

**** M.S. Assistantship, modeling climate effects for fisheries stock assessment ****

**** Advisor: Gavin Fay, University of Massachusetts Dartmouth ****

I am seeking an outstanding M.S. student to begin graduate research in the Fay lab in the Department of Fisheries Oceanography at the University of Massachusetts Dartmouth's School for Marine Science and Technology (SMAST), starting as early as September 2015.

The successful candidate will work as part of a new NOAA-funded project, focused on understanding the implications of choosing alternative models for climate effects in stock assessments for flatfish in the Gulf of Alaska. The student will work closely with collaborators at NOAA Fisheries Alaska Fisheries Science Center (AFSC), the University of Washington, and the International Pacific Halibut Commission. As part of the assistantship, the student will spend a summer in Seattle working at the AFSC with project co-PI Dr. Carey McGilliard.

At the Fay lab, our research focuses on developing, testing, and applying a range of statistical and modeling methods for the assessment and management of living marine resources. We currently work on marine fisheries, protected marine species, and at whole-of-system scales to improve and evaluate the methods used to provide scientific advice to decision makers about the likely consequences of management actions.

**** Qualifications ****

Students will have (or will have completed prior to start) an undergraduate degree in fisheries, ecology, applied mathematics, or a related field. Excellent written and oral communication abilities are required. Useful quantitative skills include mathematics, statistics, and computer programming. The ideal candidate will have completed undergraduate coursework in ecological modeling and have experience using statistical software such as R.

Students will be enrolled through the University of Massachusetts Intercampus Marine Science (IMS) Program. Successful applicants to the IMS program will generally have completed an undergraduate or graduate degree with a GPA of 3.00 or better. They will also have an undergraduate major in one of the basic scientific disciplines or engineering, or will have strong multidisciplinary training with completion of at least six semesters of coursework in the natural sciences, generally to include biology, chemistry, and/or physics. Preparation in mathematics at least through integral calculus is strongly encouraged.

**** Application procedure ****

Interested applicants should email Dr. Fay (gfay@umassd.edu) with a single pdf containing a cover letter describing their motivation and research interests, current CV, university transcripts (unofficial or official), GRE scores, and contact information for at least three professional references.

Qualified candidates will be contacted directly and encouraged to submit a full application to the IMS graduate program.

The position could start as early as September 2015 with guaranteed funding for two years. Position comes with an annual stipend of \$20,500 with health insurance and tuition waiver.

For more information about the lab's research and SMAST see www.thefaylab.com and www.smast.umassd.edu.

**** School for Marine Science and Technology ****

The School for Marine Science and Technology (SMAST), the marine campus of the University of Massachusetts Dartmouth, is located in the state's largest fishing port of New Bedford. The city of New Bedford started as the world's preeminent whaling port in the 1800's, and today ranks second in the country in seafood catch value. Of interest to the marine science community are the nearby New Bedford Harbor and its fishing fleet, as well as close proximity to Buzzards Bay and Massachusetts and Cape Cod Bays, Georges Bank and the deep ocean, as well as Boston and Woods Hole areas.

SMAST offers advanced degree programs focused on interdisciplinary basic-to-applied marine sciences and the development of related innovative technologies. In addition to the scholarly marine science and technology communities, the SMAST mission also emphasizes interaction with regional industry, and government and non-governmental agencies on compelling regional marine-related issues and technological development.

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