2019

# ORDA Weekly Update, 2019 02 18

Office of Research Development and Administration

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**Office of Research Development and Administration**

**Events & Deadlines**

**February 18, 2019**

**Workshops**

Logistic Regression Using SPSS

Tuesday, February 19

1:00-2:00pm; G11 Halle Library

Logistic regression is used when the predicted variable is dichotomous. The interpretation of the results differs from multiple regression. This is a hands-on introduction on how to carry out and interpret results of logistic regression.

Introduction to R, Part 2

Rescheduled: Thursday, February 21

1:00-2:30pm; 200 Boone Hall

R is a popular, free computing/graphing tool for data analysis. This workshop will give a hands-on introduction of basic computing with R.  Bring your own laptop.

**Deadlines**

National Endowment for the Humanities, Institutes for Advanced Topics in the Digital Humanities

The Institutes for Advanced Topics in the Digital Humanities (IATDH) program supports national or regional (multistate) training programs for scholars, humanities professionals, and advanced graduate students to broaden and extend their knowledge of digital humanities. Through this program NEH seeks to increase the number of humanities scholars and practitioners using digital technology in their research and to broadly disseminate knowledge about advanced technology tools and methodologies relevant to the humanities.

https://www.neh.gov/grants/odh/institutes-advanced-topics-in-the-digital-humanities

Next Deadline: March 26, 2019

Department of Education, Education Innovation and Research Competitions

The Education Innovation and Research (EIR) Program, established under section 4611 of the Elementary and Secondary Education Act (ESEA), as amended by Every Student Succeeds Act (ESSA), provides funding to create, develop, implement, replicate, or take to scale entrepreneurial, evidence-based, field-initiated innovations to improve student achievement and attainment for high-need students; and rigorously evaluate such innovations. The EIR program is designed to generate and validate solutions to persistent educational challenges and to support the expansion of effective solutions to serve substantially larger numbers of students. There are three types of grants under this program: "Early-phase" grants, "Mid-phase" grants, and "Expansion" grants.  These grants differ in terms of the level of prior evidence of effectiveness required for consideration for funding, the expectations regarding the kind of evidence and information funded projects should produce, the level of scale funded projects should reach, and, consequently, the amount of funding available to support each type of project.

https://innovation.ed.gov/what-we-do/innovation/education-innovation-and-research-eir/

Next Deadline: LOI February 21, 2019; Applications April 2, 2019

Michigan Health Endowment Fund, Nutrition and Healthy Lifestyles

Michigan boasts one of the most agriculturally diverse economies in the country, yet our rate of food insecurity is higher than the national average. Poor nutrition and a lack of physical activity contribute to the prevalence of

childhood obesity, which can in turn lead to a host of chronic health issues and other challenges, from diabetes to poor academic performance. Moreover, low-income communities are often disproportionately affected, leaving too many already disadvantaged young people even further behind. The Health Fund's Nutrition and Healthy Lifestyles program is committed to improving health outcomes for Michiganders by reducing the barriers to living a healthy life. We support programs that bring nutrition and physical activity into schools, create fresh food pipelines, and make healthy lifestyles more accessible to seniors, children, and their families.

https://www.mihealthfund.org/wp-content/uploads/2019/02/HealthFund_2019NutritionRFP.pdf

Next Deadline: Optional concept papers February 25, 2019; Applications April 10, 2019

National Science Foundation, Harnessing the Data Revolution: Transdisciplinary Research in Principles of Data Science Phase I

*Harnessing the Data Revolution: Transdisciplinary Research In Principles Of Data Science* (HDR TRIPODS) aims to bring together the electrical engineering, mathematics, statistics, and theoretical computer science communities to develop the theoretical foundations of data science through integrated research and training activities. Phase I, described in this solicitation, will support the development of small collaborative Institutes. Phase II (to be described in an anticipated future solicitation, subject to availability of funds) will support a smaller number of larger Institutes, selected from the Phase I Institutes via a second competitive proposal process. All HDR TRIPODS Institutes must involve significant and integral participation by researchers representing at least three of the four aforementioned communities. Please note that the ordering of the four communities is alphabetical and is not meant to emphasize any one discipline over another.

https://www.nsf.gov/pubs/2019/nsf19550

Next Deadline: Required Letter of Intent due March 25, 2019; Proposals due April 24, 2019

National Science Foundation, Growing Convergence Research

**Growing Convergence Research (GCR)** at the National Science Foundation was identified as one of 10 Big Ideas. Convergence research is a means for solving vexing research problems, in particular, complex problems focusing on societal needs. It entails integrating knowledge, methods, and expertise from different disciplines and forming novel frameworks to catalyze scientific discovery and innovation.

GCR identifies  <u>Convergence Research</u>  as having two primary characteristics:

- *Research driven by a specific and compelling problem.* Convergence Research is generally inspired by the need to address a specific challenge or opportunity, whether it arises from deep scientific questions or pressing societal needs.
- *Deep integration across disciplines.* As experts from different disciplines pursue common research challenges, their knowledge, theories, methods, data, research communities and languages become increasingly intermingled or integrated. New frameworks, paradigms or even disciplines can form sustained interactions across multiple communities.

A distinct characteristic of convergence research, in contrast to other forms of multidisciplinary research, is that from the inception, the convergence paradigm *intentionally* brings together intellectually diverse researchers and stakeholders to frame the research questions, develop effective ways of communicating across disciplines and sectors, adopt common frameworks for their solution, and, when appropriate, develop a new scientific vocabulary. Research teams practicing convergence aim at developing sustainable relationships that may not only create solutions to the problem that engendered the collaboration, but also develop novel ways of framing related research questions and open new research vistas.

https://www.nsf.gov/pubs/2019/nsf19551

Next Deadline: May 8, 2019

National Science Foundation, Improving Undergraduate STEM Education, Computing in Undergraduate Education

Increasingly, undergraduate computer science (CS) programs are being called upon to prepare larger and more diverse student populations for careers in both CS and non-CS fields, including careers in scientific and non-scientific disciplines. Many of these students aim to acquire the understandings and competencies needed to learn how to use computation collaboratively across different contexts and challenging problems. However, standard CS course sequences do not always serve these students well. With this solicitation, NSF will support teams of Institutions of Higher Education (IHEs) in re-envisioning the role of computing in interdisciplinary collaboration within their institutions. In addition, NSF will encourage partnering IHEs to use this opportunity to integrate the study of ethics into their curricula, both within core CS courses and across the relevant interdisciplinary application areas.

https://www.nsf.gov/pubs/2019/nsf19546

Next Deadline: May 9, 2019

National Science Foundation, Production Engineering Education and Research

The National Science Foundation (NSF) and The Boeing Company are supporting a new initiative, managed and administered by NSF through its EHR Core Research (ECR) program, to accelerate training in critical skill areas for the Nation's engineering and advanced manufacturing workforce. The *EHR Core Research: Production Engineering Education and Research* (ECR: PEER) initiative supports foundational research arising from the design, development, and deployment of creative online curricula that provide learners at various levels with skills in five focal areas: model-based systems engineering, software engineering, mechatronics, data science, and artificial intelligence. ECR: PEER invites proposals to design, develop, deploy, and study the effectiveness of online courses in any one of these focal areas using the theories and tools of the learning sciences. Proposals for these ECR: PEER *Course, Curriculum, and Evaluation* projects may request a maximum of $2,000,000 support for a duration of up to three years. Additionally, ECR: PEER welcomes proposals to convene experts in the academic, for-profit, and non-profit sectors to imagine the future of production engineering education for one of the five focal areas. Proposals for these ECR: PEER *Workforce Development Workshops* may request a maximum of $100,000 support for a duration of up to one year.

https://www.nsf.gov/pubs/2019/nsf19557

Next Deadline: May 15, 2019

## Statistical Consultation

ORDA welcomes back Dr. Grigoris Argeros (Sociology Anthropology Criminology) and Dr. Kathy Chu (Mathematics) as Faculty Associates for research statistics.  Consultation is available for faculty, as well as graduate students working with faculty on independent research projects and theses with the goal of publication of results.

Contact Orda_stats@emich.edu for more information or to schedule an appointment.

## ORDA on Social Media!

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