

The Institute for Research on Innovation and Science (IRIS) is a national data resource dedicated to providing credible data and rigorous findings about the value of the research enterprise to inform effective policy-making, support outreach, aid in research management, and expand the state of knowledge. This university-led consortium is currently housed at the University of Michigan's Institute for Social Research.

IRIS News

Fall 2017

IRIS

INSTITUTE FOR
RESEARCH ON
INNOVATION & SCIENCE

From the Executive Director

Dear Friends of IRIS:

I hope the beginning of the school year finds you all well. It has been a busy and productive summer at IRIS. There are many new and exciting things happening. We detail just a few of them in this newsletter. For me there have been several high points.

A generous new grant from the Alfred P. Sloan Foundation is allowing us to expand the IRIS research community by offering grants to support research using the data we produce in our capacity as an IRB approved data repository. We look forward to the opportunity to continue to develop our research support capabilities



Jason Owen-Smith

and to working with researchers to expand what we know about university research and its effects on society.

We have also taken important steps to develop IRIS' national governance structure. We now have a distinguished Board of Directors that includes a mix of elected and appointed members. The Board will work closely with me to guide and shape IRIS as we move into the next phase of our existence.

IRIS continues to support and benefit from an exceptional community from our member institutions. Our third annual Data Summit will be held on September 21, 2017 in Ann Arbor, MI. It offers an opportunity for established, new, and prospective members to meet and to participate in panels and discussions that will help us continue to shape IRIS data and products. We look forward to seeing you there.

Thank you, once again, for all you do with and for IRIS.

New IRIS Initiative to Support Research with IRIS Data

IRIS has received funding from the Alfred P. Sloan Foundation to support high-profile research using IRIS data. This is a three-year project that will provide research grants to early career researchers who wish to utilize IRIS data, specifically for individuals working on dissertations, as well as postdoctoral and faculty seed grants.

A detailed call for proposals is now available at <http://iris.isr.umich.edu/research-data/grants/>. Dissertation awards up to \$15,000 and early career and established researcher awards up to \$30,000 will be available; funds can be used to cover personnel costs, equipment, supplies, travel, and other expenses such as professional development/training.

Applications are due November 1.



2017 Data Summit

IRIS is excited to announce its annual Data Summit, scheduled for September 21 in Ann Arbor. The goal of the Data Summit is to continue to expand the IRIS data infrastructure into a national program that has three key features:

- lowest possible burden to university data providers,
- highest possible value to stakeholders (particularly university vice presidents for research), and
- highest possible data quality.

In order to achieve this goal, it is critical to have the input of data providers and to further expand the community of data providers who can share best practices. The Data Summit is open to data providers for each IRIS institutional member (and prospective members), plus key stakeholders. As in the past, this is a working meeting; attendees will be asked to provide input and make recommendations to further enhance data acquisition, review, and processing and will also be asked to suggest and prioritize enhancements.

Details about the Data Summit can be found at <http://mailchi.mp/35a5b7132ba1/iris-data-summit-invitation-208949>.

From the Technical Director

Hello! I want to take this opportunity to share with everyone the impact of being a TAG (**Technical Advisory Group**) member. TAG is a group of IRIS member university representatives. Once per month we conduct a conference call to provide technical updates to these members, share with them new features and reports, get their feedback, and talk about everything that they would like to see in future reports.



Kevin Bjorne

The input that IRIS gains from these conversations has led to a variety of improvements to many reports. For example, the “share report” option added to all our reports came from TAG. Also, TAG work led to better descriptive language for explaining charts, the congressional spending map in the spending report, and new and improved charts in the Census-linked reports (the Employee Profile Report and Vendor Profile Report). They also consulted on the upcoming Data Summit and what sessions should be conducted there. TAG input is leading to enhancements in the Census-linked reports that will increase their value. For example, IRIS is exploring the possibility of drilling down into details of employee states and industries.

Who are the current TAG members? They are representatives from:

- Princeton University
- Pennsylvania State University
- University of Arizona
- University of Virginia
- Northwestern University
- University of Michigan
- Rutgers University
- University of Wisconsin – Madison

How can you become a TAG member? Simply let me know that you’re interested. We ask that new TAG members make a two-year commitment if possible. If you want more of voice in the direction of IRIS, in what kind of reports are produced, or in any features that are important to you, then join TAG and help lead the discussion.

I want to thank all the current members of TAG. Your input and feedback has been valuable to IRIS. It’s been great getting to know you all and I look forward to seeing you all at the upcoming Data Summit.

IRIS Governance

We’re excited to announce that IRIS member universities have elected the inaugural IRIS Board of Directors. Its role will be to oversee the management of the affairs, business, and activities of IRIS and will establish policies and directives governing business and programs of IRIS. In addition, the Board of Directors will appoint at-large members, a Scientific Advisory Board, and a Policy and Outreach Advisory Board. As host institution, the University of Michigan named one representative to the Board of Directors, per the IRIS bylaws.

IRIS Board of Directors are:

- **Mary Sue Coleman**, President, Association of American Universities (at-large member)
- **Kimberly Espy**, Senior Vice President for Research & Chief Research Officer, University of Arizona (3 year term)
- **Kimberly Griffin**, Director for Electronic Research Administration, Northwestern University (1 year term)
- **James Hilton**, Vice Provost for Academic Innovation, University Librarian & Dean of Libraries, University of Michigan (host institutional representative)
- **Christopher Molloy**, Senior Vice President, Office of Research & Economic Development, Rutgers the State University of New Jersey (1 year term)
- **Daniel Reed**, Vice President for Research and Economic Development, University of Iowa (3 year term)
- **Neil Sharkey**, Vice President for Research, Pennsylvania State University (2 year term)
- **Caroline Whitacre**, Senior Vice President for Research, The Ohio State University (2 year term)

The Board of Directors is holding its first meeting this September 22. Elections to fill IRIS Board of Directors seats will take place annually, so this is an opportunity for IRIS members to get involved in shaping its direction. Welcome, Directors!

We’re Moving!

If you’re looking for us after mid October, IRIS offices will be located in the ISR-Perry Building at 330 Packard St. Phone numbers and email addresses for IRIS staff will not change.

Our new expanded space will accommodate all IRIS staff and operations!



Researcher Meeting

IRIS hosted a meeting in June 2017 in Washington DC to bring together researchers working with IRIS data in an effort to enhance community development, as well as to showcase the diversity of research projects and inform researchers about IRIS growth and data activities. With over 30 participants, the day started with a series of 12 “lightning talks” given by researchers conducting a wide variety of studies using IRIS data. Later, Jason Owen-Smith gave a presentation on the status of IRIS, followed by a series of in-depth presentations by Julia Lane, Kay Husbands Fealing, and Bruce Weinberg on food safety; work by Francesco D’Acunto and by Nick Zolas measuring economic impact; and presentations on the production function of science by Jerry Marschke and by Bruce Weinberg.

A number of recurring themes emerged from the day’s discussions:

- Researchers noted the need for more data from more universities in order to enhance the representativeness and therefore the generalizability of their findings.
- The importance of identifying counterfactuals was a second important thread.
- Researchers discussed developing a common data taxonomy, working together to establish core standards and tools.



Pathways to Research Impact: The Case of Food Safety

An upcoming book co-edited by IRIS Co-PI Julia Lane and colleagues, ***Pathways to Research Impact: The Case of Food Safety***, uses “big data,” including IRIS/UMETRICS data, to trace federal food safety investments through individual university researchers to show economic outcomes. What is the impact of federal research spending? It’s a public policy question with huge economic ramifications. The authors apply new “big data” techniques to the area of food safety research, and show connections between university laboratories, agriculture and food industry sectors, and federal science investments.

The scientific advances that underpin economic growth and human health would not be possible without research investments. Yet demonstrating the impact of research programs is a challenge, especially in areas that span disciplines, public and private sector activity, and long time horizons. Justifying

public science budgets can seem like guesswork without reliable evidence that connects research spending with outcomes.

Food safety science is no exception. Understanding outbreaks and how to control them is a matter of life and death, but contributions are made by scientists in food and agriculture, human and veterinary health, public regulatory agencies and private firms. Mounting pressures on public research funding increases the need to demonstrate impacts across all these programs and priorities.

This book presents new methods to isolate and characterize related research and trace expenditures within individual awards through individual researchers and their scientific and economic outcomes. We show how to assess pathways of impact for U.S. federal food safety research, with methods that extend beyond food safety to other scientific fields.

New IRIS Faculty

Jinseok Kim, PhD, is a Research Assistant Professor who joined IRIS on August 1, 2017. Kim received his doctoral degree in Information Science from the University of Illinois at Urbana-Champaign. His work focuses on understanding the human interaction patterns extracted from large-scale, semi-structured and unstructured data generated from diverse information and communication technologies. He obtained his MA in Communication from the University of Illinois at Urbana-Champaign in 2012 and his BA in English Literature from Yonsei University in South Korea in 2001. Kim worked as a central government official in Korea for ten years, including a year of service as Deputy Assistant to the President of South Korea for communications with the public.



At IRIS, Kim will provide expertise in name disambiguation of administrative datasets and work on research projects examining the role research experience plays in the career trajectories of students at various levels.

Jake Fisher, PhD, is a Research Investigator who joined IRIS on July 17, 2017. Fisher received his PhD in Sociology in 2016 and his MS in Statistical Science in 2015 both from Duke University, where he also served as a Postdoctoral Associate. His research focuses on developing and testing better network diffusion models to understand how ideas, innovations, and information spreading through a group of people helps to create and maintain a common culture over time. Fisher's dissertation won the ASA Mathematical Society's Outstanding Dissertation in Progress award. Prior to coming to U-M, he worked at Google as well as at the City of St. Louis Department of Health.



Fisher will contribute expertise in network analysis at IRIS with an early emphasis on the ways that collaboration networks shape the scientific and career outcomes of university researchers.

New IRIS Staff

Since our last newsletter, the IRIS team has grown considerably. We would like to welcome the following new IRIS staff members:

Najla August: Najla is the lead Developer at IRIS and reports to Kevin Bjorne. It is her responsibility to develop new reports and visualizations. Najla comes to us from Computing and Multimedia Technology (CMT) at the Institute for Social Research at the University of Michigan. We are very excited to add Najla's considerable skill to the team.



Rob Truex: Taking the role of Data Manager and reporting to Amy Butchart, Rob recently completed his Master of Science in Information at the University of Michigan, specializing in Information Analysis and Retrieval, Preservation of Information. Although new to the team (having joined IRIS in June), Rob has already demonstrated his considerable talent in identifying and tackling data issues and we're delighted to have him on the team.



Beth Uberseder: IRIS would like to welcome new IRIS staff member (Lindsay) Beth Uberseder, who joined the team on August 7. Beth is our new Research Support Specialist and will work with Natsuko Nicholls to assist researchers in accessing and utilizing IRIS datasets. Beth comes to IRIS from Texas A&M, where she worked as an Associate Research Specialist for their Public Policy Research Institute. Beth holds a Master in Library and Information Science degree from Indiana University and a Bachelor of Arts in Political Science from Earlham College. Welcome, Beth!



IRIS Students: The work we do would not be possible without some outstanding students from the School of Information's Master of Science in Information at the University of Michigan. Micaela Hunter, Xiaofan Ji, Jiayi Guo, Jasmine Mou, Sophia Li, Xiyun Xiang, Yidan Zhu, and Paul Vicinanza all worked with us during the past year and their contributions to IRIS were significant. We wish them all well in their future endeavors and look forward to working with a new group in the coming academic year.