Exjobb in coral microbiology or bioinformatics/genomics in Carolin Frank's lab at UC Merced, California

We are looking for a project student who is interested in working on a project that examines the unknown bacterial diversity associated with corals. The project is a collaboration between Carolin Frank who works on microbes using computational and experimental methods, and Monica Medina, who works on coral reef genomics. Coral reefs are economically and ecologically important, but are currently being threatened by anthropogenic factors including climate change. To understand and predict the response of corals to these stressors, we need to consider not only the coral animal itself, but also the microbes associated with it. While the relationship between corals and their endosymbiotic algae of the genus *Symbiodinium* are well studied, little is known about the diverse and abundant bacteria (and archaea) associated with corals. In a project funded by National Geographic, we are examining these bacteria using next generation DNA-sequencing of the gene encoding the small ribosomal subunit RNA (16S rDNA). We have samples from nine different coral species in Mexico, and are planning to sample the same species this coming summer in Panama. We will use these samples to determine if coral species are host to distinct bacterial communities, and if similar bacteria are associated with a given coral species across geographic locations. The project students will perform DNA extraction and PCR amplification of 16S sequences. Sequences will be submitted for 454 pyrosequencing, and the project student will participate in sequence analysis. For this project, we are looking for someone with previous wet lab experience outside of classes.

We are also looking for students with programming experience (e.g. Perl), who are interested in working on comparative genomics projects.

The newest addition to the University of California- system, UC Merced was founded in 2005. We are in the San Joaquin Valley, two hours from San Francisco and two hours from Yosemite National Park. The university is still small and intimate, with about 4500 undergraduate students, 130 professors. The small size makes it east to get to know other graduate students working in the labs. The cost of living is among the lowest in California.

Carolin gick ut molekylär bioteknikprogrammet 2000 och doktorerade i Siv Anderssons lab i Uppsala. Hon har även undervisat på bioinformatikprogrammet, och är först och främst intresserad av exjobbare från dessa båda program. Om detta låter intressant, kontakta Carolin via e-post (svenska går bra). UC Merced hjälper till att ordna visum (det är säkrast om processen påbörjas ungefär fyra månader före beräknad ankomst).

Carolin Frank cfrank3@ucmerced.edu
http://www.ucmerced.edu
http://granada.ucmerced.edu/~cfrank/Home.html
http://www.ucmerced.edu/spotlightdetail.asp?spotlightid=162