Before earning his doctorate in information systems at Carnegie Mellon University, Fred Riggins worked at Boeing as a cost analyst negotiating software procurement contracts with suppliers. In this role he learned firsthand the concept of network externalities. An externality is where each subsequent user of a system adds value to it. “Think of a telephone,” he says. “If you only have one, there’s no value, but every unit you add increases the overall value of the system.” Fred sees the same concept within one of his areas of interest and expertise: blockchains.
Fred is a professor of management information systems at NDSU and the director of the Center for Enterprise Business Analytics at the university. With a career that spans time at Georgia Tech, the University of Minnesota, and Arizona State University, Fred has been ranked as one of the top 10 IS researchers in the world. His research interests include blockchain technology, the economics of information systems, the Internet of Things, and Internet commerce technology and how these systems impact people. Fred feels that at NDSU he’s found the perfect place for both his teaching and research.

While IT research has not often considered the human element as a primary concern, Fred believes that today it should be fundamental to research. “Management and economics are both very social concepts. While I never thought of myself as a social scientist, today I consider myself one. It’s becoming more important to think how we can empower each individual to make choices that will make the world a better place.”

He shares these ideals with his students and hopes they adopt them. When talking about the future, he asks students, “Is this the world you want to live in?” Regardless of their answer, he knows he’s moved their thoughts and ideas to a new time and place where they can begin to have a positive impact.

For being both a researcher and proponent of a better future world, Fred Riggins is our April Researcher of the Month.

Learn more about Dr. Riggin’s research >>
The Office of Research and Creative Activity is pleased to announce the following winners for NDSU EXPLORE. In its fifth year, the event featured 61 students and 50 mentors representing 56 projects. Every NDSU college was represented. Attendees discussed their work in two poster and oral sessions and awards were presented to both the top oral and top poster presenters. A total of 24 evaluators provided feedback on the students, and awards are given to the top oral and poster presenters in both the morning and afternoon sessions. This year’s award recipients are:

**ORAL PRESENTATIONS**

<table>
<thead>
<tr>
<th>First Place</th>
<th>Honorable Mentions</th>
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<tbody>
<tr>
<td>Tyrel Iron Eyes // Anthropology</td>
<td>Benjamin Eichholz // Mechanical Engineering</td>
</tr>
<tr>
<td><em>Advised by John Creese</em></td>
<td><em>Advised by Yan Zhang</em></td>
</tr>
<tr>
<td><strong>Second Place</strong></td>
<td></td>
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<tr>
<td>Kate Volk // Biological Sciences</td>
<td>Hashem Sonbol // Civil Engineering</td>
</tr>
<tr>
<td><em>Advised by Jill Hamilton</em></td>
<td><em>Advised by Beena Ajmera</em></td>
</tr>
<tr>
<td><strong>Third Place</strong></td>
<td></td>
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<tr>
<td>Atiya Khan // Plant Pathology</td>
<td></td>
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<tr>
<td><em>Advised by Robert Brueggeman</em></td>
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**POSTER SESSION**
<table>
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<tr>
<th><strong>First Place</strong></th>
<th><strong>Honorable Mentions</strong></th>
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</thead>
<tbody>
<tr>
<td>Martin Eichers // Mechanical Engineering</td>
<td>Claire Campion // Biological Sciences</td>
</tr>
<tr>
<td>Advised by Dilpreet Bajwa</td>
<td>Advised by Julia Bowsher and Heather North</td>
</tr>
<tr>
<td><strong>Second Place</strong></td>
<td></td>
</tr>
<tr>
<td>Reed Jacobson // Biological Sciences</td>
<td>Korie DeBardlabon // Biological Sciences</td>
</tr>
<tr>
<td>Advised by Jiha Kim</td>
<td>Advised by Kendra Greenlee</td>
</tr>
<tr>
<td><strong>Third Place</strong></td>
<td></td>
</tr>
<tr>
<td>Elizabeth Rono // Biological Sciences</td>
<td>Rebecca Haller // Chemistry</td>
</tr>
<tr>
<td>Advised by Matthew Smith</td>
<td>Advised by Mukund Sibi</td>
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</tbody>
</table>

Thank you to all the students and mentors for sharing their research and creative projects with the broader campus community!
Learn more about NDSU EXPLORE >>
Download the 2019 Abstract Book >>

IRB NOTICE: DEADLINE CHANGE

The submission deadline for the May IRB Meeting has been changed. Please submit materials by close of business on Wednesday, April 24th. Materials received after this date will be reviewed at the June meeting.

For questions, contact Kristy Shirley [kristy.shirley@ndsu.edu; 231-8995].
On May 1, 2019, Adobe Reader Version 9 will no longer be compatible for use with Grants.gov Workspace PDF forms.

This is a reminder to keep your (free) Adobe Acrobat Reader software up-to-date. For more information on compatible versions of Adobe Reader software for use with Grants.gov, please review our Adobe Software Compatibility page. There, you can verify the compatibility of your version of Adobe Reader for use with Grants.gov Workspace PDF forms.

**EXPORT CONTROL FAQs**

**Q: What is the Published Information Exclusion?**

**A:** Information that is already published or is out in the public domain is considered public information and, as provided for under the federal regulations is **NOT** subject to export controls. Examples of information in the public domain include:

- Books, newspapers, pamphlets;
- Publicly available technology and software;
- Information presented at conferences, meetings, and seminars open to the public;
- Information included in published patents; and/or
- Websites freely accessible by the public.

Please contact the export control administrator [ndsu.exportcontrols@ndsu.edu / 231-6455] with any questions, or visit the NDSU export control website.
Revised Human Subjects Regulations: Exemption Category 6 – Taste and Food Quality Evaluation and Consumer Acceptance Studies

Find the regulatory criteria [here](#).

Exemption Category 6 is the only category that remains unchanged in the revised Common Rule. Taste and food quality evaluation and consumer acceptance studies may be exempt:

i. If wholesome foods without additives are consumed, or

ii. If a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe by the FDA or approved by the DPA or the Food Safety and Inspection Service of the USDA.

For questions, please contact Kristy Shirley [kristy.shirley@ndsu.edu; 231-8995].

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The [Research Integrity Administrators](#) (IACUC, IBC & IRB) will be out of the office Monday, April 29-Thursday, May 1, 2019 while attending the Three I’s and Biosecurity professional development conference. Please plan accordingly.

For questions during this time, contact Neil Dyer [1-7830, neil.dyer@ndsu.edu]
Significant Financial Interest (SFI) Disclosures for Grant Submissions

If you are planning to submit a grant proposal April 29-May 2, please ensure that your Significant Financial Interest (SFI) disclosure is current. This will avoid delays in the process while the Research Integrity Administrators are out of the office. SFI disclosures are valid for 12 months. Please contact Julie Sherwood [231-8908, j.sherwood@ndsu.edu] with any questions.

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FUNDING OPPORTUNITIES

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- National Pork Board
- NSF CAREER Program
- NSF DCL: Research on Sexual Harassment and Other Forms of Harassment in STEM Contexts
- USDA-AFRI: Education and Workforce Development

NOTICES

- Save the Date: Industry-University Partnerships Lunch and Learn
April Issue of Research Development and Grant Writing News

**NIH: Science Education Partnership Award (SEPA)(R25)**

**Limited submission grant programs** are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

**NIH SEPA:** Notify RCA by 5/1/2019, 5:00 p.m. if you intend to apply.
This funding opportunity announcement [PAR-17-339] encourages the development of innovative educational activities for pre-kindergarten to grade 12 (P-12), pre-service and in-service teachers (Teachers) and students from underserved communities with a focus on Courses for Skills Development, Research Experiences, Mentoring Activities, Curriculum or Methods Development and Outreach. The over-arching goals of the NIH R25 program are to:

1. complement and/or enhance the training of a workforce to meet the nation's biomedical, behavioral and clinical research needs;
2. enhance the diversity of the biomedical, behavioral and clinical research workforce;
3. help recruit individuals with specific specialty or disciplinary backgrounds to research careers in biomedical, behavioral and clinical sciences; and
4. foster a better understanding of biomedical, behavioral and clinical research and its implications.

Research education programs may complement ongoing research training and education occurring at the applicant institution, but the proposed educational experiences must be distinct from those training and education programs currently receiving Federal support. Applicants are strongly encouraged to consult with the SEPA Scientific/Research Contact to be advised on the appropriateness of the intended P-12 STEM or ISE project for SEPA program objectives and the priorities of the National Institute of General Medical Sciences (NIGMS).

Application deadline: July 9, 2019

National Pork Board: Spring 2019 Request for Proposals

The National Pork Board is soliciting research proposals in five categories:

1. Animal science;
2. Pork quality;  
3. Pork safety – post-harvest;  
4. Swine health – foreign animal disease; and  
5. Swine health – Porcine Reproductive and Respiratory Syndrome (PRRS).

Scientific peers will evaluate submitted proposals for scientific merit. Pork producers will evaluate the proposal for application to and impact on the pork production industry. The overall research plan and individual objectives contained within the proposal must meet the standards of scientific rigor and statistical validity expected of National Pork Board research grants. Proposals may be returned to the PI with suggested/requested revisions prior to final funding decision. Final funding decisions will be made by producer-led committees. A free webinar recording, “Writing Research Proposals for the NPB,” is available, in which Dr. Chris Hostetler provides information to investigators to provide the best chance of a competitive review.

Application deadline: May 21, 2019

NSF: Faculty Early Career Development (CAREER) Program

The Faculty Early Career Development (CAREER) Program [NSF 17-537] is a National Science Foundation (NSF)-wide activity that offers the NSF’s most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research. This premier program emphasizes the importance NSF places on the early development of academic careers dedicated to stimulating the discovery process in which the excitement of research is enhanced by inspired teaching, enthusiastic learning, and disseminating new knowledge. Effective integration of research and education generates a synergy in which the process of discovery stimulates learning, and assures that the findings and methods of
research and education are quickly and effectively communicated in a broader context and to a large audience. A CAREER award typically totals a minimum of $400,000 over a five year duration. View Frequently Asked Questions (FAQs) >>

Application deadline varies depending on discipline: July 17 – 19, 2019

NSF DCL: Research on Sexual Harassment and Other Forms of Harassment in STEM Contexts

The National Science Foundation (NSF) has publicly communicated its commitment to promoting safe, productive research and education environments for current and future scientists and engineers, including efforts to help reduce sexual harassment and other forms of harassment in STEM contexts. This Dear Colleague Letter (DCL) is intended to highlight for the research community that NSF, as a primary federal funder of basic science and engineering research in the United States, continues to welcome and support competitive, peer-reviewed research that advances fundamental knowledge about the nature and underlying dynamics of sexual and other forms of harassment, and mechanisms for evaluating harassment prevalence, prevention, and responses, in a range of STEM education, research, and workplace settings. Examples of potential research foci include: the nature and dynamics of harassment, including underlying social and behavioral processes; mechanisms for assessing and evaluating harassment prevalence, prevention, and responses across a range of organizational levels; and harassment dynamics with respect to ethics, diversity, and inclusivity in science. Additionally, NSF programs in any research area may elect to support basic research or conferences about sexual or other forms of harassment in a specific research field, group, or context. Proposals involving international collaboration, in which NSF supports the U.S. component of the collaborative activities, may also be considered. To determine whether a research idea is within the scope of this DCL and appropriate for a particular program, prospective principal investigators are strongly encouraged to contact, prior to submitting proposals, the directorate/office Liaison(s) for Harassment Research most closely aligned with the research activities to be proposed. Proposals will be submitted to
existing NSF funding opportunities and should follow the guidance and requirements of the relevant program(s) and the Proposal & Award Policies & Procedures Guide (PAPPG).

**USDA-AFRI: Education and Workforce Development**

**Limited submission grant programs** are those that indicate a limit on the number of proposals that may be submitted by an institution for a particular deadline. A selection process becomes necessary if more applicants express interest in applying than NDSU is allowed to submit to the grant program.

**USDA-AFRI-EWD: Notify RCA by 5/1/2019, 5:00 p.m. if you intend to apply.**

The Agriculture and Food Research Initiative (AFRI) **Education and Workforce Development (EWD)** focuses on developing the next generation of research, education, and extension professionals in the food and agricultural sciences. This year, EWD invites applications in the following areas:

1. **Professional Development for Agricultural Literacy** (formerly Professional Development for Secondary School Teachers and Educational Professionals (PD-STEP)) to provide K-14 educators increased knowledge of food and agricultural science disciplines and career opportunities and help them develop improved curricula to train agricultural workforce for the future. (limited to three apps per institution)

2. **Agricultural Workforce Training Grants** - projects should develop curriculum for workforce training in the food and agricultural sciences at community, junior, and technical colleges/institutes (limited to three apps per institution)

3. **Research and Extension Experiences for Undergraduates (REEU)** Training of undergraduate students in research and extension; budgets for Standard Grants and Strengthening Standard Grants must not exceed $400,000 or $500,000 total per project (including indirect costs) for project
periods of four or five years, respectively. (limited to three apps per institution)

4. **Predoctoral Fellowships** - the intent of the NIFA Predoctoral Fellowship Program is to support current doctoral students who are at the stage of conducting dissertation research, ultimately leading to completion of the dissertation and respective terminal degree. Predoctoral Fellowship requests must not exceed $180,000 total per project (including institutional allowance) for project periods of up to three years. (no limit on number of submissions in this category)

5. **Postdoctoral Fellowships** - fellowship requests, including institutional allowance, must not exceed $165,000 total per project for project periods of up to two years; fellows are required to carry out their projects on a full-time basis (i.e., 100% effort), as specified by the sponsoring institution in accordance with its own policies. (no limit on number of submissions in this category)

*Letter of Intent deadline for Agricultural Workforce Training Grants: June 11, 2019
Application deadline for Professional Development for Agricultural Literacy: June 13, 2019
Application deadline for Predoctoral Fellowships and Postdoctoral Fellowships: July 18, 2019
Application deadline for Research and Extension Experiences for Undergraduates (REEU): June 27, 2019*

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**Save the Date: Industry-University Partnerships Lunch and Learn**

Join Vice President for Research and Creative Activity Jane Schuh and Industrial and Manufacturing Engineering Department Chair David Grewell as they discuss industry-university partnerships (iUPs), an innovative model for NDSU that leverage NDSU researchers, industry partnerships, and governmental support. By building teams and developing a nimble research model now, we can put NDSU researchers in a position to quickly respond to industry needs and create the future
through innovation and partnerships. Learn more about this event >>

Tuesday, May 7, 2019
Memorial Union

April Issue of Research Development & Grant Writing News
The April issue of Research Development and Grant Writing News is now available to view. Use your NDSU login information to access this resource. Various topics are covered, including:

- Convergence, Like Spring, is Breaking Out All Over, Including at NSF and USDA
- How-to Tips on Editing a Research Narrative

Have questions, ideas, or suggestions for the RCA Update?
The Office of Research and Creative Activity (RCA) sends weekly emails to NDSU faculty and staff to provide current information on various topics including funding opportunities, grant program changes, research resources, deadlines, notices, and training.

You are receiving this notification through the NDSU official employee listserv or sub-list. The official listserv refreshes after each pay period.

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