

Sarah Sprague

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Objective To obtain a summer internship in the chemical engineering field.

Education **Massachusetts Institute of Technology (MIT)** Cambridge, MA
Candidate for Bachelor of Science in Chemical-Biological Engineering Jun 2013
Relevant Coursework: Heat & Mass Transfer, Fluid Mechanics, Eng. Thermodynamics, Organic Chemistry, Genetics, Experimental Biology, Biochemistry, Eng. Innovation & Design
GPA: 4.5/5.0

Experience **Central Intelligence Agency** McLean, VA
East Asian Analyst, Weapons Intelligence, Nonproliferation and Arms Control Center Jun 2011-Aug 2011

- Provided all-source intelligence analysis on East Asian chemical and biological national security issues to senior policymakers and other customers as part of medium-sized team
- Co-presented statistical analysis on group's use of sourcing in >200 documents to group and team heads
- Collaborated with over 4 teams to publish current issues analysis and accompanying interactive graphic
- Impacted multi-agency decisions through written responses on East Asian issues

Langer Lab, MIT Boston, MA
Lab Technician Sept 2010-Sept 2011

- Developed contact lenses that provide sustainable drug release to the eye to treat for glaucoma, eye infections and inflammation
- Characterized drug:polymer film ratios to optimize drug release kinetics over multiple weeks
- Encapsulated drug:polymer films in hydrogel lenses using UV light
- Assayed daily samples of contact lens solvent to find amount of drug released

Beth Israel Deaconess Medical Center Boston, MA
Lab Technician, Center of Advanced Orthopedic Studies Nov 2009-Aug 2010

- Studied effects of perinatal/postnatal diet relationship on skeletal growth and maintenance using biomedical techniques in mice as part of a 5-member team
- Presented own independent project studying effects of individual v. group housing in two mouse strains
- Managed colony of over 1500 mice, including daily breeding operations and dissections
- Developed project protocol for euthanizing mice to collect necessary blood, fat, bone, tissue samples

Leadership **OnStar Student Developer Challenge, National Winner** Santa Clara, CA
Co-Designer, EatOn Voice Application Jan 2011- Apr 2011

- Designed and developed speech recognition application for OnStar interface that enables user to find a nearby restaurant quickly based on food preference and location as part of 4-member team
- Presented product to senior OnStar executives and leaders in voice technology field at Where 2.0 Conference

Undergraduate Practice Opportunities Program (UPOP), MIT Cambridge, MA
Participant, Gordon Engineering Leadership Program (GEL) Jan 2011

- Intensive week-long course in project engineering, leadership, team decision making, group creative thinking, team differentiation and communicating with presence
- Managed six-member team to design and model a green home to a budget and specifications

Domestic Violence Awareness Week Committee Boston, MA
Event Co-coordinator, Alpha Chi Omega Fraternity May 2010- Dec 2010

- Organized activities to raise domestic violence awareness and funds for Boston Area Rape Crisis Center
- Coordinated candlelight vigil and multiple speakers in addition to planning duties for 130 sisters

Activities & Awards **MIT Cross Country; MIT Indoor/Outdoor Track and Field, Athlete** Aug 2009-Present
Engineers Without Borders, Member Sept 2011- Present
Society of Women Engineers, Member Sept 2010-Present
Marengo Community High School, Valedictorian Jun 2009

Skills **Computer:** Microsoft: Word, Excel, Powerpoint; MATLAB
Language: Intermediate proficiency in Chinese.
Laboratory: General wet lab skills, including pipetting, Biosafety Level 2 techniques, and experience with light microscopes and fume hoods.