WORKSHOP: FUTURE DIRECTIONS FOR THE SCIENCE OF ORGANIZATIONS

Purdue University
School of Industrial Engineering
October 1-2, 2015

Sponsor:
Science of Organizations Program
Division of Social and Economic Sciences
Directorate for Social, Behavioral & Economic Sciences
National Science Foundation

Organizer:
Sara McComb
Schools of Nursing and Industrial Engineering
Purdue University
Workshop Rationale

The Science of Organizations (SoO) program at the National Science Foundation (NSF) has an interesting history that started with the Management of Technology and Innovation (MOTI) and Total Quality Management (TQM) programs that were both partially funded through the Engineering Directorate (Jelinek & Griffith, 2005). These programs were transitioned into the Innovation and Organization Change (IOC) program, housed within the Social and Economic Sciences (SES) Division of the Social, Behavioral, & Economic Directorate (SBE). Over time, the IOC program morphed into the Innovation and Organization Science (IOS) program and, most recently, into the Science of Organizations (SoO) program.

Regardless of title or directorate, the program has always welcomed a broad array of disciplinary perspectives. In reviewing the principal investigators’ departmental affiliations of the program’s awardees since 2011, business (20%) and sociology (16%) have the highest representation in the SoO program portfolio, followed by information/information technology (14%), engineering/operations research (12%), communication (11%), economics (9%), political science/labor relations (9%), and psychology (8%). Additionally, 19% were awarded to interdisciplinary research teams.

Thus, one hallmark of the SoO program is its applicability to a variety of disciplines including business (i.e., organizational behavior, marketing, and strategic management), communication, economics, engineering, information technology, psychology, public administration, and sociology. These disparate disciplines offer varying perspectives about a range of issues associated with organizations of all sizes and scopes. At the same time, however, the breadth of disciplines presents challenges in identifying areas to strategically grow the program’s portfolio of funded projects, encouraging interdisciplinary and international research activities, and promoting the program funding opportunities and the results of its funded projects. The purpose of this workshop was to address these issues and provide feedback to the NSF SoO program by:

(1) discussing the future of organizational research,
(2) identifying strategies for encouraging and rewarding interdisciplinary and international collaborative research initiatives in the science of organizations community, and
(3) brainstorming how to promote the program and the results of its projects.

This purpose was met by assembling scholars from the various disciplines that study organizations. Additionally, invited participants brought varying perspectives about the research process including SoO principal investigators, journal editors, and thought leaders. The complementary backgrounds of participants established an excellent foundation for rich dialogue about the aforementioned issues that may be instrumental in prioritizing activities associated with the NSF SoO program.

Workshop Overview

The workshop was held at Purdue University School of Industrial Engineering on October 1 and 2, 2015 (see Appendix A for the complete agenda). Prior to the workshop, participants were asked to prepare for these discussions by identifying new, promising areas of inquiry in the realm of organizational research, exemplars advancing the methodological portfolio used to research organizations, and existing activities/entities designed to foster interdisciplinary research or international collaborations. Over the course of one and one-half days, participants engaged in three small group discussions that aligned with the workshop’s purpose as described below.
October 1, 2015 morning: The Future of Organizational Research
The purpose of the first session was to discuss the future of organizational research. Questions were provided to help prompt discussion:

1. What areas of organizational research are most promising and for what reason(s) are they promising?
2. What is the vision for the field in five years? Ten years?
3. What methodological advances are needed to realize significant advances in organizational research?
4. What priorities should be suggested to the SoO program?

The conversations occurred in two sessions. First, participants from similar disciplinary perspectives were provided the opportunity to converse about their vision for the future of organizational research in their field. Second, participants were assigned to interdisciplinary groups that also vary across the expertise represented (i.e., SoO principal investigators, journal editors, and thought leaders). These groups were maintained through the rest of the workshop.

At the close of the session, (1) each group had the opportunity to report on one to three particularly interesting ideas that arose from their conversations, and (2) all attendees engaged in an open discussion about the future of organizational research.

October 1, 2015 afternoon: Interdisciplinary and International Collaborations
The purpose of the second session was to identify strategies for encouraging and rewarding interdisciplinary and international collaborative research initiatives. Questions were provided to help prompt discussion:

1. How is interdisciplinary defined and what are the implications of this definition for organization science?
2. What are the benefits of engaging in interdisciplinary/international research related to organizations?
3. How might interdisciplinary/international collaborative research initiatives be promoted within universities, within focus areas, by professional societies, by journal editors, and/or by the SoO program?
4. What incentives, mechanisms, and support structures are necessary to facilitate interdisciplinary/international collaborations?

October 2, 2015 morning: SoO Program Promotion
In the third session, participants focused on identifying approaches to both encourage proposal submissions from scholars doing high quality research, and promote the program within the community of organizational scholars. Questions were provided to help prompt discussion:

1. What mechanisms will be most successful in promoting proposal submissions to the SoO program?
2. How can we disseminate information about what constitutes high quality proposals?
3. What type and scope of projects should the SoO program consider?
4. What role can journal editors play in the promotion of the SoO program and the dissemination of results of projects funded by the program?
Participants began in their interdisciplinary groups to identify opportunities for promoting the SoO program regardless of disciplinary perspective. At the end of the interdisciplinary discussion, participants reconvened to report out and engage in an open discussion about promotion strategies. Participants then assembled in groups that share disciplinary perspectives to identify specific opportunities for promotion within their fields and, if possible, determine how these opportunities will be realized.

**Workshop Participants**
Workshop participants encompassed the variety of disciplinary perspectives that examine organizations, including business (i.e., organizational behavior, marketing, and strategic management), communication, economics, engineering, information technology, psychology, public administration, and sociology. Within the disciplinary perspectives, SoO grantees, journal editors (or their associate editors), and thought leaders were invited. A full listing of participants can be found in Appendix B.

**Workshop Results**
The workshop attendees were divided into four groups and participated in three breakout sessions focused on (1) The Future of Organizational Research, (2) Interdisciplinary and International Collaborations, and (3) SoO Program Promotion. At the end of each breakout session, workshop participants reconvened to summarize their discussions for the other groups. In the following paragraphs, syntheses of these breakout session discussions are presented.

**The Future of Organizational Research**
The overarching topic of discussion during this session centered the utility of a broad definition of organizations that ranges from studying teams nested within or across organizations to multiple organizations, or any other cross-section of an entity (or set of entities) where multiple individuals interact to achieve some purpose. Broad does not imply, however, imprecision. Indeed, researchers must clearly articulate the scope within this expansive space they are examining. Within this context, several promising research foci were discussed.

**Complex Organizational Problems**
With the growing sophistication of research methodologies and data being collected, the workshop participants called for increasing complexity in the types of organizational issues being examined. Several examples were provided.

- First, research is needed in identifying strategies for managing high complexity within organizations and for mitigating associated risks.
- Second, individual, team, and organizational dynamics, and the mechanisms that govern those dynamics, are in need of investigation.
- Third, the role of adaptability in the knowledge transfer process may provide insights regarding effective idea implementation across entities or how knowledge reuse and/or transfer can be facilitated (vs. hindered). Moreover, a better understanding of this process may help update how traditional organizational phenomena such as productivity, worker skill requirements, and loyalty are conceptualized and measured.
- Fourth, new organizational forms are manifesting in companies like Uber and Airbnb; new paradigms about what it means to be an organization in the burgeoning freelance economy are developing; and the line between organizations and communities continues
to blur as microlending, community-based public health initiatives, and the like become more commonplace. Extant evidence and theories may or may not be applicable suggesting that research is needed to characterize the changing nature of work in organizations, validate existing theories, and develop new theories, to help explain how these organizations function effectively.

**Systematic Perspective**
Related to the need for increasing the complexity of issues examined, is the need for taking a systems perspective. A systems perspective requires, at a minimum, a clear articulation of boundaries and units of analysis, an acknowledgement of cross-boundary and/or cross-level impacts, and an appreciation for system dynamics. For instance, a systems perspective might lead a researcher to propose an organizational design that simultaneously benefits organizational, individual and societal well-being. Combining macro- and micro-perspectives of organizations may result in an examination of the dynamic interactions between organizations and individuals within a specific system. A systems perspective may also be beneficial in targeted examinations of constructs, such as investigating the tension and/or fluidity between autonomy and control across different types of systems.

**Real-World Grounding**
Research agendas need to be solidly grounded in real-world problems. The primary example discussed in multiple groups was the healthcare industry due to its significant impact on the US economy, as well as on important societal outcomes. This industry could benefit from extant organizational research (e.g., effective team interactions), as well as spawn new research opportunities that may be salient across a host of real-world domains (e.g., telework, leadership “heterarchies”).

**Methodological Opportunities within Organizational Science**
The workshop participants had hearty discussions around methodological opportunities that could be exploited to enhance organization science. With many of these opportunities, current limitations are also presented. Examining methods for addressing the limitations, however, may provide excellent topics for funding from the NSF SoO program.

**Expand Methods**
A strong recommendation from the workshop participants is to expand the portfolio of methodologies that are routinely used in the study of organizations, including longitudinal, causal (e.g., field experiments), computational modeling, qualitative, multi-method, mixed-method, and multi-level research studies. One limitation of these methods is the time required to complete studies using them.

**Increase Rigor**
In addition to expanding the current methods being used to study organizations, the workshop participants underscored the need to increase the sophistication of research designs and statistical processing that is required for rigor in the research undertaken. This point does not mean that only complex design and/or analytic techniques are required. Rather, regardless of techniques, the manner in which they are applied must be sophisticated, rigorous, and thoughtful. Examples
of the types of issues that are required include attention to construct validity; levels of analysis; dynamics (e.g., feedback processes) and alignment of theory, data collection, and data analysis.

**Ensure Clarity about and Inclusion of Multiple Levels of Analysis**
Extending the previous point, the workshop participants put particular emphasis on issues associated with levels of analysis. First, all organizational researchers need to clearly articulate the levels of analyses associate with their research studies. Second, multilevel theory is needed, particularly focused on comparing and contrasting how constructs manifest at different levels and the mechanisms that facilitate movement and interactions across levels. Finally, care needs to be taken to avoid the ecological fallacy that may result from inappropriate aggregation (i.e., inference at a level other than the one where observations were made).

**Replicate**
The workshop participants encourage more replication. Replication will increase the evidence in support of new theories and also provide opportunities to test existing theories in new contexts. Moreover, it will provide a greater evidence base upon which organizational interventions can be designed.

**Examine Big Data**
Interesting opportunities are available for computationally mining big data with methodological tools including natural language processing, pattern recognition, and network analysis. The issues, however, include the difficulty in gaining access to such data, over-interpreting small effects, and/or misinterpreting when the dynamics that generate the data are poorly understood (i.e., misalignment between theory and data collection). The NSF’s data management plan requirement for proposals is a good first step toward encouraging more effective data sharing within the research community. The NSF SoO program may be well situated to fund efforts directed at gathering big datasets that could be made available to the community of organizational scholars and advancing new methodologies for analyzing such data.

**Rethink the Role of Theory**
Encouraging scholars to rethink the role of theory may enhance the field. Several groups mentioned reading articles with clear, comprehensive theory development but lackluster methodological approaches and/or data, as well as the converse. Additionally, workshop participants were concerned about the proliferation of theory without much consideration for paradigm development (i.e., the development and use of relatively few, comprehensive theories). Suggestions for improving the seemingly singular focus advocated in many journals on theory-driven research were offered:
- One participant described a journal special issue that included a set of data-driven research notes; the special issue editors drew conclusions and linked the set of studies to theory.
- Researchers need to understand the difference between theory and hypothesis generation. Both have a role in the research process but they are not the same thing.
- Building rigorous research agendas on existing theory is critical, but is not the only path to advancing science. Medical research contains many good examples of how critical advances have been made that were not theory driven (e.g., aspirin, penicillin).
**Consider Implementation Science and Randomized Control Trials**

Implementation science focuses on embedding proven solutions from one context into other contexts, and is commonly used in healthcare settings. As such, it is less dominated by theory and has the potential for more real-world impact. Moreover, the opportunity exists to match communities of practice with researchers to undertake quality improvement initiatives. Advances made through implementation science can then be generalized and incorporated into the theoretical knowledge base describing organizational constructs. Finally, the approach used within healthcare may be applicable to a host of organizational contexts to examine the mechanisms required to translate best practices across settings. Given the dynamic nature of work facing today’s organizations, this line of inquiry may be particularly salient.

Randomized control trials are another approach common in the healthcare domain. Some of these studies – particularly those situated in hospitals – may benefit from the inclusion of organizational scholars on the research teams. Thus, a synergistic opportunity exists that may provide an interesting opportunity to develop collaborative programs between the National Science Foundation and the National Institutes for Health, similar to the join initiative focused on Smart and Connected Health.

**Interdisciplinary Collaboration**

The predominant focus of the small group session dedicated to discussing interdisciplinary and international collaborations focused on interdisciplinary collaboration. This focus should not be misconstrued as a signal that the workshop participants did not see international collaborations as an opportunity to enhance the science of organizations. Rather, they were interested in learning about the potential mechanisms for operationalizing funding for these collaborations, which were briefly discussed. Moreover, they identified similarities between international and interdisciplinary collaboration in the barriers and potential incentives that were discussed under the umbrella of interdisciplinary collaboration. Thus, in this report, the focus is on how to best encourage and facilitate interdisciplinary collaboration, regardless of researchers’ country of residence.

The workshop participants overwhelmingly agreed that interdisciplinary research is critical because it broadens perspectives, particularly with respect to how findings are used outside of the unique disciplinary space. At the same time, the participants cautioned that it should not be the sole focus of the SoO program because mono-discipline research can still advance the science of organizations.

A concrete definition of what interdisciplinary means may be useful in encouraging interdisciplinary research. Across the small groups, several plausible conceptualizations of interdisciplinary research were mentioned, including when:

- researchers from a single field collaborate across intrafield lines (e.g., psychology – industrial/organizational, social, cognitive, clinical)
- mono-disciplinary researchers enrich outcomes by borrowing concepts from another discipline where organizational science is routinely studied (e.g., psychologists integrating perspectives from communications scholars)
• organizational scholars from different disciplinary perspectives collaborate (e.g., psychologists and communications scholars)
• organizational scholars collaborate with a variety of disciplinary experts outside the field of organization science (e.g., psychologists contributing to research being undertaken by computer scientists)

In addition to clarifying what constitutes interdisciplinary research, multiple barriers were forwarded. Interestingly, many of these barriers underscore why interdisciplinary research should be encouraged and facilitated.

• First, some difficulty may arise from a lack of respect and/or appreciation across disciplinary lines, which often results in researchers reinventing the wheel and/or working at cross-purposes.
• Second, semantic differences may cause confusion in the field due to the jingle and jangle fallacies that have plagued researchers since at least the early 20th century (Kelley, 1927). The jingle fallacy represents semantic similarity with underlying dissimilarity in definitions (e.g., the term firm may be used to describe brick and mortar, brick and click, or online organizations that may, or may not, benefit from different firm-level policies) and the jangle fallacy represents the converse case where constructs have dissimilar naming conventions but similar definitions (e.g., shared mental models, team mental models, and shared cognition all depict when collaborators possess similar cognitive representations).
• Third, some interdisciplinary collaborations are created to secure research funding, but true integration does not occur.
• Fourth, identifying the appropriate collaborators is arduous.
• Fifth, dissemination of interdisciplinary research may be challenging, particularly in traditionally mono-disciplinary journals. Moreover, few interdisciplinary outlets exist (e.g., Organization Science), and may prove difficult to garner manuscript acceptance (e.g., Science, Nature, Proceedings of the National Academies).
• Finally, institutional and departmental norms regarding scholarly achievement may not support interdisciplinary research, particularly for pre-tenure faculty.

In spite of the multiple perceived barriers, the workshop participants identified several incentives and/or opportunities for improving interdisciplinary collaboration, including:

• Fund small planning grants to facilitate cross-disciplinary interactions that may result in reducing semantic distance and building integrated proposals.
• Target mid-career scholars who are intrinsically motivated to contribute substantially to a body of knowledge.
• Develop guidelines (possibly through a SoO-funded project or workshop) for assembling interdisciplinary groups of scholars and overcoming semantic distance and other communication barriers.
• Collaborate with other NSF-funded initiatives where organizational research might identify best practices. Two specific examples were ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers or Engineering Research Centers (ERCs), where interdisciplinary groups are funded to institute organizational change relating to science, technology, engineering, and
mathematics (STEM) or transform a specific field of inquiry by integrating engineering research and education with technological innovation, respectively.

Suggestions for the SoO Program
The workshop participants developed a robust set of suggestions for the SoO program based on the aforementioned discussions. At the start of this session, two handouts were provided to the workshop participants. The first provided a short history of the program and funding (see Appendix C). The second was the SoO program guidelines (see Appendix D).

Increase SoO Program Funding and Portfolio of Projects
Concerns were raised about the limited SoO program budget and how it may serve as a deterrent to some researchers seeking funding. Over the years, the quality and quantity of proposals submitted to the SoO program has improved. Room for improvement, however, still exists because increased numbers of fundable proposals provide evidence to support the further increase of SoO program budget.

Although garnering additional funding for the program from the NSF would be ideal, the workshop participants offered two specific suggestions that may be other avenues for enhancing the program budget.

- First, the Program Officer can connect with foundations that have complementary missions (e.g., Kauffman Foundation, Robert Wood Johnson, Pew Charitable Trust) to develop joint programs that benefit both the SoO program and the foundation.
- Second, the Program Officer can actively identify additional opportunities to engage in interdisciplinary opportunities around the NSF. Through these connections, the utility of organizational science will be underscored, more interdisciplinary collaborations can be encouraged, and organizational scholars invited to participate in these efforts may learn about the mechanics of the proposal writing process and the way in which the NSF operates.

Funding Recommendations – Research Projects
To ensure a positive impact that will enhance the reputation of the SoO program, the workshop participants made several suggestions. First, they recommend funding some large-scale projects and bold, risk-taking efforts. These types of research projects are consistent with the workshop participants’ advocacy for employing a systems perspective that requires comprehensive approaches to complex problems. Moreover, such projects have the potential to make substantial contributions to organizational science, thereby enhancing our reputation as a research community. Second, the participants believed that dissertation incentive grants will not only help graduate students fund their research endeavors, they will also demonstrate the utility of conducting funded research, thereby encouraging future proposal submissions. Third, workshop participants suggested adopting a two-tiered funding mechanism for mono- and interdisciplinary projects, where interdisciplinary efforts would be funded at higher levels.

Funding Recommendations – Workshops
The participants found participating in this workshop to be very valuable, particularly for those attendees less familiar with the NSF, in general, and SoO, in particular. To that end, they offered
several suggestions for funding different types of workshop that might be useful for a host of reasons.

- First, hosting workshops focused on open discussions about the future of organizational research at various conferences may result in (a) focusing scholars on the big, important questions, (b) broadening knowledge about funding opportunities, and (c) enhancing collaborations focused on the science of organizations.

- Second, a series of workshops focused on different, specific research areas and/or methodological approaches may help advance organizational science. Attendees should represent the variety of disciplinary perspectives that may be interested in the topics. Additionally, representatives from practice could be invited to attend these workshops to provide their insight into the issues facing real organizations and help facilitate access to data. Workshop organizers are encouraged to serve as the editor of a book or journal special issue that showcases the cutting edge research presented at the workshop and captures discussions about promising future areas of inquiry.

- Third, workshops structured as working meetings for researchers interested in developing research ideas into proposals would facilitate interdisciplinary collaborations and coordinated, systematic research agendas. Experienced proposal writers and disciplinary experts can provide guidance and support during these workshops.

**Funding Recommendations – Other**

Several additional funding opportunities were proposed that have the potential to (1) provide incentives for seeking funding from SoO, (2) increase the number and quality of research proposals, and (3) build research communities comprised of interdisciplinary researchers with complementary interests.

- First, as previously mentioned in the Interdisciplinary Collaboration section of this report, identifying and building a research agenda with interdisciplinary collaborators is difficult, particularly if scholars work at different Universities. Thus, supporting proposal development for promising areas of research through small grants may be useful.

- Second, seed grants may also be useful for funding junior faculty as they develop proposals.

- Third, mentoring relationships could be funded at low levels to support seasoned grantees working with junior and mid-career faculty interested in developing research ideas into fundable proposals.

- Fourth, workshop participants suggested funding the development of a system to facilitate the creation of interdisciplinary teams and connecting researchers with organizations interested in research collaborations focused on organizational science.

**Program Officer Initiatives**

Understandably, the Program Officer is the key to all suggestions offered in this section of the report. That said, several specific opportunities to the Program Officer to spearhead initiatives that will facilitate promotion of the SoO program were identified.

- SoO Program Officers need to continue being visible at a variety of conferences, including the Academy of Management (AoM), the Society for Industrial and Organizational Psychology (SIOP), the National Communication Association (NCA), the International Communication Association (ICA), and the American Sociological Association (ASA). Examining the profiles of researchers who have submitted proposals
to the SoO program in the recent past may identify additional conferences. At each of these conferences, specific interest groups could be targeted (e.g., organizational behavior group at AoM; organizational division at the ICA; organizations, occupations, and work section of ASA). Through these connections, access to the groups’ listserves may be garnered and could be used for SoO program promotion.

- To facilitate overcoming the perceived bias against funded, and/or interdisciplinary, research embedded in institutional norms, the Program Officer may look for opportunities to engage with administrators. One example may be asking to present at the Association to Advance Collegiate Schools of Business (AACSB)’s Deans Conference and/or Associate Deans Conference.

- A means of making the data from previously funded projects available would be useful. Several participants raised questions about what data is available, how it can be accessed, and where it is stored. If it is not centrally located, the Program Officer may want to consider funding the creation of a data repository or encouraging the broader use of existing repositories such as the Interuniversity Consortium for Political and Social Research (ICPSR).

- Requiring a PI meeting, where current and recently completed projects could be presented, may be useful for building a community of organizational scholars. Other researchers interested in interacting with PIs and the Program Officer, and learning about the SoO program and the proposal process, could also be invited.

**Program Promotion**

In addition to the aforementioned opportunities regarding exposure at conferences, etc., several suggestions were proffered including:

- A webinar that disseminates explicitly what several workshop participants described as the implicit knowledge that is required for successful interactions with the NSF. Examples of implicit knowledge include, funding guidelines (e.g., how much PI funding is allowable in proposal budgets), how to find useful information on the NSF website (e.g., current projects funded by the program), pointers to disseminated products from workshops (e.g., this report, special journal issues), and how to identify journal articles describing funded research (i.e., the requirement to acknowledge funding in all publications). A list of Frequently Asked Questions (FAQs) may also be useful that (1) debunks myths about the program (e.g., only social science scholars are funded), (2) highlights common errors (e.g., the “trust me” proposals with minimal specification of methods will not review well), (3) describes the Program Officer’s role, and (4) underscores the utility of discussing research ideas with the Program Officer via a two-page white paper or phone conversation, for example, prior to preparing a full proposal. These types of webinars and FAQs have been done by other NSF Program Officers (e.g., at the bottom of the Research in the Formation of Engineers program summary, URLs are listed where this type of information is available).

- Increasing the NSF-sponsored publicity of SoO-funded projects will help with program promotion. Program Officers could ensure that SoO-funded projects are showcased by the NSF. Any publicity about SoO-funded projects could be forwarded to the various professional organizations for distribution on their listserves and blogs.

- Panels, round tables, and pre-conference workshops may be useful at a variety of conferences (see partial list of relevant conferences below). Panels and round tables
may be most beneficial if the Program Officer and an interdisciplinary group of scholars, particularly panelists and PIs familiar with the proposal process, offer advice and suggestions to the attendees. One specific pre-conference workshop suggestion was to organize a “speed dating” format to help researchers meet colleagues who may have complementary research interests and motivation to seek external funding for their research projects.

- The Program Officer may want to encourage the periodic preparation of a special journal issue comprised of results from recently funded and/or completed projects. The breadth of funded projects, and the corresponding editorial introduction to the issue, would be excellent program promotion.

References:

Appendix A: Workshop Agenda

FUTURE DIRECTIONS FOR SCIENCE OF ORGANIZATIONS WORKSHOP
Workshop Agenda

Wednesday, September 30, 2015

7:00 Gather in the Lobby of the Union Club Hotel
7:30 Informal Dinner at Town and Gown

Thursday, October 1, 2015

8:00 Breakfast and Workshop Registration
9:00 Welcomes
9:10 Workshop Overview
   Sara McComb
10:00 Disciplinary Discussions – The Future of Organizational Research
10:45 Interdisciplinary Discussions – The Future of Organizational Research
12:15 Lunch and Campus Tour (optional)
1:45 Report Out and Open Discussion – The Future of Organizational Research
2:45 Interdisciplinary Discussion – Interdisciplinary and International Collaborations
4:15 Report Out and Open Discussion – Interdisciplinary and International Collaborations
5:00 Adjourn
6:00 Gather in the Lobby of the Union Club Hotel
6:30 Workshop Dinner at the John Purdue Room

Friday, October 2, 2015

7:45 Breakfast
8:30 Recap of Thursday’s Discussions
   Sara McComb
9:00 Interdisciplinary Discussion – SoO Program Promotion
10:15 Report Out and Open Discussion – SoO Program Promotion
10:45 Disciplinary Discussion – SoO Program Promotion
11:15 Workshop Wrap-Up
   Sara McComb
12:00 Lunch and Departures
Appendix B: Workshop Participants

Manju Ahuja
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Research Interests:
Healthcare information technology (IT), virtual communities and teams, and management of human resources in IT professions
Editor:
Management Information Systems Quarterly

Greg Arling
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Research Interests:
Healthcare quality assessment, evaluation, and policy analysis

Paul Bliese
Associate Professor of Management
Darla Moore School of Business
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Research Interests:
Stress, leadership, well-being, and performance
Associate Editor:
Journal of Applied Psychology

Kris Byron
Associate Professor of Managerial Sciences
Robinson College of Business
Georgia State University
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Office: 404.413.7531

Research Interests:
Employee creativity, workplace stress, workforce diversity, and meta-analysis
Associate Editor:
Academy of Management Review

Daisy Chang
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Office: 517.355.2171

Research Interests:
Moral crediting and workplace behavior, approach and avoidance in work domains, and the dynamics of team functioning

Leslie DeChurch
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Research Interests:
Leadership and teamwork in organizations
Toni Doolen
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Research Interests:
Applying process improvement methodologies and innovation to improve social and technical aspects of organizational performance using qualitative and quantitative methodologies

Connie Helfat
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Research Interests:
Business and corporate strategy, especially firm capabilities and adaptation to change, with application to innovation, top management, vertical integration
Editor:
Strategic Management Journal

Kerk Kee
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Research Interests:
The spread of cyberinfrastructure/big data technologies through cross-disciplinary collaborations in scientific organizations, and the flow of health information through social clusters in online communities

Brayden King
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Research Interests:
Social movement activists’ influence on corporate social responsibility, legislative policymaking, and organizational change
Associate Editor:
American Sociological Review
Organization Science

Ellen Kossek
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Research Interests:
Managing organizational change involving work-life and flexibility initiatives, gender, diversity and leadership; international human resources management, multiculturalism, and workplace inclusion

Carleen Maitland
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College of Information Sciences and Technology

Research Interests:
Critical and practical analyses of international, sectoral and organizational contexts where information and
Ann Majchrzak
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Research Interests:
How groups of diverse people with minimal social capital and working virtually are able to co-create solutions to wicked problems (e.g., crowdsourcing, far-flung teams, enterprise social media)
Senior Editor:
Organization Science

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Research Interests:
Organizational behavior, human resource management, and employee and leadership development

Sara McComb
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Research Interests:
Examining team communication and cognition; comparing the cognitive complexity and motivation to learn between nursing and engineering students; promoting patient involvement in care provision

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Research Interests:
Visualize, understand, and enable dynamic interorganizational networks in nongovernmental organization (NGO)-corporate partnerships, development and disease NGOs, expert-NGO partnerships in sustainable development, and healthy communities

Jeff Stanton
Interim Dean
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Research Interests:
Personnel assessment systems, employee surveys, coaching, and institutional change processes
Tony Tong  
Associate Professor of Management and Entrepreneurship  
Leeds School of Business  
University of Colorado  
Email: tony.tong@colorado.edu  
Office: 303.492.8854  

Research Interests:  
Companies’ corporate strategy choices and their impact on performance

Jeff Vancouver  
Professor  
Department of Psychology  
Ohio University  
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Office: 740.593.1071  

Research Interests:  
Developing and testing computational models of human/environment interactions; the role of beliefs in goal processes (e.g., adoption, planning, striving, and revision)

Andrew Whitford  
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Research Interests:  
Strategy and innovation in public policy and organization studies, particularly at the business-government intersection  
Editor:  
Journal of Public Policy

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Research Interests:  
U.S. public policymaking process, public management, regulation, administrative law, and interest group politics
Appendix C: Science of Organizations Program History and Statistics

Historical Background
The Science of Organizations program at the National Science Foundation has a long, interesting history that started with the Management of Technology and Innovation (MOTI) and Total Quality Management (TQM) programs that were both partially funded through the Engineering Directorate (Jelinek & Griffith, 2005). These programs were transitioned into the Innovation and Organization Change (IOC), the Innovation and Organization Science (IOS), and finally the Science of Organizations (SoO) programs, which are housed within the Social and Economic Sciences (SES) Division of the Social, Behavioral, & Economic Directorate (SBE). Prior to the transition to 100% support from SBE, the director position was held by rotators. A permanent NSF employee, Jack Meszaros, was program director for a number of years. More recently, the position has shifted back to being held by rotators.

Statistics
Regardless of title or director, the program has always welcomed a broad array of disciplinary perspectives. In reviewing the principal investigators’ departmental affiliations of the program’s awardees since 2011, business (20%) and sociology (16%) have the highest representation, followed by information/information technology (14%), engineering/operations research (12%), communication (11%), economics (9%), political science/labor relations (9%), and psychology (8%). Additionally, 19% of the awards had interdisciplinary research teams.

The following are stats about recent awards made through the SoO program (from the link on the SoO program website http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504696):

- 76 total awards
- 7 awards in EPSCoR States: Idaho, Kansas, Maine, Missouri, South Carolina, and West Virginia
- 50 $100K-$500K awards

From Current Program Officer:
- Budget: $4 to $5 million, including all matching and one-time funds
- Hit rate: 15% with respect to total submissions; 25% after triaged (i.e., poorly reviewed) proposals removed
- Awards in FY2015: 23 total awards, 12 fully funded by SoO, the rest included other leveraged funds (e.g., coreviews, EAGER, RAPID, Workshops)
Appendix D: Science of Organizations Program Guidelines

DUE DATES
Full Proposal Target Date: February 2, 2016
February 2, Annually Thereafter
Full Proposal Target Date: September 3, 2016
September 3, Annually Thereafter

SYNOPSIS
Organizations -- private and public, established and entrepreneurial, designed and emergent, formal and informal, profit and nonprofit -- are critical to the well-being of nations and their citizens. They are of crucial importance for producing goods and services, creating value, providing jobs, and achieving social goals. The Science of Organizations (SoO) program funds basic research that yields a scientific evidence base for improving the design and emergence, development and deployment, and management and ultimate effectiveness of organizations of all kinds.

SoO funds research that advances our fundamental understanding of how organizations develop, form and operate. Successful SoO research proposals use scientific methods to develop and refine theories, to empirically test theories and frameworks, and to develop new measures and methods. Funded research is aimed at yielding generalizable insights that are of value to the business practitioner, policy-maker and research communities.
SoO welcomes any and all rigorous, scientific approaches that illuminate aspects of organizations as systems of coordination, management and governance.

In considering whether a particular project might be a candidate for consideration by SoO, please note:

- Intellectual perspectives may involve (but are not limited to) organizational theory, behavior, sociology or economics, business policy and strategy, communication sciences, entrepreneurship, human resource management, information sciences, managerial and organizational cognition, operations management, public administration, social or industrial psychology, and technology and innovation management.
- Phenomena studied may include (but are not limited to) structures, routines, effectiveness, competitiveness, innovation, dynamics, change and evolution.
- Levels of analysis may include (but are not limited to) organizational, cross-organizational collaborations or relationships, and institutional and can address individuals, groups or teams.
- Research methods may be qualitative and quantitative and may include (but are not limited to) archival analyses, surveys, simulation studies, experiments, comparative case studies, and network analyses.

Consistent with NSF merit review criteria, each SoO proposal should discuss both the intellectual merit and the potential broader impacts of the proposed research. SoO values basic research that has the potential to provide broader societal benefits. However, the majority of space in any proposal will need to be dedicated to the explication of theory, methods, and specific contribution to the evidence base about organizational effectiveness.
Projects that aim to implement and subsequently evaluate particular organizational training, effectiveness or change programs, rather than to advance fundamental, generalizable knowledge, are not appropriate for SoO.

Researchers who seek to conduct SoO-appropriate research in an industrial site and/or via an industry-university collaboration are invited to also look at the Grant Opportunities for Academic Liaisons with Industry (GOALI) program web site.