Postdoctoral Fellowship Opportunity

We harvest fish in a stochastic environment but commonly used theories on optimal harvest policies do not consider stochasticity. Northwest Atlantic fisheries ecosystems have experienced large changes in various aspects of their productivity in the past several decades and this will continue in the future and also be impacted by global warming trends.

Understanding fish stocks and their productivity is the main focus of the Centre for Fisheries Ecosystems Research (CFER; http://www.mi.mun.ca/centre-for-fisheries-ecosystems-research/) of the Marine Institute of Memorial University of Newfoundland (MUN). The Centre has obtained funding for a postdoctoral fellow who will assist in developing statistical forecast models of the main components of stock productivity based on long time-series of data that have been collected at sea. Another focus is to develop theory to describe how optimal harvest policies (i.e. long term maximum sustainable yield, MSY) are impacted by variable productivity. Applications will involve several Newfoundland fisheries and the project will focus on estimating stochastic MSY reference points.

The successful candidate will conduct research at CFER and MUN under the guidance of Noel Cadigan (CFER) and J Concepción Loredo-Osti (Department of Mathematics and Statistics, MUN) as well as a project steering committee consisting of members from CFER, Dalhousie University, Université Laval, Fisheries and Oceans Canada, and the fishing industry.

The annual salary will be CA$45,000. Teaching opportunities with the Department of Mathematics and Statistics ($4755 per course, limit of 2 courses per year) may be possible. The anticipated start date is January 7, 2013. The fellowship is up to two years in duration conditional on satisfactory performance evaluations. Applicants are required to have a PhD with experience in either of applied stochastic processes, time-series methods, or generalized linear and nonlinear models.

Apply to noel.cadigan@mi.mun.ca. Send a cover letter that summarizes your qualifications and includes the year of your graduation or anticipated graduation. It is important to also include a detailed CV and contact information of three references.