UNIVERSITY OF CALIFORNIA, DAVIS

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF MICROBIOLOGY & MOLECULAR GENETICS
COLLEGE OF BIOLOGICAL SCIENCES
TELEPHONE: (530) 752-0261
FAX: (530) 752-9014

ONE SHIELDS AVENUE
DAVIS, CALIFORNIA 95616

Postdoctoral position in genetic analysis of plant and nitrogen-fixing cyanobacterial symbiotic signaling pathways

A Postdoctoral position is available on or after January 1, 2019, and renewal for up to four years, in the Department of Microbiology and Molecular Genetics, College of Biological Sciences, UC Davis.

We are seeking a highly motivated, independent, colleague with training in plant and/or microbial molecular genetics to determine, first using transcriptomics, whether the common plant symbiotic signaling pathway, or a unique bryophyte-cyanobacterium-specific pathway operates in the *Anthoceros-Nostoc* symbiosis. This study will provide the foundation for the potential engineering of cereal plant-nitrogen-fixing associations.

A successful candidate should have the following credentials and skills:

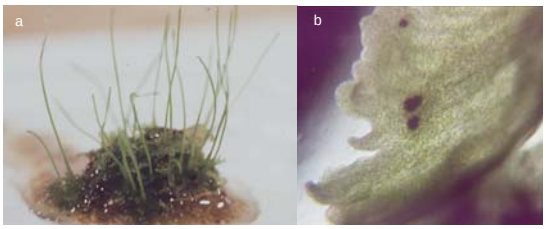
- A Ph.D. in Plant or Microbial Molecular Biology, Genetics, Biochemistry, or Biology
- Excellence in *in vitro* DNA and RNA manipulation
- Adaptable to alteration of experimental approaches and systems
- Ability to positively interact with laboratory, departmental, institutional and intercollegiate colleagues

Candidates with the following laboratory skills are highly desired:

- Design, construction and application of Crisper/Cas genome editing in plant tissue
- Experience in analysis of large omic data bases

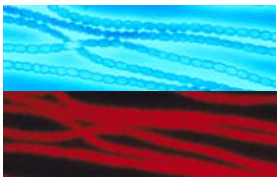
Applications can be sent by email to Dr. John (Jack) Meeks (jcmeeks@ucdavis.edu). Please include a cover letter, including a research summary and career goals, curriculum vitae and names and contact information of up to 3 references.

Plant (*Anthoceros*) and cyanobacterial (*Nostoc*) experimental systems.

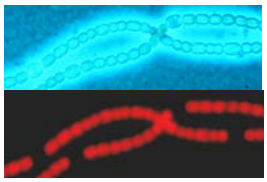


Cluster of the hornwort *Anthoceros punctatus* gametophyte thalli with sporophytes

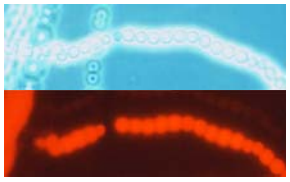
Nostoc punctiforme colonies in gametophyte tissue



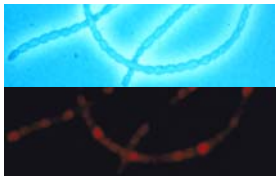
vegetative filaments showing red autofluorescence



filaments with nitrogen-fixing hetero-cysts that lack autofluorescence



filament of autofluorescent spores or resting cells



motile hormogonium filaments that have lower autofluorescence