

Undergraduate Research Newsletter

Issue 6, July 16, 2008

What's Happening!

July 16, 2008 12:00 noon	Research Ethics Presentation Samuelson Pavilion, includes lunch
July 16, 2008 9:30 pm; July 17, 2008, 7:00 pm	Outfest Festival (Los Angeles) Please contact ResLife http://www.outfest.org/fest2008/festival_overview.html
July 20, 2008	Beach Trip! Please RSVP with ResLife
July 23, 2008 12:00 noon	Kerry Thompson, Biology Dept. Samuelson Pavilion, includes lunch

This Wednesday...

Research Ethics

(From a Student's Perspective)

"Who bears the burden of future earthquake"



While California's notorious earthquakes cause widespread damage, Geology student Stephanie Kay ('10) investigates who bears the socio-economic brunt of earthquakes.

1. Can you please provide a brief description of your subject?

I'm using Geographical Information Systems to examine which populations and demographics will be most affected in the event of an earthquake in California. I'm trying to find if there is a correlation between a high risk of damage by an earthquake and the location of certain demographics. The demographic characteristics I'm studying are race, income, education and property values. I wish to discover if certain demographics are bearing the burden of earthquake hazards more than others and if this has changed from 1990 and 2000.

2. What inspired/influenced you to take on this project?

I've always been interested in earthquakes since a young age and after taking a class in GIS last semester I knew I wanted to do more work with GIS. This project meant that I could combine my passions for earthquakes, environmental justice and GIS.

3. Whom have you collaborated with on this project (or are you working alone)?

I've been working with Professor Jim Sadd.

4. Please tell us a little about your research methods.

I'm using Geographical Information Systems, a computer software that is a tool used to analyze spatial data and create maps. I've been using datasets from the US

census in order to map the population of California and see where certain populations are located. I'm also using maps and data from the USGS that maps the locations of the greatest earthquake risk. I've been compiling Excel tables that express numerically which populations are at the greatest risk as well as creating maps that express the results spatially.

5. What would you consider to be your greatest challenge throughout the research project? or your greatest accomplishment?

The greatest challenge has been finding datasets and converting them into a format which I can use. Since most GIS data is up on the internet is has also been a challenge to try and find it and on occasions I have not been able to find the data I need as it simply does not exist.

(Newsletter by Vanda Ayrapetyan)