Funding Opportunities for March 1, 2018

Funding for Students and Postdoctoral Researchers

**International Research Scientists Development Award**

The purpose of the International Research Scientist Development Award (IRSDA) is to provide support and protected time (three to five years) to advanced postdoctoral U.S. research scientists and recently-appointed U.S. junior faculty (at least two years beyond conferral of doctoral degree) for an intensive, mentored research career development experience in a low- or middle-income country (LMIC) leading to an independently funded research career focused on global health. FIC invites applications from early-career investigators from any health related discipline who propose career development activities and a research project that is relevant to the health priorities of the LMIC.

*March 7, 2018*

**Dartmouth College: Postdoctoral Fellowship in Ecology and Society**

Dartmouth College. EEES is a diverse community of scholars who conduct innovative research in the natural sciences and interdisciplinary environmental studies, including ecology, evolution, anthropology, economics, governance and geography. We aim to recruit an environmental social scientist whose work is synergistic with our program's strong emphasis on ecology and ecosystem science. High quality candidates will have a strong background in interdisciplinary research, advanced analytical skills and an interest in undergraduate and graduate level education. More specifically, superior candidates will have research interests that complement the program's existing strengths in ecological economics, political ecology and the investigation of social-ecological systems. In addition to developing innovative research projects, postdoctoral fellows are expected to enhance graduate student education and professional development through a seminar series or working group dedicated to developing a collaborative research product. The ideal candidate will be a strong contributing member of the vibrant EEES community at Dartmouth and foster productive discourse both within and beyond the program. Applicants should identify one or more potential faculty mentors from the EEES program. Program website: http://sites.dartmouth.edu/EEES/


*March 16, 2018*

**Schrems West Michigan Trout Unlimited Graduate Fellowship**

Michigan State University graduate students are invited to apply for a Schrems West Michigan Trout Unlimited (SWMTU) Graduate Fellowship, up to $3,400, administered by the MSU Graduate School. This fellowship was established in 1987 by Sis Schrems, whose husband, Cornelius "Cornie" Schrems, was a founding member of Trout Unlimited. The goal of the fellowship is to engage MSU graduate students in conducting research that will have an impact on enhancing, protecting and preserving Michigan's coldwater fisheries and streams resources. Applications for this graduate fellowship are due by Monday, March 19, 2018 to Dr. Bill Taylor at taylorw@msu.edu. Applicants must be enrolled as a graduate student at MSU, in good standing, and working on coldwater fisheries or streams as part of their thesis or dissertation. Additionally, the applicant must demonstrate a dedication to trout fishers and have excellent academic credentials, evidence of leadership abilities, the ability to communicate to the public, and to effectively solve problems. The application information required for this nomination includes the following: Cover letter which states
education and career goals as they relate to the mission of Trout Unlimited and the Schrems Chapter. A CV detailing academic and personal experiences. Detailed description of the research being investigated related to Michigan's coldwater fisheries or their streams. Letter of recommendation from the student’s advisor. For more information, please contact: William W. Taylor, Ph.D. University Distinguished Professor in Global Fisheries Systems Department of Fisheries and Wildlife Center for Systems Integration and Sustainability Michigan State University 115 Manly Miles Building 1405 S. Harrison Rd. East Lansing, MI 48823, USA taylorw@msu.edu

March 19, 2018


Michigan State University graduate students engaged in international fisheries, water, or wildlife-related research in the vein of knowledge of coupled human and natural systems are invited to apply for fellowships, up to $5,000, through The William W. and Evelyn M. Taylor Endowed Fellowship for International Engagement in Coupled Human and Natural Systems. This fellowship was established by William W. Taylor and his wife, Evelyn. William Taylor, who currently is a University Distinguished Professor in the Center for Systems Integration and Sustainability, served as Chairperson of the Department of Fisheries and Wildlife from 1992-2008. The goal of the endowment is to provide opportunities for fisheries and wildlife-related graduate students to significantly engage in understanding the scientific and cultural challenges and opportunities dealing with coupled human and natural systems at the global level. Applications for this graduate fellowship are due Monday, March 19, 2018. The application information (below) may be sent to Jennifer Carducci at carducci@anr.msu.edu. Please include "Fellowship Application" in the Subject Line. Qualification Criteria (the Scholarship is awarded based on the following): General: Academic Achievement Leadership Academic Level/Class: Graduate 1. Recipients must be enrolled as graduate students at MSU and performing research related to sustainability of fish, wildlife, or water resources using a coupled human and natural systems approach 2. Recipients must a. Have demonstrated academic excellence b. Articulate their commitment to research goals well matched to the fellowship showing evidence of leadership abilities and the capacity to make a distinctive professional or scholarly contribution c. Contribute to a diverse educational community, as evidence in personal history and experience, research goals, or the promotion of understanding among persons of different backgrounds and ideas 3. Applicants must write a reflective essay (no more than 3 single-spaced pages) that describes the individual's leadership skills, persistence, compassion, adaptability, flexibility, and appreciation/respect for multi-cultural experiences. In addition, this essay should include: a. The activities planned and expected outcomes of their engagement and importance of their work in a global context b. The applicant's unique qualifications for pursuing their chosen topic of research and engagement c. The applicant's career goals after graduation d. The applicant's plan for international engagement after the fellowship e. The applicant's plan for sharing their experiences with others; particularly with the policy makers and the public 4. Letter of support from host country mentor and agency 5. Letter of support from major professor at MSU

March 19, 2018

Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (Parent F31)- PA-18-671

The purpose of the Kirschstein-NRSA predoctoral fellowship (F31) award is to enable promising predoctoral students to obtain individualized, mentored research training from outstanding faculty sponsors while conducting dissertation research in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers. The proposed mentored research training must reflect the applicants dissertation research project and is expected to clearly enhance the
individuals potential to develop into a productive, independent research scientist. This Funding Opportunity Announcement (FOA) is designed specifically for applicants proposing research that does not involve leading an independent clinical trial, a clinical trial feasibility study, or an ancillary study to a clinical trial, but does allow applicants to propose research experience in a clinical trial led by a sponsor or co-sponsor.

Jan. 7, 2021

Funding for Faculty

Tinker Foundation: Sustainable Resource Management in Latin America
The Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW) is a scientific prize with a focus on innovation. It rewards the efforts made by scientists, inventors and research organizations around the world which contribute to the sustainable availability of potable water and the alleviation of the escalating global problem of water scarcity. There are four prizes: Surface Water Prize, Groundwater Prize, Alternative Water Resources Prize, and Water Management & Protection Prize. Researchers, research teams, and organizations nominate themselves.

March 1, 2018

NOAA-OAR-CPO-2018-2005445 Climate and Societal Interactions
The overall objectives of the CSI portfolio are the following: 1. Support innovative, applicable, and transferable approaches for decision making, especially for risk characterization in the context of a variable and changing climate; 2. Establishment of a network of regionally scoped, long-term efforts to inform climate risk management and decision making; and 3. Promotion of the transfer of climate knowledge, tools, products, and services within NOAA, across the federal government, nationally, and internationally. These objectives are pursued through four complementary, interdisciplinary research programs: the Regional Integrated Sciences and Assessment (RISA) Program; the International Research and Applications Project (IRAP); the Sectoral Applications Research Program (SARP); and the Coastal and Ocean Climate Applications program (COCA). RISA supports research teams that conduct innovative, interdisciplinary, user-inspired, and regionally relevant research that informs resource management, planning, and public policy. IRAP supports activities to link science and assessments to practical risk management challenges in regions where weather and climate affect U.S. interests at home and abroad. COCA supports interdisciplinary applications research on the impacts of climate variability and change on coastal communities and coastal and marine ecosystems to inform decision making. SARP addresses the needs of a specific stakeholder or set of stakeholders within key socioeconomic sectors (e.g., water resources, agriculture, health, etc.) grappling with pressing climate-related issues. The FY18 SARP competitions was published in the CPO FFO in May 2017. CSI is an active partner in NOAA’s efforts to enhance and support services. This partnership brings together NOAA Regional Climate Services Directors (RCSDs), other NOAA service line offices, and close external partners such as RISA teams, Regional Climate Centers, State Climatologists, Sea Grant and other U.S. Government agencies to help make weather and climate information and products relevant, accessible and actionable to people across the U.S. CSI activities address the societal challenges identified in NOAA’s Next-Generation Strategic Plan (NGSP): i) climate impacts on water resources; ii) coasts and climate resilience; iii) sustainability of marine ecosystems; and iv) changes in the extremes of weather and climate

March 16, 2018
USDA-FAS-MCGOVERN-DOLE-18 McGovern-Dole International Food For Education and Child Nutrition Program
The McGovern-Dole International Food for Education and Child Nutrition (McGovern-Dole) program supports feeding of school-aged children, reduces hunger, promotes literacy (especially for girls), promotes food security and enhances nutrition for mothers and their children in low-income, food-deficit countries committed to education and school meals. The program provides U.S. commodities and financial and technical assistance to achieve these goals. While McGovern-Dole projects are typically funded for five years, all projects in this announcement will be funded subject to availability of a fiscal year 2018 budget for McGovern-Dole.

March 30, 2018

U.S. Department Of Agriculture - Natural Resources Conservation Service (NRCS), Commodity Credit Corporation (CCC) is announcing the availability of CIG to stimulate the development and adoption of innovative conservation approaches and technologies. Applications will be accepted from eligible entities for projects carried out in the state of Michigan. A total of up to $225,000 is available for CIG in FY 2018. All non-Federal entities (NFE) and individuals are invited to apply, with the sole exception of Federal agencies. Projects may be between one and three years in duration. The maximum award amount for a single award in FY 2018 is $75,000. The purpose of CIG is to stimulate the development and adoption of innovative conservation approaches and technologies in conjunction with agricultural production. CIG projects are expected to lead to the transfer of conservation technologies, management systems, and innovative approaches (such as market-based systems) to agricultural producers, into NRCS technical manuals and guides, or to the private sector. CIG generally funds pilot projects, field demonstrations, and on-farm conservation research.

On-farm conservation research is defined as an investigation conducted to answer a specific applied conservation question using a statistically valid design while employing farm-scale equipment on farms, ranches or private forest lands.

Apr 13, 2018

Dear Colleague Letter: Signals in the Soil (SitS) NSF 18-047
The National Science Foundation (NSF) Directorate for Engineering (ENG) in collaboration with its Directorates for Biological Sciences (BIO), Computer and Information Science and Engineering (CISE), and Geosciences (GEO), aims to encourage convergent research that transforms existing capabilities in understanding dynamic near-surface processes through advances in sensor systems and dynamic models. The goal of this Dear Colleague Letter (DCL) is to encourage submission of Early-Concept Grants for Exploratory Research (EAGER) proposals for early-stage, high-risk, high-reward research on technologies, models, and methods to better understand dynamic soil processes, including interactions of the macro- and microbiomes with soil nutrients, the rhizosphere, and various abiotic and biotic processes within the soil. In addition, for proposals that include topics relevant to both this DCL and the NSF "Rules of Life" Big Idea, submissions of Research Advanced by Interdisciplinary Science and Engineering (RAISE) proposals are encouraged. Researchers who are interested in submitting a SitS EAGER or RAISE proposal must first submit a SitS Research Concept Outline, as described below. Selected submitters of these Outlines will be invited to submit full EAGER or RAISE proposals for funding consideration.

April 13, 2018

Alfalfa and Forage Research Program (AFRP)- USDA-NIFA-OP-006532
The Alfalfa and Forage Research Program (AFRP) for fiscal year (FY) 2018 to increase yields and quality; improve harvest and storage systems; develop methods to estimate forage yield and quality
to support marketing and reduce producer risks; explore new and novel uses for alfalfa; and conduct life cycle analysis to enhance field to market opportunities.

April 18, 2018

**Fiscal Year 2018 Chesapeake Bay Fisheries Research Program- NOAA-NMFS-NCBO-2018-2005524**
The NOAA Chesapeake Bay Office (NCBO) provides technical assistance in (1) identifying science-based management options for restoration and protection of living resources and their habitats; (2) monitoring and assessing the status of living resources and their habitats; and, (3) evaluating the effectiveness of management plan implementation. For FY 2018, it is anticipated that up to approximately $500,000 could be made available for projects that address funding priorities identified in the Program Priority Section (I.B.) NCBO encourages projects that are collaborative, interdisciplinary, and will leverage other resources. Preference will be given to projects with clear management application. An informational webinar about the FY 2018 Chesapeake Bay Fisheries Research Program funding announcement will be held on March 2, 2018 at 1:00 PM Eastern Time. To register for the webinar, visit the "Hot Topic" article about this grant announcement on the NOAA Chesapeake Bay Office Homepage: http://go.usa.gov/xKth5

April 26, 2018

OAR’s Office of Weather and Air Quality (OWAQ) is soliciting proposals to support research and development that has a strong potential for advancing the use of snowpack (snow water equivalent) and soil moisture remote sensing data to improve the National Water Model (NWM) and contribute directly to the mission of NOAA’s National Water Center over the next 1 to 2 years.

April 26, 2018

**Desalination and Water Purification Research Program for Fiscal Year 2018 - BOR-DO-18-F002**
This Funding Opportunity Announcement’s (FOA) objective is to invite private industry, universities, water utilities, and other research sponsors to submit proposals to cost share laboratory scale and pilot scale projects that address DWPR program goals and objectives. Funding Group I: Laboratory scale projects are typically bench scale studies involving small flow rates (less than 2 gallons per minute). They are used to determine the viability of a novel process, new materials, or process modifications. Research at this stage often involves a high degree of risk and uncertainty. Funding Group II: Pilot scale projects test a novel process at a sufficiently large scale to determine the technical, practical, and economic viability of the process and are generally preceded by laboratory studies (funded previously by DWPR or others) that demonstrate that the technology works.

May 1, 2018

**Dear Colleague Letter: Stimulating Research Related to Navigating the New Arctic (NNA), One of NSF’s 10 Big Ideas NSF 18-048**
This Dear Colleague Letter (DCL) invites proposals in FY 2018 that will advance NNA research through convergent approaches to emerging scientific, engineering, societal, and education challenges, and builds upon the NNA awards resulting from the FY 2017 DCL on Growing Convergence Research at NSF. A systems-based approach is strongly encouraged, including research that both contributes to, and leverages, large data sets from enhanced observational technology and networks. Knowledge co-production with local and indigenous communities, advancing public participation in research, and international partnerships are also strongly encouraged as possible means to achieve NNA objectives.

May 1, 2018
Crop Protection and Pest Management Competitive Grants Program- USDA-NIFA-CPPM-006536
The purpose of the Crop Protection and Pest Management program is to address high priority issues related to pests and their management using IPM approaches at the state, regional and national levels. The CPPM program supports projects that will ensure food security and respond effectively to other major societal pest management challenges with comprehensive IPM approaches that are economically viable, ecologically prudent, and safe for human health. The CPPM program addresses IPM challenges for emerging issues and existing priority pest concerns that can be addressed more effectively with new and emerging technologies. The outcomes of the CPPM program are effective, affordable, and environmentally sound IPM practices and strategies needed to maintain agricultural productivity and healthy communities.
May 8, 2018

Humans, Disasters, and the Built Environment
The Humans, Disasters and the Built Environment (HDBE) program supports fundamental, multidisciplinary research on the interactions between humans and the built environment within and among communities exposed to natural, technological and other types of hazards and disasters. The program's context is provided by ongoing and emerging changes in three interwoven elements of a community: its population, its built environment (critical infrastructures, physical and virtual spaces, and buildings and related structures) and the hazards and disasters to which it is exposed. The HDBE program seeks research that integrates these elements and that can contribute to theories that hold over a broad range of scales and conditions. Examples include but are not limited to unified frameworks and theoretical models that encompass non-hazard to extreme hazard and disaster conditions, theoretical and empirical studies that consider how interactions between a community's population and its built environment may suppress or amplify hazard exposure or its effects, and studies that seek to inform scholarship through the development of shared data and related resources. In these and other areas funded through the HDBE program, research that challenges conventional wisdom on the interactions among humans, the built environment and hazards and disasters is particularly encouraged. Given the richness of the phenomena under study, the HDBE program seeks research that advances theories, methods and data within and across diverse disciplines, whether in engineering, the social sciences, computing or other relevant fields. Ultimately, research funded through this program is expected to inform how communities can cultivate and engage a broad range of physical, social and other resources to ensure improved quality of life for their inhabitants.
Sept. 17, 2018

Great Lakes Restoration Initiative, Partners for Fish and Wildlife 2018- F18AS00051
The Great Lakes Restoration Initiative targets the most significant environmental problems in the Great Lakes ecosystem by funding and implementing federal projects that address these problems. One goal is to improve habitat and wildlife protection and restoration. Using appropriations from the Great Lakes Restoration Initiative, the U.S. Fish and Wildlife Service (Service), Partners for Fish and Wildlife (PFW) Program anticipates funding wetland (both coastal and interior) and associated upland habitat restoration and enhancement projects for conservation of native Great Lakes fish and wildlife populations, particularly migratory birds and, as appropriate, federally-listed species. Restoration projects will be completed on privately owned (non-federal/non-state) lands. Emphasis will be placed on, but not limited to, completing projects within the watersheds of Great Lakes Areas of Concern and in coastal zones. The PFW Program is a voluntary, incentive-based program that provides direct technical assistance and financial assistance in the form of cooperative agreements to private landowners to restore and conserve fish and wildlife habitat for the benefit of federal trust resources. In the Great Lakes watershed, PFW biologists from eight states coordinate with project
partners, stakeholders, and other Service programs to identify geographic focus areas and develop habitat conservation priorities within these focus areas. Geographic focus areas are where the PFW Program directs resources to conserve habitat for federal trust species. Project work plans are developed strategically, in coordination with partners, and with substantial involvement from Service field staff. Projects must advance our mission, promote biological diversity, and be based upon sound scientific biological principles. Program strategic plans inform the types of projects funded under this opportunity. Applicants seeking funding under this program should review the program strategic plan and also contact the PFW state coordinator PRIOR TO submitting an application for funding.

Sept. 30, 2018

Energy for Sustainability
The Energy for Sustainability program is part of the Chemical Process Systems cluster, which includes also 1) Catalysis; 2) Process Separations; and 3) Process Systems, Reaction Engineering, and Molecular Thermodynamics. The goal of the Energy for Sustainability program is to support fundamental engineering research that will enable innovative processes for the sustainable production of electricity and fuels, and for energy storage. Processes for sustainable energy production must be environmentally benign, reduce greenhouse gas production, and utilize renewable resources. Research projects that stress molecular level understanding of phenomena that directly impacts key barriers to improved system level performance (e.g. energy efficiency, product yield, process intensification) are encouraged. Proposed research should be inspired by the need for economic and impactful conversion processes. All proposals should include in the project description, how the proposed work, if successful, will improve process realization and economic feasibility and compare the proposed work against current state-of-the-art. Highly integrated multidisciplinary projects are encouraged.

Oct. 22, 2018

Environmental Engineering
The Environmental Engineering program is part of the Environmental Engineering and Sustainability cluster, which includes also 1) Environmental Sustainability; and 2) Biological and Environmental Interactions of Nanoscale Materials. The goal of the Environmental Engineering program is to support transformative research which applies scientific and engineering principles to avoid or minimize solid, liquid, and gaseous discharges, resulting from human activities on land, inland and coastal waters, and air, while promoting resource and energy conservation and recovery. The program also fosters cutting-edge scientific research for identifying, evaluating, and monitoring the waste assimilative capacity of the natural environment and for removing or reducing contaminants from polluted air, water, and soils. Any proposal investigating sensors, materials or devices that does not integrate these products with an environmental engineering activity or area of research may be returned without review.

Oct. 22, 2018

Environmental Chemical Sciences
The Environmental Chemical Sciences (ECS) Program supports experimental and computational research on the fundamental chemistry of processes in the environment. Recognizing the intrinsic complexity and heterogeneity of environmental systems, projects develop and utilize advanced experimental, modeling and simulation approaches to discover, explain, and predict environmental phenomena. Topics may include, but are not limited to: processes occurring at environmental interfaces and the chemical behavior and transformation under a variety of naturally occurring environmental conditions. Submissions that address national needs for sustainability are particularly encouraged. Examples of sustainable chemistry appropriate for the ECS Program include, but are
not limited to: proposals that consider the nexus of food, energy, and water sustainability especially as related to nitrogen and phosphorus cycling. Field measurements and instrument development in support of environmental measurements are not supported. Programs in other NSF Directorates and other Federal Agencies address aspects such as field studies, large-scale models of the environment, toxicity studies, industrial processes, remediation methods, and the behavior and fate of nanoparticles in the environment.

Oct. 31, 2018

Energy, Power, Control, and Networks (EPCN)
Recent advances in communications, computation, and sensing technologies offer unprecedented opportunities for the design of cyber-physical systems with increased responsiveness, interconnectivity and automation. To meet new challenges and societal needs, the Energy, Power, Control and Networks (EPCN) Program invests in systems and control methods for analysis and design of cyber-physical systems to ensure stability, performance, robustness, and security. Topics of interest include modeling, optimization, learning, and control of networked multi-agent systems, higher-level decision making, and dynamic resource allocation as well as risk management in the presence of uncertainty, sub-system failures and stochastic disturbances. EPCN also invests in adaptive dynamic programming, brain-like networked architectures performing real-time learning, and neuromorphic engineering. EPCN supports innovative proposals dealing with systems research in such areas as energy, transportation, and nanotechnology. EPCN places emphasis on electric power systems, including generation, transmission, storage, and integration of renewables; power electronics and drives; battery management systems; hybrid and electric vehicles; and understanding of the interplay of power systems with associated regulatory and economic structures and with consumer behavior. Also of interest are interdependencies of power and energy systems with other critical infrastructures. Topics of interest also include systems analysis and design for energy scavenging and alternate energy technologies such as solar, wind, and hydrokinetic. The program also supports innovative tools and test beds, as well as curriculum development integrating research and education. In addition to single investigator projects, EPCN encourages cross-disciplinary proposals that benefit from active collaboration of researchers with complementary skills. Proposals for the EPCN program may involve collaborative research to capture the breadth of expertise needed for such multidisciplinary integrative activities. ECCS will consider supporting a limited number of small team proposals of three or more Investigators from different disciplines and/or universities.

Nov. 1, 2018

Arctic Natural Sciences NSF 16-595
The Arctic Natural Sciences (ANS) Program supports disciplinary and interdisciplinary research related to arctic processes, with particular emphasis on understanding the changing arctic environment. The Program encourages proposals that test hypotheses leading to new understanding of the Arctic and the development of predictive tools. Although proposals to perform monitoring per se are discouraged, the program welcomes proposals that synthesize and analyze historical data

Proposals Accepted Anytime