Junior Specialist
Cherr Lab

POSITION ANNOUNCEMENT

The Environmental Toxicology laboratory at the Bodega Maine Laboratory (BML), under the direction of Prof. Gary Cherr, is seeking candidates for the position for a Junior Specialist for up to two years maximum. See detailed Position Description below. Qualified candidates may now apply for Job #JPF01874 here: https://recruit.ucdavis.edu/apply/JPF01874. Closing date is October 13, 2017.

Position Description

We are seeking a highly motivated and enthusiastic individual to conduct research on the effects of nanomaterials in the marine environment.

Nanomaterials are a class of emerging contaminants that are currently in use in a wide variety of applications, from consumer products, to medical applications, to industrial processes. The environmental implications of these diverse materials are a topic of active research. Additional research is required to better understand the fate, toxicity, and complex interactions of nanomaterials in the marine environment.

Research

The successful candidate will conduct research under the supervision of the laboratory’s faculty and academic research staff, examining the morphological and cellular effects of nanomaterials on adult and embryonic marine organisms. The candidate will conduct directed research and assist in design of one or more of the following projects:

- the effects of copper nanomaterials on the immune system of mussels;
- the effects of copper nanomaterials on gene expression during embryonic skeletogenesis in sea urchins;
- the interaction of ocean acidification and copper nanomaterials in sea urchin toxicity;
- the intracellular fate of copper nanomaterials in mussel immune cells; and other projects as needed in the lab.

The candidate will have a strong background in developmental biology and toxicology, as well as experience working with nanomaterials. The candidate will have strong problem-solving and communication skills, as well as the ability to work independently and as part of a team. The candidate is expected to be able to analyze data and graphically display these data. The candidate is expected to contribute to publications as a creative contributor and will be included as an author as appropriate. The selected candidate should be familiar with the published literature and be able to bring relevant information from other publications into both experimental design and eventually manuscript preparation.

Professional Competence

The candidate is expected to attend and possibly present findings at technical and society meetings in the field of marine toxicology.

University and Public Service

The candidate is expected to be involved in university and public service which includes educational activities to the public at the UC Davis Bodega Marine Laboratory and on campus at Picnic Day, as well as presentations to regulatory agency staff as requested. The candidate is also expected to be occasionally involved in educational outreach with K-12 groups at the Laboratory.
Basic qualifications:
- Bachelor degree in biology, cell biology, toxicology, marine science, or related field
- Strong organizational skills.
- Excellent communication skills.
- Experience in Word and Excel or other appropriate computer programs to organize, summarize and analyze data.
- Proficiency in both written and verbal English.
- Must have experience conducting research in a marine laboratory
- Must have experience with developmental toxicity testing in marine organisms, including spawning of marine organisms
- Must have experience assessing development in sea urchins and molluscs
- Must have experience working with nanomaterials, and knowledge of the environmental applications and impacts of nanomaterials in marine and aquatic environments
- Knowledge of the environmental application and impacts of nano-CuO based paints
- Must have previously conducting experiments examining the effects of ocean acidification on invertebrate embryos and larvae
- Must have experience using fluorescence microscopy with intracellular probes
- Must have familiarity with gene expression during sea urchin embryonic skeletal development
- Must have familiarity with techniques for examining gene expression, RNA extraction, and in situ hybridization

Preferred qualifications:
- Experience conducting research in environmental science.
- Experience with animal care.
- Experience collecting analytics from metals and pesticides in the field
- Experience managing a team.