



UNIVERSITY OF CALIFORNIA
SANTA CRUZ

UNIVERSITY OF CALIFORNIA, SANTA CRUZ
DEPARTMENT OF ELECTRICAL ENGINEERING
Post-Doctoral Researcher, Adaptive Optical Microscopy

The School of Engineering at the University of California, Santa Cruz (UCSC) invites applications for the position of Post-Doctoral Researcher in Adaptive Optical Structured Illumination Microscopy (AO-SIM), under the direction of Prof. Joel Kubby, working in the Keck Center for Adaptive Optical Microscopy (<http://cfaom.soe.ucsc.edu/>). Applicants should be able to contribute to the development and application of adaptive optics in biological imaging. Possible related areas of research might include chromosome structure and function during meiosis in *C. elegans* and the regulation of chromatin structure and gene expression in *Drosophila*. The successful candidate will be expected to develop and operate new optical imaging and optomechatronic systems. We have a preference for candidates with expertise in optical system design and alignment, data acquisition, electrical circuit design and test, digital electronics and software development for interfacing between a computer and an optical system, motor controller, microassembly system design and assembly.

RANK: Post-Doctoral Researcher

SALARY: Commensurate with qualifications and experience.

BASIC QUALIFICATIONS: A Ph.D. in Electrical or Mechanical Engineering with experience in the development of new optical imaging and optomechatronic systems.

PREFERRED QUALIFICATIONS: Familiarity with the application of adaptive optics in astronomy and vision science. Experience in the preparation of biological specimens for optical imaging.

Prior experience with:

- Structured Illumination Microscopy, Fourier Optics
- Optical System Design: ZEMAX, CodeV, OSLO
- Programming: Matlab, C++, Labview, Visual Studio, MFC, C#, Qt
- Mechanical Design: Solidworks
- Hardware: Data acquisition (NI-DAQ), deformable mirror control, wavefront measurement using Shack-Hartmann sensor, SLM (Spatial Light Modulator), motor controller (MEI, UMAC, PI).
- Publications in high-impact refereed journals.

POSITION AVAILABLE: June 15, 2014. Appointments are contingent upon availability of funding.

TERM OF APPOINTMENT: The initial appointment is for one year, with the possibility of extension to a second year. Should the hiring unit propose reappointment, a review to assess performance will be conducted. Reappointment is also contingent upon availability of funding.

TO APPLY: Applications are accepted via e-mail to the address below. The application must include a letter of application, curriculum vitae, list of publications, and three letters of reference*. Documents/materials must be submitted as PDF files.

Apply by e-mail response to jkubby@soe.ucsc.edu

*All letters will be treated as confidential per University of California policy and California state law. For any reference letter provided via a third party (i.e., dossier service, career center), direct the author to UCSC's confidentiality statement at <http://apo.ucsc.edu/confstm.htm>.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, or protected veteran status. UC Santa Cruz is committed to excellence through diversity and strives to establish a climate that welcomes, celebrates, and promotes respect for the contributions of all students and employees.