USC Center for Drug Discovery and Development: An Integrated Collaborative Platform for New Therapeutics

While there is a growing demand for new effective therapies for a wide range of conditions, the pharmaceutical industry is often constrained by an emphasis on blockbuster drugs and short-term success. Increasingly, pharmaceutical and biotech companies have either been unwilling or unable to produce paradigm-changing therapeutics for many major diseases, resulting in a void that government and academia are now aiming to bridge. The goal of this project is to create an integrated collaborative platform for establishing a new University-wide center that will provide an environment that stimulates, promotes and facilitates interdisciplinary collaboration leading to the design, synthesis and development of bioactive molecules as therapeutic agents.

Leaders:

- Stan Louie, School of Pharmacy, Clinical Pharmacy and Pharmaceutical Economics & Policy
- Clay Wang, School of Pharmacy, Pharmacology and Pharmaceutical Sciences
- Nicos Petasis, Dornsife College of Letters, Arts and Sciences, Loker Hydrocarbon Research Institute
- Mark Humayun, Keck School of Medicine, Department of Ophthalmology

Center for Transformative Scholarship Digital Scholars Program to Support Digital Humanities Publishing

The digital humanities scholars program will support an advanced scholars program built on a Web 2.0 publishing platform. The collaboration will develop a shared community of investigators through seminar discussions on in which faculty will share works in their digital manifestations, and explore questions on sustainment of publishing models, how humanists can reach different audiences, how to sustain rich and meaningful collaboration, and how digital methodology add to scholarship in the humanities. Faculty participants come from the College of Letters, Arts and Sciences, the School of Cinematic Arts, and the Annenberg School of Communication.

Leaders:

- Phil Ethington, Dornsife College, Department of History
- Tara McPherson, School of Cinematic Arts, Critical Studies

Interdisciplinary Spatial Science
Human action literally takes *place*, and that spatial dimension of social interaction is paramount for understanding classic questions about the human condition. Spatial Science is a rapidly expanding field, incorporating many fields from the physical sciences to the humanities. GIS, image processing, pattern recognition, and scientific visualization are in widespread use throughout the academy. However, development of relevant theory, concepts, and cultivation of spatial intelligence through education has lagged behind. Through this collaboration we will build and sustain a series of collaborative research projects that link faculty across multiple departments and schools to build tools and knowledge that help address society’s most vexing problems.

Leaders:

- John Wilson, Dornsife College, Spatial Sciences Institute
- Myles Cockburn, Keck School of Medicine, Preventive Medicine