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, Spanish Concentration May 2013
- Relevant Coursework: *Genetics, Python, Cell Biology, Organic Chemistry, Analysis of Biomolecular and Systems*

Henry M. Gunn Sr High School Palo Alto, CA
- Graduated top 1% of 500; National Merit Finalist (2009) June 2009

WORK EXPERIENCE

David H. Koch Institute for Integrative Cancer Research at MIT Cambridge, MA
Tyler Jacks Lab October 2010-Present
- Investigated therapeutic nanoparticle delivery of tumor suppressor microRNA miR-34a and short hairpin shKras to suppress lung cancer development and maintenance in mice
- Examined the significance of p53 and Kras networks in lung cancer and their influence on tumor progression through subcutaneous and tail vein injections, tumor extraction through necropsy, and luciferase bioluminescence assays

Amgen Scholars Program - UC Berkeley Berkeley, CA
David Schaffer Lab May-August 2012
- Explored the effect of upregulation of the mTOR pathway on aberrant neurogenesis and how it relates to cancers and disorders, such as Tuberous Sclerosis Complex (TSC), in mice
- Utilized techniques, such as brain extraction through necropsy, cryostat brain slicing, immunostaining, dosing, and Western blotting, to study neural stem cell proliferation and differentiation in *Tsc1* mutant mice

Genentech So. San Francisco, CA
Dorothy French Lab May-August 2011
- Discovered the role of the Notch signaling pathway in transactivation of liver stem cell differentiation into bile duct cells or hepatocytes through use of tissue culture techniques, RNA isolation, qRT-PCR, and Western blots

NIH National Cancer Institute Bethesda, MD
Carl Wu Lab June-August 2010
- Developed a sensitive assay, SNAP labeling, to measure kinetics of histone variant H2A.Z dynamics at gene promoters and determine mechanisms involved in nucleosome eviction and reassembly in budding yeast
- 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 Cambridge, MA
Robert S. Langer Lab October 2009-January 2010
- Experimented with pancreatic, mouse macrophage, and embryonic stem cells to conclude which lipidoid nanoparticles proved to be the most effective in providing proteins to cells with defective amino acids
- Developed lab techniques, such as seeding, passaging, and transvecting cells, particle sizing, and Western blots

Stanford Developmental Biology Dept Palo Alto, CA
Matthew P. Scott Lab June 2008-August 2009
- Conducted rescue experiments using *in vivo* RNAi screening by expressing wild-type NS3 in mutants to determine the family of genes in serotonergic neurons of Drosophila that control insulin release as well as growth and development in flies

HONORS & AWARDS

- "Hyperactivation of mTOR Pathway Potentially Leads to Aberrant Adult Neural Stem Cell Function." Presented at Biomedical Engineering Society (BMES) National Conference (2012)
- Speaker at MIT Biology Undergraduate Research Symposium (2012)
- Genentech campus ambassador for MIT (2012)
- Tau Beta Pi Engineering Honors Society- Executive board member (2011)
- National Society of Collegiate Scholars- Secretary and Treasurer (2011)
- Third place winner of college-wide Merck-MIT Bioengineering Society Poster Competition (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)

Continued

LEADERSHIP & ACTIVITIES

MIT Biomedical Engineering Society Cambridge, MA
Co-President, Industrial Relations Chair, BioTECH Journal Co-Editor December 2009-Present

- Collaborated with biotechnology, pharmaceutical, and bioengineering companies to provide students with research, employment, and educational opportunities in biomedical engineering
- Authored 3 published articles, oversaw the production, and managed distribution of Genentech-sponsored BioTECH journal

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 to help them recognize the importance of women in science, engineering, and technology

INTERESTS & SKILLS

Languages: Conversational: Spanish; Basic: Hindi and French
Computer: Matlab, Python, Microsoft Office
Skills: MIT women's club soccer team, jewelry making, baking, traveling