

Purpose

- To study for a PhD by combining the fields of Biochemistry and Physics in creative and adventurous ways.

Education

- *University of California, Berkeley*: Biophysics Graduate Group, PhD Candidate Current
- Special Student in Department of Physics (UVA): for graduate school preparation Fall '06
- *University of Virginia (UVA)*, Charlottesville
Biochemistry (BS); Physics (BA); Mathematics (Minor)
Degrees Conferred: BS/Chemistry – Biochemistry w/ Distinction May 21, 2006

Research Experience¹

- *Chemistry Department (Berkeley)*: reflection interference contrast microscopy (RICM), optical properties of CdSe quantum dots, single-molecule spectroscopy and imaging. (Summer '07 – Current)
- *High Energy Physics Department (UVA)*: particle accelerators and detectors. (Fall '05 – Spring '07)
- *Biology Department (UVA)*: electron microscopy, tissue culturing, molecular subcloning, viral transfections. (Fall '02 – Fall '05)
- *National Institutes of Health (Bethesda, MD)*: chromatography, PCR amplification, DNA purification and isolation, protein kinetic assays, protein purification and prep, *in vitro* motility assays, confocal microscopy. (Summers of '00 – '04)

Publications

- “Myosin VIIB from *Drosophila* is a high duty ratio motor” *J. Biol. Chem.* 280: 32061-32068, 2005, Yi Yang, Mihaly Kovacs, **Qian Xu**, John B. Anderson, and James R. Sellers
- “Neck Length and Processivity of Myosin V” *J. Biol. Chem.* 278:29201-29207, 2003, Takeshi Sakamoto, Fei Wang, Stephan Schmitz, Yuhui Xu, **Qian Xu**, Justin E. Molloy, Claudia Veigel, and James R. Sellers

Posters and Presentations

- Presentation: *How to Handle Gravity: Experimental Signatures of Extra Dimensions*, High Energy Physics Department, UVA (Fall '06)
- Poster: *HyperCP: A High Rate Spectrometer for the study of Rare and Forbidden Hyperon Decays*, High Energy Physics Department, UVA (Spring '06)
- Presentation: *Engineering Transfection Vector with Monomeric DS Red and α -Tubulin*, Lab Meeting, Bloom Lab, Biology Department, UVA (Fall '04)
- Presentation: *Expression of Mammalian pFLAG-CMV-2 Vector with a APP 695 Insert*, Lab Meeting, Bloom Lab, Biology Department, UVA (Fall '03)

Work Experience¹

- *Teacher's Assistant*, Physics Lab (UVA) w/ Dr. Stephen Thornton (Spring '07)
- *Software Quality Engineer*, Microstrategy, Inc., McLean, VA (June '06 – August '06)
- *Teacher's Assistant*, Organic Chemistry w/ Dr. Cassandra Fraser (Fall '05)

Honors and Awards

- Echols Scholar (UVA): lack of core course requirements, special faculty advisors, and early course enrollment.
- Siemen's Westinghouse Science and Technology Competition Semifinalist, 2001

¹ References available upon request.