

Post Doctoral Position in Conservation Science

We are seeking a highly motivated and dynamic Postdoctoral Fellow to work with Dr Julia Baum and Dr Tara Martin on a new project “*Prioritizing Threat Management Strategies to Ensure Long-term Resilience of the Fraser River Estuary*”. The Postdoctoral Fellow will be based at the University of Victoria (<http://uvic.ca>) in British Columbia, Canada and will also be associated with CEED (Centre of Excellence for Environmental Decisions; <http://ceed.edu.au>).

Context: Estuaries are amongst the most important and productive ecosystems within marine environments globally. They also are amongst the most at risk. British Columbia’s Fraser River Estuary (FRE) provides valuable goods and services to the people of Canada and abroad. Not least, it is the mouth of the largest salmon-bearing river in the world and home to half of BC’s rapidly expanding urban population. Without timely and effective conservation management, these goods and services are at risk. Water pollution and loss of habitat resulting from industrial and urban development, exploitation of fish stocks, and climate change are a few of the key threats.

Research effort to date in the FRE has focused on identifying its natural assets and their threats. It is now time to focus research on the identification of the key management actions needed to respond to these threats and emerging risks in order to protect and restore the FRE’s natural assets for the long-term. Information on the effectiveness of alternative management actions often is not published, but is the knowledge of experts. Rapid and adaptable decision making in the face of novel risks to natural assets is increasingly reliant on effective methods for combining expert judgment with empirical data. This project will bring together experts in the ecology, sociology, economics and management of estuarine systems and the FRE in particular including those from government, First Nations, industries (fishing, agriculture, forestry), academia and environmental non-government organizations, along with fishers and other nonspecialists with local knowledge. Together these experts, policy makers, and stakeholders will estimate the costs and benefits of alternative management actions. The outcome of this project will be a prospectus for investing in the priority management actions needed to ensure the resilience of the FRE’s natural assets into the future.

Research: The postdoc will undertake a priority threat management assessment to identify the management actions required to abate the key threats to the Fraser River Estuary in order to ensure its long-term resilience. The postdoc will help to organize and lead three workshops with FRE experts and stakeholders, and develop state-of-the-art techniques in conservation decision science to identify the most effective and at the same time, least costly management actions needed to ensure the long-term resilience of the FRE. Importantly, this type of analysis will clarify what can and cannot be achieved for different levels of investment in environmental management

of the estuary. This research builds from conservation decision science pioneered in Dr. Martin's lab.

Position:

§ This position is funded by MEOPAR (<http://meopar.ca>, the Marine Environmental Observation Prediction and Response Network) one of Canada's Networks of Centres of Excellence, and is offered full time, fixed term for two years at CDN\$50,000 per year plus benefits;

§ This position also comes with generous research funds to cover a series of expert elicitation workshops, computer and conference/work travel, as well as a dedicated Research Assistant to assist with supporting the PDFs research and organizing the workshops;

§ The successful candidate will join Dr. Julia Baum's productive collaborative lab at UVic and will work closely with Dr. Tara Martin. Visit the Baum Lab <http://baumlab.weebly.com/> and Martin Conservation Decisions Lab <http://taramartin.org/> for more on their cutting edge conservation research;

§ This position is available to start any time between July 1 and September 1, 2016. The latter is the latest possible start date and candidates must have a completed their PhD degree by the start date.

Applicants should have the following qualifications:

§ A PhD in ecology, environmental studies, oceanography, mathematical biology, or computer science, or other related field;

§ Strong statistical and mathematical modeling skills including demonstrated proficiency with R and/or MatLab, as well as ArcGIS (or related spatial program);

§ Excellent technical, analytical, computer, organizational, and problem-solving skills. Strong attention to detail, and meticulous work style, as evidenced by previous research;

§ Strong interpersonal and communication skills, the ability to work both independently and collaboratively, including developing multi-sector collaborations and leading workshops, as well as the ability to communicate research findings both at professional meetings and in high quality peer-reviewed journals;

§ Excellent time management skills, including the ability to meet project goals in a timely manner, and follow through on projects;

§ An interest in marine ecology, conservation and socio-ecological dynamics

Application: Interested candidates please email Drs. Baum and Martin at baumlabmanager 'at' gmail.com with 'PDF in Conservation Science' in the email subject line, by June 15th 2016 with a cover letter, a statement of research interests and how this postdoctoral fellowship will help you meet your career goals, a CV, and contact details for three referees.