

Santa Clara Valley Science and Engineering Fair Association

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Celebrating Consecutive Regional Science Fairs Since 1960

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MENTOR PROFILE FOR STUDENTS TO REVIEW

Please fill in the appropriate information boxes below, and email this document to claught1@earthlink.net for posting on our website www.science-fair.org.

Last name: Reinsch

First name:

Sigrid

College and degree(s) earned:

UC Santa Cruz, BA Biology, UC San Francisco, PhD, Cell Biology

Email address: Contact

mentors@science-fair.org

Web page (if applicable):

<http://www.nasa.gov/centers/ames/research/OMEGA/index.html>

Phone number and available hours to call:

please contact mentors@science-fair.org

Your background summary: (Please limit to 200 words)

I'm currently working on biofuel development. At NASA we have the OMEGA project, headed by Dr. Jonathan Trent. I am scientist on this project. We are developing a photobioreactor to deploy in the ocean that will grow microalgae for oil production using wastewater that normally would go into the ocean. Recently I worked on another biofuel project to develop tools for cellulosic biofuel production. I also have extensive experience in developmental and cell biology, primarily using frogs as models for vertebrate development. As a cell biologist, my expertise is in the cytoskeleton. NASA is starting a program in Synthetic Biology. I have been asked to be a part of this program as well. Synthetic Biology combines science and engineering specifically to engineer organisms or genes for specific tasks. The NASA synthetic biology program will develop tools for space applications.

Briefly write about your science and/or engineering interests:

I'm interested in biofuels, cell biology, developmental biology, molecular biology, neurobiology, ecology

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>.

Botany, **Environmental Sciences, Medicine, Zoology, Biochemistry**

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

Biochemistry, Zoology, 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.)

Synopsis, Hayman Elementary school science fair.
