CHEMICAL AND SYSTEMS BIOLOGY


The department emphasizes individualized training at the interface of physical science and biomedical science. The program encourages students to draw upon a variety of modern scientific techniques, ranging from recent advances in molecular biology and protein biochemistry to synthetic organic chemistry and single cell imaging. Graduate students in the department take courses in signal transduction networks, chemical biology, and other areas of importance to their research goals.

Master of Science in Chemical and Systems Biology

Students in the Ph.D. program may apply for an M.S. degree after having satisfactorily completed the course and laboratory requirements of the first two years. The degree also requires a written thesis based on literature or laboratory research. Postdoctoral research training is available to graduates having the Ph.D. or M.D. degree.

Doctor of Philosophy in Chemical and Systems Biology

University requirements for the Ph.D. are described in the "Graduate Degrees" section of this bulletin. Faculty advisers guide students in key areas such as selecting courses, designing and conducting research, developing of teaching pedagogy, navigating policies and degree requirements, and exploring academic opportunities and professional pathways.

Graduate students are active contributors to the advising relationship, proactively seeking academic and professional guidance and taking responsibility for informing themselves of policies and degree requirements for their graduate program.

For a statement of University policy on graduate advising, see the "Graduate Advising" section of this bulletin.

Emeriti: (Professors) Robert H. Dreisbach, Avram Goldstein, Dora B. Goldstein, Stuart Kim, Tag E. Mansour, Oleg Jardetzky, Richard A. Roth, James P. Whitlock

Chair: James K. Chen

Professors: James K. Chen, Karlene A. Cimprich, James E. Ferrell, Jr., Tobias Meyer, Daria Mochly-Rosen, Thomas J. Wandless, Joanna K. Wysocka

Professor (Teaching): Kevin Grimes

Assistant Professors: Joshua Elias, Daniel F. Jarosz, Lei Stanley Qi, Mary Teruel

Courtesy Professors: Philip Beachy, Carolyn Bertozzi, Matthew Bogoy, Beverly S. Mitchell, Paul A. Wender

Courtesy Associate Professors: Markus W. Covert, Justin Du Bois, Michael Z. Lin, Jan M. Skotheim, Aaron F. Straight, Marius Wernig

Students with a comprehensive, systems-based education in physiology, pathology, microbiology, and pharmacology.

Graduate Advising Expectations

The Department of Chemical and Systems Biology is committed to providing academic advising in support of graduate student scholarly and professional development. When most effective, this advising relationship entails collaborative and sustained engagement by both the adviser and the advisee. As a best practice, advising expectations should be periodically discussed and reviewed to ensure mutual understanding. Both the adviser and the advisee are expected to maintain professionalism and integrity.

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