

## New Faculty Awards Program

<u>Institution</u>	<u>Awardee</u>	<u>Department</u>	<u>Area of Interest</u>
<b>2007</b>			
Brandeis University	Douglas L. Theobald	Biochemistry	Structure-function perturbation studies of resurrected ancestral proteins: Atomic-resolution visualization of adaptive evolutionary trajectories and potentials
Georgia Institute of Technology	Sven H. Behrens	Chemical and Biomolecular Engineering	From Stimulus-Responsive Polymers to "Smart Capsules": Fundamentals of Polymer-Mediated Particle Interaction and Directed Assembly for Drug Encapsulation and Triggered Release
Harvard University	Adam E. Cohen	Chemistry and Chemical Biology	I will measure the local mechanical properties of DNA to understand how the mechanics affects protein binding
Northwestern University	Justin M. Notestein	Chemical and Biological Engineering	Novel oxidation catalysts from surface-grafted organometallics to form cooperative organic-inorganic interfaces for energy needs and sustainability
The Pennsylvania State University	Tae-Hee Lee	Chemistry	Dynamics of enzymatic reactions: Single molecule research on the role of fluctuations in molecular recognition by enzymes
The University of Chicago	Gregory S. Engel	Chemistry	Probing photoreactions at conical intersections with ultrafast spectroscopy: developing routes to design novel enzymatic photoreactivity
University of California, Berkeley	Michelle C. Chang	Chemistry	Chemical approaches for biofuel synthesis in microbes
University of California, San Diego	Joshua S. Figueroa	Chemistry and Biochemistry	Oxygen-Oxygen Bond Coupling by Ruthenium-Arene Complexes Relevant to Synthetic Water Splitting
University of California, Santa Barbara	M. Scott Shell	Chemical Engineering	Development of novel computational methods for the rational design of peptide and protein technologies
University of Washington, Seattle	Munira Khalil	Chemistry	Mapping vibrational phase and energy relaxation during photoinduced electron transfer processes using femtosecond two-dimensional infrared spectroscopy
Yale University	David A. Spiegel	Chemistry	A Synthetic Approach to Studying Advanced Glycation End-Products, a Class of Natural Products Found in Humans