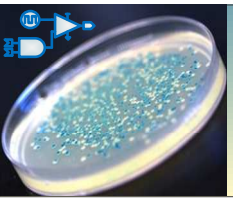

Synthetic & Computational Biology at UC Davis

Paid Internships in Synthetic Biology and Bio-inspired Game Design

Location: Tagkopoulos lab, GBSF 5312, UC Davis Genome Center and Department of Computer Science, University of California, Davis

Eligibility: UC Davis undergraduates from all departments (US Citizenship required)

Starting date and duration: June 2012, duration 3 to 12 months

Job description: Three paid internships are available starting this summer in the Tagkopoulos lab in the interface of synthetic biology, computational modeling, and mobile application development. Applications are solicited in the following areas:
(A) Experimental Synthetic Biology: Biological part library construction and characterization (promoters, RBS, functional proteins), model-driven design and experimental construction of biological circuits. Successful candidates should have basic knowledge of laboratory techniques (PCR, cloning, etc.) through classes or past internships, although exceptional candidates with no prior training will be considered.
(B) Computational Synthetic Biology: Multi-scale modeling of microbial systems, large scale simulations of microbial evolution through HPC, Database-based computer-aided design platform of synthetic gene circuits. Good programming skills are required (Perl, C, C++). Knowledge of parallel programming (e.g. MPI) or technical suites (e.g. Matlab) are a plus, but not required.
(C) Bio-inspired Game Design for Mobile Platforms: Game design and development for iPhone and/or Android, development of a bio-inspired game and application for synthetic biology. Good programming skills and familiarity with mobile platforms is required. Prior work or class experience (e.g. ECS 189H) on mobile application development a plus.

Other details: Students will work closely with graduate students and postdoctoral researchers in the Tagkopoulos lab. They will participate in team meetings, report their progress to the group, and be included in publications that result directly from their work. Depending on the IGEM project, there is also the possibility for collaboration with the IGEM 2012 team that Prof. Tagkopoulos co-advises.

How to apply: Please send as email attachments to Prof. Tagkopoulos (iliast@ucdavis.edu) (a) your CV, (b) unofficial transcript (SISWEB), and (c) an one-page statement of purpose describing why you are interested in the position and your relevant experiences/skills. To ensure appropriate handling, the email should have the following subject “Application for the synthetic biology REU position”.

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