

# POSTDOCTORAL POSITIONS

## Bacterial Pathogenesis, Genomics, dual RNA-seq

Positions are available to study the molecular pathogenesis of *Chlamydia trachomatis* and other species of the family *Chlamydiaceae* in the laboratory of Deborah Dean, Professor of Medicine and Pediatrics, UCSF; Director, Children's Global Health Initiative; Senior Scientist, Center for Immunobiology and Vaccine Development (CIVD), UCSF Benioff Children's Hospitals Research Institute; and Affiliate Faculty, UC Berkeley-UCSF Joint Graduate Program in Bioengineering.

The Lab is focused on the evolution and pathogenesis of *C. trachomatis* and other *Chlamydiaceae* spp. using state of the art techniques in comparative and functional genomics, proteomics, bioinformatics, bacterial genetics, molecular and cell biology, real time confocal microscopy, dual RNA-seq and nanotechnology to advance our knowledge in the field. In addition, the Lab is designing *C. trachomatis* vaccine candidates as well as rapid point-of-care (POC) diagnostics for *C. trachomatis* sexually transmitted and ocular infections.

Projects on the pathogenesis of *Chlamydia* include: development of a system for genetic exchange and analysis of *Chlamydia* spp.; evaluation of multiple genomes of *Chlamydia* spp. to decipher virulence determinants, evolution and recombination mechanisms; and use of primary genital tract cells and studies of clinical vaginal/endocervical/rectal microbiota among cohorts from various developing countries with high risk for STIs to advance knowledge of host innate immunity and host-pathogen interactions that allow or thwart chlamydial growth and development.

Opportunities are available for working with and mentoring UCSF medical students and undergraduate students from the University of California at Berkeley who rotate through the lab and often complete a senior research thesis over the course of one to three years in the Lab, including full time research in the summer. Candidates with a strong interest in teamwork and linking basic research with clinical relevance are encouraged to apply.

The applicant should possess a Ph.D. or M.D. or both and experience in some or all areas: molecular and cell biology, immunology, bacterial genetics, microbiota and genomics including some metagenomic analysis techniques. Training will also be provided in these areas. The appointment is renewable annually based on performance. Salary will be based on the NIH pay scale for postdoctoral fellows and includes full health, dental and vision coverage.

Prof. Dean's Chlamydia Research Laboratory is part of the Center for Immunobiology and Vaccine Development (CIVD) at UCSF Benioff's CHORI. Dr. Dean has a number of collaborations with investigators at the Imperial College, London; University of Amsterdam; Emory University; Georgia Institute of Technology; CDC; UC Berkeley; Chulalongkorn University, Bangkok, Thailand; National Institute of Health, Hanoi, Vietnam; the Ministry of Health, Fiji; and biotech companies and start-ups in the Bay Area that will advance novel discoveries to improve health care.

Interested individuals should send a letter of application, curriculum vitae and the names of three references (phone number and email) to Dr. Deborah Dean ([deborah.dean@ucsf.edu](mailto:deborah.dean@ucsf.edu)).

