Atkinson-EDF Postdoc Fellow, Resilient Fisheries

*With world attention focused on both the environment and the economy, **Environmental Defense Fund** (EDF) is where policymakers and business leaders turn for win-win solutions. This leading green group, with programs from Boston to Beijing, has tripled in size over the past decade by focusing on strong science, uncommon partnerships and market-based approaches. You can be part of a vibrant workplace that welcomes diverse perspectives, talents and contributions, where innovation and a focus on results are a way of life.*

Program Overview

EDF's Oceans Program seeks to improve the livelihoods and well-being of millions of people who depend on ocean resources while ensuring ocean ecosystems and wildlife are abundant for current and future generations. The program includes a diverse team of global fishery experts and practitioners who develop and apply science-based tools and insights to improve fisheries management. With a focus on fishery management design, markets, policy and science, the team is a recognized leader on the diagnosis of fisheries problems and the implementation of comprehensive solutions. From data collection to implementation, the Oceans Program equips fishermen, fishery managers and other stakeholders with the knowledge, tools and training they need to boost the profitability and sustainability of their fisheries.

In partnership with Cornell University, Environmental Defense Fund seeks a recent Ph.D. to examine the implications of climate change to Iceland's fisheries, and the readiness of Iceland's fishery management system to handle these consequences. The Post-Doctoral Scientist will work with Dr. Kristin Kleisner, Senior Scientist, and Merrick Burden, Director of Resilient Fisheries, at EDF, and Dr. Patrick Sullivan, Professor and Chair, Department of Natural Resources, and Dr. Richard Stedman, Professor, Department of Natural Resources, at Cornell University, for this two year fellowship.

Overall Function

Understanding the factors that promote resilience in fisheries and fishery-dependent societies will be critical for the world's fisheries to remain sustainable in the face of moderate climate change. The Icelandic fisheries management system is already demonstrating resilient responses to system-level changes on social, ecological, and economic dimensions. By identifying empirical factors that help or hinder transformation and adaptation of Icelandic fisheries, we can move beyond conceptual and abstract lessons and move toward an understanding of resilience in operation.

To understand how fisheries-dependent countries like Iceland prepare themselves for climate related impacts, the Fellow will examine the level of climate-related change and variability expected for Icelandic fisheries, including the direction and rate of change in species distribution and abundance in this region, and seek to understand the implications of these forecasted changes. Following this examination, the Fellow will conduct an assessment of how well the fishery management system, and various auxiliary aspects of it, is likely to fare as climate change takes hold. In doing so, the Fellow will be asked to identify key weaknesses and challenges in the system, paying particular attention as to how and whether the management system incorporates attributes of resilience. Collaborating with Cornell and EDF staff, the Fellow will look at these challenges through the lens of resilience to identify factors that can enhance the

resilience of Iceland's fisheries.

The work of the Post-Doctoral Fellow will provide information that can be incorporated into EDF's fisheries intervention efforts so that they foster resilience to climate change. While the project will focus on Iceland, the lessons learned from Iceland can inform the practice of resilience elsewhere and help to evaluate governance and management systems in other parts of the world.

The Fellow will be part of a cohort of Post-Docs and research fellows at EDF and at the Cornell Atkinson Center for a Sustainable Future, and collaborate closely with our research partners at Cornell University. Continued professional development, training and mentoring by EDF & Cornell staff and partners will be provided to familiarize the successful candidate with specific issues, including working at the science/policy interface, the Icelandic fisheries system, climate resilient fisheries management strategies, and the sustainability of coupled human-natural systems, including fisher-based systems.

Key Responsibilities
In collaboration with the project team and scientists in the field, the Post-Doctoral Fellow will:

- Use existing data to identify key relationships between temperature and other oceanographic conditions and fisheries population processes.
- Use existing data and models to emulate and simulate changes to fish stocks in response to climate change.
- Develop an understanding of Iceland's fishery management and governance systems.
- Identify likely impacts of climate change to Iceland's fishery sectors and communities.
- Assess the fishery management challenges posed by climate change.
- Identify fishery management methods and approaches responsive to these challenges, using attributes of resilience as a guiding framework.
- Develop a set of lessons learned that can inform the practice of resilience elsewhere.
- Develop papers for publication in peer-reviewed journals, conference presentations, and other appropriate fora on the topic of resilience and fisheries.

Qualifications
- A recent Ph.D. in a relevant field (e.g., fisheries science, ecology, physical oceanography, natural resource management, etc.).
- Experience with ecosystem processes and ecosystem-based fisheries management.
- Strong quantitative skills, including demonstrated experience and fluency in statistical modeling languages (e.g. R and MATLAB).
- Understanding of fishery management and governance systems.
- Strong written and oral communication skills, as evidenced through publication in the peer reviewed scientific literature and presentations to a variety of audiences.
- Strong skills in critical thinking and analysis.
- An interest in and demonstrated capacity for translating scientific theory into real-world applications and practice.
- Well organized, self-motivated and detail-oriented.
- Ability to work on multiple projects, prioritize and meet deadlines.
- Ability to work both independently and as part of a multidisciplinary team, including with colleagues from different technical and cultural backgrounds, and distributed across multiple geographies.
- Ability and willingness to be flexible and adapt to an evolving area of work.
- Willingness to travel semiregularly (e.g. once per month) domestically and internationally, including regular travel to meet with project partners at Cornell University.

- Experience with leadership of a research project, conducting original research from conception to completion, and presentations at scientific conferences preferred.
- Exposure to key social science elements (e.g. economics, community well-being etc.) of fishery dependence preferred.
- Experience working with climate model outputs and oceanographic datasets preferred.
- This position may require occasional travel to Ithaca, New York, from Boston, Massachusetts.

Location
Boston, MA

Term
This is a 2-year Fellowship.

Application Materials
Interested applicants should attach their cover letter and resume/CV to the EDF application, together with an unofficial transcript, a writing sample, and contact information for three references.

Please apply directly to this position at https://www.edf.org/jobs/internships-fellowships.

Follow the QR code below: