

Santa Clara Valley Science and Engineering Fair Association

P.O. Box 307, Los Altos, California 94023 • 650-856-1289

www.science-fair.org

Celebrating Consecutive Regional Science Fairs Since 1960

Affiliated with the Intel International Science and Engineering Fair

MENTOR PROFILE FOR STUDENTS TO REVIEW

Please fill in the appropriate information boxes below, and email this document to rwwcwl@yahoo.com for posting on our website www.science-fair.org.

Last name:

Suhoski

First name:

Megan

College and degree(s) earned:

University of Pennsylvania, Ph.D. in Immunology

King's College, B.S. in Biology

Email address: Contact mentors@science-fair.org

Web page (if applicable):

N/a

Phone number and available hours to call:

N/a

Your background summary: (Please limit to 200 words)

I earned my Ph.D. in Immunology from University of Pennsylvania in 2008, and am currently a postdoctoral research fellow at Stanford University School of Medicine in the department of Pathology. I have a strong interest in motivating students about science and have volunteered in a number of events from giving high school career fair presentations to discuss science career paths, to teaching science lessons to kindergarteners, as well as participating as a science fair judge for both elementary and high school competitions. Furthermore, I have directly supervised high school, college, and graduate students, helping them to develop a project of interest and conduct hypothesis-driven biomedical research. In addition, I've volunteered as a mentor for the 2010 Stanford Institutes of Medicine Summer Research (SIMR) Program, and provided a talented high school intern with the opportunity to perform cutting-edge research with me, as well as assisting in the design of a powerpoint presentation and poster to communicate her findings at the final SIMR symposium. Thus, I am eager to assist students with their projects for the 2011 Synopsys Championship Science Fair.

Briefly write about your science and/or engineering interests:

I am interested in biological science research and how we can apply our knowledge to strategies to treat diseases and conditions that plague the population. As an immunologist, my research focuses on studying the human immune response in normal individuals and comparing it to the suppressive immune response found in patients with cancer. The immune system contains many cellular components and has two main functions: 1. To recognize and destroy foreign agents such as bacteria/viruses that can cause infection and disease, and 2. To distinguish "self" from "non-self" or foreign in order to suppress the immune cells from attacking normal tissue and organs. Cancer is tricky, because tumors are made up of normal cells that continue to multiply, and although there is evidence that an anti-tumor response can be generated, cancer cells look

Santa Clara Valley Science and Engineering Fair Association

P.O. Box 307, Los Altos, California 94023 • 650-856-1289

www.science-fair.org

Celebrating Consecutive Regional Science Fairs Since 1960

Affiliated with the Intel International Science and Engineering Fair

more like “self” than foreign, and the immune cells are more suppressed and cannot effectively destroy cancer cells like they would an infected cell. I am studying how to redirect these immune cells to recognize cancer as “foreign” so that they can ultimately kill tumors. By studying the complex immune cell subsets, I hope to develop therapies to treat patients with cancer.

Projects from which scientific category (one or more) would you be interested in mentoring? Categories are explained in detail at

<http://synopsys.championship.googlepages.com/scientificcategoriesforprojects>.

Biological Sciences, Biochemistry/Microbiology, Medicine/Health/Gerontology, Behavior/social sciences, Zoology

If you are a past Science Fair Judge, list scientific categories which you judged:

Biology/Health/Medicine

If you are a past Science Fair Judge, list fairs by name in which you participated (local school fair, Synopsys Championship, CSSF, ISEF, etc.)

George Washington Carver Regional Science Fairs, grades 4-7, 9-12 (Philadelphia, PA)
