Term Address 350 Memorial Drive Cambridge, MA 02139 Sabina Sood ssood@mit.edu (650) 400-2103 Home Address 4218 Ynigo Way Palo Alto, CA 94306

EDUCATION

Massachusetts Institute of Technology (MIT)

Cambridge, MA

• Candidate for Bachelor of Science in Biological Engineering, GPA: 4.9/5.0

May 2013

Relevant Coursework: Genetics, Biochemistry, Organic Chemistry, Python Computer Programming

Henry M. Gunn Sr High School

Palo Alto, CA

• Graduated with 4.5/4.0 GPA; top 1% of graduating class

June 2009

WORK EXPERIENCE

MIT Biology Dept (Tyler Jacks Lab)

Cambridge, MA

Biotechnology Researcher

October 2010-Present

- Investigated therapeutic delivery of tumor suppressor microRNA let-7 to suppress lung cancer development in mice
- Examined the significance of tumor suppressor miRNA networks in lung cancer, its influence on tumor progression, and its applicability for therapy

NIH National Cancer Institute (Carl Wu Lab)

Bethesda, MD

Biotechnology Researcher (Lab of Biochemistry and Molecular Biology)

June 2010-August 2010

- Developed a sensitive assay, SNAP labeling, to measure kinetics of histone replacement when certain genes are knocked out, leading to a better understanding of control of gene expression in eukaryotes
- Explored budding yeast to measure histone variant H2A.Z dynamics at gene promoters to determine mechanisms involved in nucleosome eviction and reassembly; conducted Western blots and cloning
- Presented five research papers to 30 people in cancer stem cell journal club in hopes of informing and innovating current laboratory procedures related to mechanisms of cancer stem cell metastasis and drug resistance

MIT Bioengineering Dept (Robert S. Langer Lab)

Cambridge, MA

Biotechnology Researcher

October 2009-January 2010

- Experimented with pancreatic, mouse macrophage, and embryonic stem cells to conclude which lipidoid nanoparticle is most effective in providing proteins to a cell with defective amino acids
- Developed lab techniques, such as seeding, passaging, and transvecting cells, particle sizing, and Western blots

Stanford Developmental Biology Dept (Matthew P. Scott Lab)

Palo Alto, CA

Biotechnology Researcher

June 2008-August 2009

- Devised a protocol to determine the family of genes (NS3) in serotonergic neurons of Drosophila that control insulin release as well as growth and development in flies
- Conducted rescue experiments using in vivo RNAi screening by expressing wild-type NS3 in mutants

HONORS & AWARDS

- Third place winner of college-wide Merck-MIT Bioengineering Society Poster Competition (2010)
- "Measuring Histone Variant H2A.Z Dynamics at Budding Yeast Promoters to Determine Mechanisms Involved in Nucleosome Eviction and Reassembly." Presented at NIH poster session to 600+ PIs and Post-docs (2010)
- "A Nucleostemin Family GTPase, NS3, Acts in Serotonergic Neurons to Regulate Insulin-Producing Neurons and Control Body Size." Presented at American Society for Cell Biology National Meeting to 150+ scientists (2008)

LEADERSHIP & ACTIVITIES

MIT Biomedical Engineering Society

Cambridge, MA

BioTECH Journal Co-Editor

December 2009-Present

• Authored 3 published articles, oversaw the production, and managed distribution of Genentech-sponsored BioTECH journal about evolving research and technologies in bioengineering

Executive Board Secretary

December 2009-Present

Managed a budget of \$2500 to run 10 events that provide students with research, employment, and educational
opportunities in biomedical engineering

MIT Society of Women Engineers

Cambridge, MA

Career Development Chair

February 2010-Present

- Coordinated events, such as *Career Fair* and *Meet the Professionals Dinner*, that permit MIT students to establish relationships with engineering corporations
- Mentored high school girls by giving them opportunities to deepen their understanding of different fields of study and to recognize the importance of women in science, engineering, and technology