

Geoffrey K. Feld

3075 Buena Vista Way
Berkeley, CA 94708

(510) 666-2789
gkfeld@berkeley.edu

Education

2007-present	University of California, Berkeley Ph.D. Chemistry (May 2012 expected)	Berkeley, CA
2002-2006	Georgia Institute of Technology B.S. Chemistry with High Honor / Minor International Affairs	Atlanta, GA

Technical Skills

Structural	X-ray crystallography, small angle X-ray scattering, mass spectrometry
Laboratory	fluorescence & circular dichroism spectroscopy, planar lipid bilayer electrophysiology, calorimetry, recombinant DNA cloning, protein expression, FPLC/HPLC, electrophoresis, cysteine chemistry
Computer	HKL2000, CCP4, PHENIX, PyMOL, CHIMERA, ATSAS, SASStbx, Scripting in Bash/Perl, Windows/OSX/Linux, Origin, pClamp, Adobe CS, Office/iLife

Research Experience

2007-present	University of California, Berkeley Structural and biophysical characterization of transmembrane protein transport using anthrax toxin as a model system	Berkeley, CA Advisor: Byan Krantz, Ph.D.
2006-2007	Georgia Tech Research Institute Analytical identification of biological and environmental markers	Atlanta, GA Advisor: Charlene Bayer, Ph.D.
2006	Technion: Israel Institute of Technology Biophysical characterization of <i>Geobacillus stearothermophilus</i> metabolism	Haifa, Israel Advisor: Yuval Shoham, Ph.D.
2005	Kemira Chemicals, Inc Physical characterization of surfactants as agents in chemical papermaking	Marietta, GA Advisor: Brian Brogdon, Ph.D.
2004-2005	Georgia Tech Department of Chemistry Synthesis and characterization of nanocellulose whiskers	Atlanta, GA Advisor: Arthur Ragauskas, Ph.D.

Publications

Feld GK, Brown MJ, Krantz BA. (2011) Anthrax toxin translocation. *Review in preparation*.

Feld GK, Kintzer AF, Tang II, Thoren KL, Krantz BA. (2011) Domain flexibility modulates the heterogeneous assembly mechanism of anthrax toxin protective antigen. *J. Mol Biol.* doi:10.1016/j.jmb.2011.10.035. **PDB: 3TEW, 3TEX, 3TEY, 3TEZ**

Feld GK, Thoren, KL, Kintzer AF, Sterling HJ, Tang II, Greenberg SG, Williams ER, Krantz BA. (2010) Structural basis for the unfolding of anthrax lethal factor by protective antigen oligomers. *Nature Struct Mol Biol.* **17**, 1383-1390. **PDB: 3KWW**

Sterling HJ, Daly MP, **Feld GK**, Thoren KL, Kintzer AF, Krantz BA, Williams ER. (2010) Effects of supercharging reagents on noncovalent complex structure in electrospray ionization from aqueous solutions. *J Am Soc Mass Spectrom.* **21**, 1762-1774.

Kintzer AF, Thoren KL, Sterling HJ, Dong KC, **Feld GK**, Tang II, Zhang TT, Williams ER, Berger, JM, Krantz BA. (2009) The protective antigen component of anthrax toxin forms functional octameric complexes. *J Mol Biol.* **392**, 614-29.

Shulami S, Zaide G, Zolotnitsky G, Langut Y, **Feld G**, Sonenshein AL, Shoham Y. (2007) A two-component system regulates the expression of an ABC transporter for xylo-oligosaccharides in *Geobacillus stearothermophilus*. *Appl Environ Microbiol.* **73**, 874-84.

Seminars and Meetings

Oral presentations “Structural basis for the pre-translocation unfolding of anthrax lethal factor by protective antigen”
Molecular and Cell Biology BMB Retreat, January 2010, Asilomar, CA

“Structural basis for the unfolding of anthrax lethal factor by protective antigen oligomers”
Structure Supergroup, March 2011, Berkeley, CA
Biophysics Graduate Group Retreat, September 2011, Marshall, CA

Poster presentations 239th American Chemical Society National Meeting, March 2010
Bay Area Microbial Pathogenesis Symposium XIII/XIV, March 2010/2011
Advanced Light Source User’s Meeting, October 2010
Biophysics Graduate Group Retreat, October 2010
Molecular and Cell Biology BMB Retreat, January 2009/2011
Biology with Free Electron Lasers Workshop, January 2011

Leadership and Teaching

University of California, Berkeley Coordinator, Structure Supergroup, 2010-present
Krantz Lab
Biosafety officer, 2008-present
Webmaster, 2010-present
Mentor to (3) undergraduate student researchers, 2008-2010
Graduate Student Instructor
Introduction to Organic Chemistry, 2007-2008
Biophysical Chemistry, 2009
Member, Graduate Life Committee, 2008-present

Kaplan Test Prep Instructor and Tutor: SAT, 2004-2006

References

Bryan Krantz, Ph.D.
Professor of Chemistry, Molecular & Cell Biology
University of California Berkeley
(510) 666-2788
bakrantz@berkeley.edu

John Kuriyan, Ph.D.
Professor of Chemistry, Molecular & Cell Biology
University of California, Berkeley
(510) 643-0137
kuriyan@berkeley.edu
(correspondance to hfrazier@berkeley.edu)

David Wemmer, Ph.D.
Professor of Chemistry
University of California, Berkeley
(510) 666-2683
dewemmer@berkeley.edu

James Holton, Ph.D.
Beamline Scientist
Lawrence Berkeley National Laboratory
(510) 486-4587
jmholt@lbl.gov