



UNDERGRADUATE RESEARCH EXPERIENCES

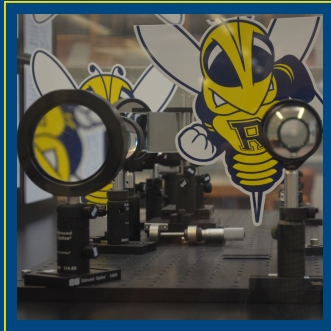
Eligibility varies by program; please visit our website for more information

National Science Foundation Research Experience for Undergraduates (NSF REU)

Applications due February 15, 2018

Advancing Human Health, From Nano to Network

Human health is a compelling application space for undergraduate students, particularly for engineering students who can apply their diverse knowledge, experiences and skills to improve an array of human health concerns. Our REU site, advancing human health, from nano to network, will enable students to not only obtain research experience in one aspect of this space, it will also provide the opportunities for all the REU participants to learn from each other about the multidisciplinary research within this area.



Nano-, Bio-, and Quantum Photonics

Understanding and controlling the most elemental unit of light – the photon – is essential to developing light-based technology as well as evolving critical elements of our nation's defense and security. REU scholars will join the vibrant national community of students, academia and industry actively engaged in all facets of photonics— a community concentrated nowhere in the country as densely and historically as in Rochester, NY. This REU hosted by the Institute of Optics will prioritize members of underrepresented groups, community college students, and students from institutions lacking large STEM research programs.

Computational Methods for Understanding Music, Media, and Minds

How can a computer learn to read an ancient musical score? What can methods from signal processing and natural language analysis tell us about the history of popular music? Can a computer system teach a person to better use prosody (the musical pattern of speech) in order to become a more effective public speaker? REU students will explore an exciting, interdisciplinary research area that combines machine learning, audio engineering, music theory, and cognitive science. Each student will be mentored by two or more faculty members drawn from Computer Science, Electrical and Computer Engineering, Brain and Cognitive Science, the program in Digital Media Studies, and the Eastman School of Music. (<http://www.sas.rochester.edu/dsc/undergraduate/reu.html>)



Contact kearnscollegeprograms@ur.rochester.edu or visit

<https://www.rochester.edu/college/kearnscenter/undergraduate/reu/index.html> for more information