

Aaron Engel-Hall

Education

- 2005-2010 Stanford University Stanford, CA
- Masters Mechanical Engineering (2009-2010)
 - B.S. Physics (2005-2009)
 - Creative Writing Minor
 - Cumulative GPA of 3.83* (*to date)

Research Experience

- 2004: June – August University of Chicago Hospitals Chicago, IL
- Research Assistant**

- Compilation of data for a study conducted in a medical training context to determine if resident work-schedule changes influenced doctor effectiveness and efficiency in the Intensive Care Unit
- Compiled data in _ the time expected
- Worked with a team of 4 other researchers

- 2006: June – September Univ. of Chicago Hospitals and Depaul Chicago, IL
- Research Assistant**

- Proteomics Core Lab Researcher
- Explored correlation of MALDI-TOF sensor reported relative ratios of phosphorylated and unphosphorylated peptide to actual ratios
- Independently ran a MALDI-TOF Mass Spectrometer along with other sophisticated analytic equipment
- Organized and kept careful documentation of thousands of protein samples
- Worked jointly with a team of Data Analysts at Depaul and Proteomics Researchers at the University of Chicago
- Was selected as the spokesperson to keep both lab groups updated and working together and successfully overcame the lack of direct contact
- Presented work as a full research-in-progress to faculty and post-doctoral students

- 2007: June-September Univ. of Chicago Hospitals Chicago, IL
- Research Assistant**

- Biophysics and Nanotechnology Lab Researcher
- Explored element specific force signatures using Atomic Force Microscopy in solution
- Was trained and given full access to AFM Laboratory along with freedom to pursue independent project

- 2008: June-September Stanford University Stanford, CA
- Research Assistant**

- Physics Lab Researcher
- Worked with a Post-Doc and a fifth year graduate student towards developing a tabletop X-ray Laser
- Presented a cumulative poster of summer research to Stanford students and

faculty

- Gained authorship in any forthcoming publications concerning X-ray Laser research
- Was offered a continuing lab position but due to academic requirements was unable to accept

Relevant College Work Experience

2008-2009 Academic Year: Resident Computer Consultant for EBF Residence

- Responsible for the upkeep of wireless network
- Fixed all technical issues with residents computers; hardware and software related
- Worked with a student staff team to provide the house with supplies and food, as well as organize house activities for residents

Interests

African hand-drumming (I am a member of Kuumba; Stanford's African Drum and Dance ensemble), soccer, snowboarding, reading and writing fiction

Publications

Laurie Parker, Aaron Engel-Hall, Kevin Drew, George Steinhardt, Donald L. Helseth Jr, David Jabon, Timothy McMurry, David S. Angulo, Stephen J. Kron, "Investigating quantitation of phosphorylation using MALDI-TOF mass spectrometry", *J. Mass Spectrom.* **9999**, Early View, (2007).

Vinayak A, Levitt J, Pohlman A, Engel-Hall A, McCallister K, Hemmann S, Kress J, Gehlbach B, Hall J. Impact of Compliance with ACGME Mandated Duty Hours on Patient Care in a Medical Intensive Care Unit. *Am J Respir Crit Care Med.* Apr 1 2004; 169(7): A39 (Abstract).