POSTDOCTORAL POSITIONS

The Messersmith Group at the **University of California-Berkeley** is always on the lookout for outstanding postdoctoral candidates in the areas listed below. A PhD in engineering, chemistry, biological sciences, physics, or a related field is required. Independence, creativity, passion for research, and good communication skills are essential. Although specific project positions are filled on an as-needed basis, exceptionally well-qualified candidates are encouraged to apply at any time. For consideration, send a cover letter and CV to *philm(at)Berkeley(dot)edu*.

1) **Novel Biomimetic Polymers.** Synthesis and characterization of polymers inspired by wet biological adhesives (mussels, etc.). This project involves primarily polymer synthesis and characterization, in-vitro studies, and possibly interactions with clinical collaborators. Skills desired: polymer and/or organic chemistry; polymer characterization, cell culture. Formal Training: chemistry, materials science, chemical engineering, biomedical engineering.
2) **Regenerative Medicine.** Development of polymers and polymer pro-drugs for tissue regeneration. This project involves both in-vitro and in-vivo work. Skills desired: limited polymer synthesis from a recipe, in-vitro studies, and possible involvement with in-vivo studies through a collaboration. Training: cell and/or molecular biology, biomedical engineering, drug delivery.
3) **Cell-Material Interactions.** This project investigates the interactions of synthetic biomaterials with cells and the control of such interactions through surface chemistry. Skills desired: Experience in cell biology and cell-material interactions. Knowledge of cell culture, cell imaging and fluorescence microscopy is necessary. Training: cell and tissue engineering, cell biology.
4) **Single Molecule Force Spectroscopy.** Single molecule force spectroscopy of peptides, amino acids, and polyphenols. This project employs AFM to investigate the forces of interaction between biomolecules and surfaces. Skills desired: some experience with single molecule biophysical methods. Prior experience performing AFM imaging is not sufficient for this position. Training: physics, biophysics, molecular engineering.
5) **Bioinspired Materials for Energy Harvest and Storage.** This represents a new area of research in the group where we aim to exploit biological design principles to develop materials for use in energy. Skills desired: materials design, synthesis and characterization. Training: materials science, chemistry, physics.