Have you ever considered being a seismologist?

Abstract: My personal journey towards a career in seismology began as a physics major at the University of Wisconsin. There I gained exposure to the field of seismology and had an opportunity to participate in research with my academic advisor. However, my horizons and opportunities were expanded even further after being accepted into the IRIS Undergraduate Internship Program to conduct seismological research during the summer of my sophomore year.

Non-volcanic tremor is a weak, extended duration seismic signal observed episodically on some major faults, often in conjunction with slow slip events. Such tremor may hold the key to understanding fundamental processes at the deep roots of faults, and could signal times of accelerated slip and hence increased seismic hazard. Since the discovery of deep, non-volcanic tremor many studies have attempted to locate it and understand its origin; however, tremor has proven difficult to study due to the lack of impulsive wave arrivals, such as those used to locate and constrain the mechanism of ordinary earthquakes. My current work at Stanford focuses on extracting low frequency earthquakes from Non-volcanic tremor in order to gain a precise idea of the mechanics of tremor and slow slip on faults prone to large ruptures.

2009 Summer Internship Program Description

Conduct research with state of the art geophysical data and leading researchers at IRIS institutions. Research projects may involve the deployment of seismic instruments in the field (within the US or internationally), and/or analyses of seismic data in a lab setting with the ultimate goal of producing results to be presented at a national scientific meeting.

IRIS provides

- A weekly stipend ($550/week for 9 - 11 weeks)
- A week-long orientation at New Mexico Tech (funding for travel & room/board)
- Funding for travel to the home institution of your research host
- Assistance securing housing at the host institution
- Funding for any additional expenses related to fieldwork
- Funding to present your results along with the associated meeting costs (travel, registration, abstract submission fee and per diem)

Experience or coursework in geophysics is not required.

Application deadline is February 1, 2009