translational musculoskeletal research.



The McKay labs have recently completed a transformation both in terms of physical space and faculty. Our home, Stemmler Hall, underwent a > \$120 million dollar renovation, completed in 2019, which resulted in a fully modernized facility in which to grow our laboratory space, faculty, and research and training endeavors. We were also excited this year to recruit Dr. Su Chin Heo as our newest Assistant Professor, who is developing a program in musculoskeletal mechanobiology and tissue engineering supported by a K01 Award from the NIH. Finally, we have just completed an exhaustive search to recruit a senior scientist as the inaugural holder of our new endowed Professorship in Orthopaedic Surgery. We are delighted to announce that Dr. Ernestina Schipani, MD, PhD, will be joining us in the fall of 2020 as the WW Smith Professor of Orthopaedic Surgery! Welcome to McKay, Stina!

In addition to these exciting developments in our faculty, the lab continues to expand its activities and funding. Currently, McKay has an annual research budget from extramural grants, gifts, and endowments of > \$14 million, and continues to rank within the top 5 orthopaedic programs in the country in terms of funding from the National Institutes of Health (NIH), with a 2019 ranking of #3. This past year has seen a very impressive and continued rise in new grants awarded to our faculty. To highlight just a few, Dr. Foteini Mourkioti was awarded two (!) new NIH R01s and a grant from NASA to support her research program. Dr. Joel Boerkel was also awarded two (!) new R01s and was recognized with the Alice L. Jee Young Investigator Award by the Orthopaedic Research Society. In addition to the above-mentioned new grants this year awarded to our junior faculty, each of the McKay Laboratory faculty members remains well-funded through ongoing and newly awarded research grants from federal agencies and industrial sponsors.

Our faculty and trainees also continue to represent the department at major international meetings and via national and international recognitions. Sherry Liu was selected as a spotlight speaker at the 2020 Orthopaedic Research Society Annual Meeting and Ling Qin and Robert Mauck were named a Fellows of International Orthopaedic Research (FIOR) at the International Combined Orthopaedic Research Society Meeting. Dr. Mauck was also named a Research Career Scientist by the Department of Veterans Affairs. Our trainees also won numerous awards and prizes over the last year, including multiple Section Awards and New Investigator Recognition Awards at the 2020 Orthopaedic Research Society Meeting, a Young Investigator Award at the 2019 American Society for Bone and Mineral Research Annual Meeting, and several winners of the PhD and Masters Competitions at the 2019 Summer Bioengineering Conference, to name just a few.

Growing musculoskeletal research in the Department of Orthopaedic Surgery and across the Penn campus has been a primary objective for our program, and this effort has been particularly fruitful in the past year. Last spring marked the 40th year of operation of the McKay labs, and we were excited to celebrate this occasion with ~ 200 of our current members and alumni at the Ortho Alumni Weekend and McKay 40th

Celebration this past May. In the last dozen years alone, we have more than doubled in terms of lab faculty (100% increase), lab personnel (100% increase), lab space (110% increase), and research expenditures (140% increase). With our 40 years of leadership, training, and scientific contributions to musculoskeletal research, we are excited for what the future will bring.

