

UCI to Receive \$40k to Accelerate Exercise Research Findings to Improve Individual and Public Health

Researchers and clinicians associated with the UCI School of Medicine Pediatric Exercise and Genomics Research Center (PERC, <https://www.perc.uci.edu/>) and the UCI Institute for Clinical and Translational Science (ICTS, <https://www.icts.uci.edu/>) have received a \$40K NIH grant to bridge the gap between discovery and clinical practice and application.

PERC is the official and only pediatric center for the most ambitious National Institutes of Health research study ever funded on the **health effects of physical exercise**. The Molecular Transducers of Physical Activity (MoTrPAC) study is nearing completion (<https://commonfund.nih.gov/moleculartransducers>). The study will have recruited approximately 2,300 healthy people (including children, seniors, women, and men in a very representative cohort) from across the U.S. by its completion in 2025.

MoTrPAC consists of the nation's leading basic and clinical scientists and uses state-of-the-art testing to assess the key biological mechanisms of the response to physical activity. In the words of Dr. Francis Collins, former NIH Director, "This research study is the largest targeted NIH investment aimed to understand how physical activity improves health and prevents disease."



Shlomit Radom-Aizik, PhD



Dan M. Cooper, MD

The UCI PERC and ICTS leaders, Drs. Shlomit Radom-Aizik and Dan M. Cooper, are leaders of the MoTrPAC study and are concerned with the unacceptable 17-year time span between research discovery and its application in clinical practice. One reason for roadblocks and chokepoints has been the lack of "meaningful stakeholder partnership" between researchers and frontline clinicians.

The new project will begin to address these gaps by conducting formal, structured interviews with primary care, frontline clinicians and their patients. We will partner with them to outline the most effective ways to

get novel MoTrPAC discoveries to the practicing clinician and to the general public. We will probe which learning modules are most compelling and understandable. We will outline how best to message the new MoTrPAC health benefits of exercise in a way that advances clinical care.

Drs. Radom-Aizik and Cooper believe that this project is key to the success of the large investment by US taxpayers in the MoTrPAC study. As Dr. Cooper noted, "It is our obligation to honor the taxpayers' investment in this project not only to produce cutting edge research, but to ensure that the discoveries are translated to improve individual and public health as rapidly as possible."