SIP is a summer-long (10 week) research internship program for high-school students in STEM fields. UCSC faculty, graduate students, and postdoctoral researchers provide one-on-one mentoring of these high-school interns. The research projects are REAL in that they are NOT made up just for the high-school students; instead the high-school students are inserted into existing research projects at UCSC.

The SIP program has grown from a mere three students from one high school in the summer of 2009 (all three worked with the PI on NSF-funded Andromeda research) to 68 students from 31 high schools this past summer. About 60% of all SIP interns have been girls.

For the more than 200 students from 60+ high schools who have been through SIP since the program’s inception, the value of the research PROCESS is amply clear - e.g., critical thinking, abstract problem solving, open-ended research questions, etc. Perhaps more importantly, this realization about the importance of experiential learning has now dawned on hundreds of other students and teachers/advisors/counselors in these schools (and, by word of mouth, in other schools) and on parents and siblings at home.

The Science Internship Program provides motivated, advanced students with a unique opportunity to work and learn at a premier research institution.

Website:
For complete information on requirements, deadlines, cost and application procedures, visit SIP at ucsc-sip.org

Contact Information
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Sample of 2014 Research Projects

- Modeling and Analysis of the Spectra of Exoplanets
- Supermassive Black Holes at the Centers of Galaxies
- Primate-specific Non-coding RNAs
- Seismic Imagery of Underwater Sediments in the Elkhorn Slough
- Feeding Strategies in Marine Vertebrates
- Conservation of Southwestern Atlantic Reef Environments
- Nanowire Networks
- Genetic Characterization of Chromatin
- Evaluation of Photosensors for Very-High-Energy Gamma-Ray Telescopes

...and more than 25 other exciting research projects in 2014 alone.

In the nationwide 2013-14 Siemens competition, SIP interns accounted for 15 out of the state’s 51 semifinalists and the nation’s 300 semifinalists, and 4 out of the nation’s 95 regional finalists! This success has led to lots of news media coverage and generous donations from grateful parents. These donations have been used to provide need-based scholarships for high-school students and summer stipends for graduate students and postdocs. Most SIP research projects are high technical and computational in nature. This provides a spark of hope for gender balance in the workforce in such areas of research and industry where women are severely underrepresented at the present time. The impact of SIP on an academically rigorous all-girls partner school has been remarkable. The school had had three Siemens competition entrants over a six-year period prior to its involvement in SIP. It has now had a dozen entrants in the Siemens competition in each of the last two years!

Past SIP students have:

- Developed important relationships with mentors
- Worked collaboratively with other researchers
- Sharpened critical thinking skills
- Attended professional conferences
- Submitted articles to journals
- Submitted papers to science competitions

The professor I work with is awesome, I’ve definitely learned a lot, and the RAs in the dorms are great. I’m having a lot of fun, and I feel like summer’s passing too quickly.

—2014 SIP Intern

My son has been with SIP for two consecutive years. It’s a wonderful research program - at par with the best there is. The mentors (and Raja) spend a lot of time teaching the kids how to do research, encouraging and guiding them. I’d recommend it to anyone.

—2014 SIP Parent

Great professors, professional projects addressing professional questions that have ACTUAL impacts in the world; we’re not just doing experiments, this is REAL RESEARCH.

—2014 SIP Intern
2014 Funding and Projections

SIP began charging an academic program fee in 2014 of $2,500. These funds went a long way to supporting science research at UCSC through mentor stipends.

However, SIP’s academic program fee covered only a portion of the actual costs associated with each student’s participation (mentor stipends, program administration, etc.). UCSC’s seed funding for the program consisted of $50,000 in 2014 and was able to cover this gap, but will drop to $10,000 in 2015 and will end thereafter.

SIP provided 5 full and 4 partial scholarships for both program fees and housing when needed. This scholarship program underscores SIP’s commitment to increase the diversity of the program and broaden the scope of this opportunity.

Fundraising Goals for 2015

The SIP academic program fee will increase slightly this year. We are concerned that a steep fee increase will inhibit our ability to enhance the diversity of the program.

In addition to covering the gap between costs and program fee, SIP would like to increase its scholarship opportunities for students in Santa Cruz County and throughout the Bay Area. As a program at a public university, it is important that SIP students represent this diverse community and maintain its reputation for excellence in science and research. In order to meet this challenge, SIP will need to raise $50,000 each year.