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The 2015 Annual Meeting in St. Louis, with its focus on research impact, was lively and well attended. I had a great view of the Mississippi and the Arch from my hotel room. It’s hard to think that almost everything I could see must have been under water two months later. We wish our hosts a speedy recovery.

This issue continues our coverage of the Annual Meeting with photo coverage of people, awards and events and reports on the plenary sessions and most of the pre-conference research forums, including those by the ASIS&T Special Interest Groups in Classification Research (SIG/CR), Metrics (SIG/MET), Social Informatics (SIG/SI) and Information Needs, Seeking and Use (SIG/USE). We also cover the papers presented at the SIG CON session sponsored by our largest and most distinguished Special Interest Group, SIG/CON, whose activities are dedicated to its founder, Dr. Llewellyn C. Puppybreath III.

You may already have seen the “President’s Page,” which ASIS&T is now sending to members as soon as it becomes available. In it, 2016 president Nadia Caidi reports on conferences of related societies that she has recently attended and on our common goals.

In the RDAP Review Cynthia R.H. Vitale, Washington University in St. Louis, focuses on the possible role of libraries and data repositories in supporting the reproducibility of research from the faculty of the institutions they serve, while associate editor for information architecture (IA), Laura Creekmore, in the IA Column urges IA’s to give more control and understanding back to their users.
On behalf of my colleagues on the ASIS&T Board, I would like to extend to you all our best wishes for the New Year and a happy start to 2016.

In the past few months, I attended several events and represented ASIS&T at various meetings, including the Council of Scientific Society Presidents (CSSP) in Washington, DC, as well as ALISE and the ALA Midwinter (both in Boston). To me, this was a wonderful reminder of how crosscutting and broadly encompassing the field of information science truly is.

Council of Scientific Society Presidents

The Council of Scientific Society Presidents is an umbrella organization representing a broad array of scientific disciplines. Affiliated member societies are represented by their presidents. CSSP’s biannual meetings are a wonderful opportunity for members to share best practices, to lend a strong voice in support of science and science policy development and to learn about cutting-edge research. At the CSSP meeting this past December, information issues pervaded many sessions: from the talk by Prof. Jacqueline Burton on gene editing and the chemistry of DNA to Prof. Abigail Marsh’s take on the altruistic brain.

In his inspiring talk about the Mars mission, special guest General Charles F. Bolden, Jr., NASA administrator, related to the CSSP audience that while the technological issues are for the most part figured out, what is needed is behavioral and social scientific research on humans’ adaptation to living in space for prolonged periods of time as they journey toward Mars. General Bolden’s openness to interdisciplinary inquiry is
steeped in decades of collaboration with various scientists and partners. When asked about his mentor and inspiration, however, he attributes his success in part to his mother, Ethel Martin Bolden, a practicing librarian in South Carolina.

It is during CSSP’s working group meetings, however, that issues most familiar to the information field emerge as our sister societies relate their struggles with making sense of the changing landscape of scholarly publishing (open access models, author publication/processing charges, mega-journals and the future of the academic journal). Similarly, the data syndrome is a recurring theme: how to ensure integrity and security of one’s data or to preserve and curate born-digital data for effective access and re-use. I saw ample opportunities for our field to contribute our expertise on these matters and engage in discussion with our sister societies.

ASIS&T is seeking to co-sponsor a workshop or session on these issues for the next meeting of CSSP. I will reach out to some of you for your research expertise.

ALA Midwinter

If you have not attended an ALA meeting in recent years, you should reconsider. There is a palpable energy to these meetings as droves of librarians descend on the Exhibit Hall. Vendors, publishers, LIS programs, authors, libraries and, of course, librarians engage in complex rituals that include lots of freebies, book signing, cooking demos, updates about the latest developments in LIS-related services, inspiring talks and ample opportunities to network with a range of people representing all sectors of the library universe.

As an ALA affiliate, ASIS&T was well represented by president-elect Lynn Connaway and past ASIS&T presidents Samantha Hastings and Linda Smith. In the Exhibit Hall, Wayne Wiegand could be found in the Oxford University Press booth signing copies of his latest book, “Part of Our Lives: A People’s History of the American Public Library.” The ALA meetings, in many ways, are a reminder that our field is deeply connected with books and libraries, with reading and literacy, with information organization and access and with the training of librarians and other information professionals.

ALISE 2016

That training was a significant theme at the ALISE 2016 conference. Many sessions were devoted to pedagogy, experiential learning, ethics and values. Beyond the panels and juried papers, however, there were numerous conversations about the future of the accreditation process and standards. Last fall ALA president Sari Feldman appointed two task forces on LIS accreditation to make recommendations to the ALA Executive Board. As one of the leading organizations representing the information field in all its richness and variety, ASIS&T plans on participating in these conversations around accreditation reforms. We will be consulting with our membership once the Board establishes the most appropriate means to communicate ASIS&T’s position on this matter.

In the meantime, the preparations for the 2016 Annual Meeting of ASIS&T in Copenhagen are progressing well. Co-chairs Diane Sonnenwald and Lauren Harrison promise to deliver us a unique experience, and they invite you to submit your papers and panel sessions (due date: April 17). I encourage those who wish to do so to take advantage of the paper mentoring service (deadline to submit is March 10, 2016). We thank the officers and the volunteers who are contributing to this innovative experiment. The Annual Meeting is shaping up to be a great opportunity to bring diverse perspectives and approaches to our study of the library and information fields. I look forward to seeing most of you in Copenhagen.
In the December/January issue of the Bulletin of the Association for Information Science and Technology, we provided a brief news report of our 78th Annual Meeting in St. Louis, as well as feature articles from three of the 2015 ASIS&T Award winners. But the timing of both the meeting and this publication’s deadlines kept us from providing full photographic and text coverage of the fun, the substantive, the social and the ridiculous at the successful ASIS&T confab.

So join us throughout this issue of the Bulletin for a look at some of the work and fun that members and guests enjoyed in St. Louis at the 2015 ASIS&T Annual Meeting. Following a photo montage from the meeting, you’ll find coverage of the ASIS&T Annual Awards presented at the conference. Also in this issue, other Annual Meeting coverage includes reports from many of the pre-conference workshops and seminars; the plenary sessions headlined by Aaron Doering and Sarah Morton; and a report from the always-irreverent SIG CON.

Please return to the December/January 2016 issue of the Bulletin to re-read the Award of Merit acceptance speech delivered by Michael Koenig; an article by Ronald Day, author of the 2015 Best Information Science Book Award; and a report from Karen Miller, the 2015 James Cretsos Leadership Award recipient.
One of the highlights of each year’s ASIS&T Annual Meeting is the presentation of the prestigious ASIS&T Annual Awards.

**Award of Merit**

Michael E.D. Koenig, professor at Long Island University, is the 2015 recipient of the ASIS&T Award of Merit, the highest honor presented by ASIS&T. The award goes to an individual who has made a noteworthy contribution to the field of information science, including the expression of new ideas, the creation of new devices, the development of better techniques and outstanding service to the profession. The jury noted enthusiastically how fully and successfully Mike fits all the criteria outlined for this prestigious award.

Mike’s breadth of experience in educational, social and political processes has affected many facets of the information science profession. His experience is in the academic, international, technical, commercial and theoretical realms of the profession. Few people have touched as many lives or mentored as many people as has Mike. In his gentle and unassuming way he has made the profession a better place to practice. He has bridged the cultural gap between distinct areas of computer and information, between commercial and academic sectors. He has proven that the theories he has taught can work in the real world. His productivity in the field is impressive. He represents the best in information science research, teaching and practice.

For these reasons and more, Michael E.D. Koenig receives the 2015 Award of Merit.

**Watson Davis Award**

ASIS&T’s Watson Davis Award recognizes the contributions of someone who has shown continuous dedicated service to the ASIS&T membership through active participation in and support of programs, chapters, SIGs, committees and publications. In 2015, the person who most effectively lives up to that ideal is Michael Leach.

During his 20 years of active service to ASIS&T, Michael has led student chapter activities at Simmons College and regional chapter activities in the New England Chapter; he has served on committees and juries at the local and national levels; and he has demonstrated association-wide leadership working on
strategic plans for ASIS&T and serving as ASIS&T president. Currently, Michael is Chapter Assembly director; member of both the leadership and membership committees; and leader of the Strategic Planning Task Force.

In his many roles, Michael’s service to ASIS&T has been selfless, consistent and effective. He has assumed diverse leadership responsibilities and consistently done them well, providing the voice of the information professional while including other views.

For these and many other reasons, Michael Leach is the honorable and worthy recipient of the 2015 Watson Davis Award.

**Thomson Reuters Outstanding Information Science Teacher**

The 2015 Thomson Reuters Outstanding Information Science Teacher Award goes to Denise Agosto, Drexel University. Dr. Agosto has an impressive record of teaching excellence. She has received awards for her teaching at both the institutional and the national levels. She has published and presented widely on pedagogy, and her record demonstrates extended engagement with questions of LIS teaching practice. Dr. Agosto engages students in her research, providing them with publishing and presenting opportunities. In sum, Dr. Agosto is an outstanding information science teacher who is constantly interweaving teaching and research and involves her students in research, writing and publishing, and for these reasons, among others, ASIS&T is pleased to name Denise Agosto the 2015 Outstanding Information Science Teacher.

**JAMES M. CRETSOS LEADERSHIP AWARD**

Karen A. Miller, a student at the University of South Carolina, is the recipient of the 2015 James Cretsos Leadership Award honoring a new ASIS&T member who has demonstrated outstanding leadership qualities in professional ASIS&T activities.

Karen has been an active and enthusiastic member of ASIS&T for the past five years, during which she has contributed significantly to SIGs, chapters and the ASIS&T oral history program. She served as vice chair of ASIS&T Special Interest Group/Education for Information Science (SIG/ED) in 2014-2015 following a couple of years as the SIG’s program coordinator. Her work on behalf of SIGs earned her the SIG Member-of-the-Year Award. Additionally, her service was recognized by her selection into the New Leaders program in 2014. Her service responsibility with the New Leaders program allowed her to leverage her experience with the South Carolina student chapter to help represent the 40 current student chapters to Chapter Assembly.

Sandy Hirsh presents James M. Cretsos Leadership Award to Karen Miller.

Her enthusiasm for ASIS&T is notable: reviewers remarked on her dedication, maturity and curiosity. They also noted the high level of her research, both within her academic program and as presented at ASIS&T meetings. In this way, Karen represents the future of our society – someone who is both deeply embedded in the research and service aspects of our professional society and integrates these in a meaningful way.

For all of these reasons and more, each of which exemplifies leadership on behalf of ASIS&T and its members, Karen Miller is the 2015 James Cretsos Leadership Award winner.
**BEST JASIST PAPER**

The 2015 Best JASIST Paper Award goes to Frans van der Sluis, Egon L. van den Broek, Richard J. Glassey, Elisabeth M. A. G. van Dijk and Franciska M. G. de Jong for their paper, “When Complexity Becomes Interesting” (volume 65, issue 7).

This paper addresses significant issues with regard to information interactions between users and systems. The study focuses on users’ emotion of interest, examining its relationship with the level of complexity of the information presented by information systems. To investigate this area of research, the authors hypothesized that information items comprising both novelty and optimal complexity will yield higher levels of interest. As a result, a psycho-linguistic complexity model with a combination of both traditional and deep psychological features, reflecting a user-centered notion of processing difficulty, was developed. The newly constructed model was validated by testing the relation between the objective variable (textual complexity) and subjective variables (appraised complexity, appraised comprehensibility, and interest), confirming the hypothesis.

A key strength of this paper lies within its well-structured and constructed methodological approach. A classifier system was built upon established theories and techniques in order to construct the resulting model and test for validity. The model was validated through analysis of a multi-level appraisal process, including novelty-complexity and comprehensibility, by employing structural equation modeling, demonstrating strong predictability to measure the trade-off between complexity and interest, yet generalizable enough to be applicable for other purposes. The findings of this paper will lead to further ways to operationalize users’ perceptions with measurable dimensions, which will provide useful insights for the design and development of information systems with strong potential to provide positive information experiences (IX). This article provides an exciting, original and well argued, logical, interesting-to-read study that proposes and tests a new measurement indicator for information system performance.

**BEST INFORMATION SCIENCE BOOK AWARD**

INDEXING IT ALL: The [Subject] in the Age of Documentation, Information and Data by Ronald E. Day is the winner of the 2015 Best Information Science Book Award. In this book published by The MIT Press, Day offers a critical history of the modern tradition of documentation. Focusing on the documentary index (understood as a mode of social positioning) and drawing on the work of the French documentalist Suzanne Briet, Day explores the understanding and uses of indexicality. He examines the transition as indexes went from being explicit professional structures that mediated users and documents to being implicit infrastructural devices used in everyday information and communication acts. Doing so, he also traces three epistemic eras in the representation of individuals and groups, first in the forms of documents, then information, then data.
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**Thomson Reuters Doctoral Dissertation Proposal Scholarship**

The 2015 Thomson Reuters Doctoral Dissertation Proposal Scholarship goes to Matthew Willis, Syracuse University, for his proposal entitled, *Patient Sociotechnical Assemblages: The Distributed Cognition of Health Information Management*.

Matthew’s research will use a distributed cognition conceptual framework, combined with a sociotechnical assemblage perspective on issues in personal health information management (PHIM). A longstanding personal health record developed by the Department of Veterans Affairs (My HealtheVet, MHV) is the central IT artifact of the planned study. This research will be conducted as a case study incorporating descriptive multiple-case, cross-case analysis; each case will begin with a particular patient/veteran, including both heavy users and non-users of MHV, and will branch out to include their caretakers, family members and primary care providers, as appropriate. Data will be collected via participant observation and interviews. The study will address questions related to the PHIM practices of veterans, the distribution of those practices across other people and artifacts in the relevant context, the key assemblages that emerge from this distributed work and the key functions of those assemblages. The results are expected to inform further use and design of personal health records systems.

As noted by his dissertation advisor, Dr. Jennifer Stromer-Galley, Matthew’s research has the potential to fill a major gap in the research on the adoption of personal health records and other health information practices by veterans. The jury agreed that Matthew’s research is highly significant and urgent for the medical field, especially given the widespread mandate for computerized health information records. In the proposal, the research questions are clearly stated and are achievable, based on the methodology and the strategy for recruitment and data collection.

**ProQuest Doctoral Dissertation Award**

The 2015 ProQuest Doctoral Dissertation Award is presented to Chris Cunningham, University of South Carolina, for his dissertation entitled, *Government Structure, Social Inclusion and the Digital Divide: A Discourse on the Affinity Between the Effects of Freedom and Access to Online Information Resources*.

This study examines the relationship between democracy and access to online information. Democracy was operationalized using the ratings of political rights and civil liberties available from Freedom House (https://freedomhouse.org/) and additional data from a prior published study, as well as two economic variables (using data from the World Bank): Gross Domestic Product and Foreign Direct Investment. Access to online information was operationalized as the number of internet users per capita (using data from the United Nations). An OLS regression model was used to test the null hypothesis that the level of democracy within a country does not affect level of access to online resources. The model (level of democracy) explained ~57% of the variation in the number of people using the internet per capita (p=0.019). In addition, the civil liberties ranking of a country was determined to have a statistically significant relationship to the number of internet users while the political rights of a country did not.

Chris’ advisor, Dr. Kendra Albright, noted that, “The particular strength of this dissertation is that much of the research on the digital divide looks at the changes...
over time in general access (e.g., the information rich vs. the information poor), rather than on the impacts of the digital divide caused by other aspects; in this case, the effects of democracy on information access. It raises important new questions and reveals new data that can contribute to policymaking for future digital divide issues.” The jury agreed, noting that “the analysis of elements related/contributing to the digital divide remains a vitally important topic and, to the author’s credit, this is a strong effort at applying quantitative examination to a serious issue.”

**STUDENT CHAPTER-OF-THE-YEAR**

For 2015, Student Chapter-of-the-Year honors go to the student chapter at San Jose State University (SJSU ASIS&T) in recognition of chapter’s membership, activities, communications, financial and administrative management and overall contributions to both ASIS&T and the broader information science community. Operating as an online, virtual chapter, SJSU held a total of 15 meetings and 18 events with 29 speakers, including eight cooperative ventures with other ASIS&T and iSchool organizations (out of 14 eligible events). A 35% increase in membership, increased event attendance and community engagement were driven through social media, SJSU YouTube and the new ScholarWorks repositories. Administratively, new bylaws and enhancements to chapter management helped drive growth. SJSU members actively supported the Association through SIG leadership, social media contributions and task force support. As of June 2015, SJSU reported the highest number of current ASIS&T student members in the chapter’s four-year history, including three ASIS&T New Leader Award winners in the past two years. SJSU developed the #HUGASIG campaign that was distributed around ASIS&T this year; now we can return the gift with a congratulatory hug to SJSU ASIS&T!

For all these reasons and others, the student chapter of San Jose State University is the 2015 Student Chapter-of-the-Year.
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SIG AWARDS

SIG-OF-THE-YEAR

The ASIS&T 2015 SIG-of-the-Year Award is presented to SIG/Arts & Humanities (SIG/AH) in recognition of its enthusiasm and concerted efforts to increase membership and outreach, innovative and collaborative programs and for assiduous use of social media and other channels, such as an enhanced website and newsletters, to reach out to all SIG/AH members. Their generative work with SIGs/VIS & DL will continue to bear fruit for years to come. This SIG has embarked on commendable special projects such as the virtual symposium, the student paper competition and the archive project. SIG/AH enriches the ASIS&T experience, not just for its own members, but also for the association as a whole. We will all look forward to and benefit from the SIG’s plans for the coming year.

For all these reasons, SIG/Arts & Humanities (SIG/AH) is the 2015 ASIS&T SIG-of-the-Year.

SIG MEMBER-OF-THE-YEAR

In recognition of significant efforts on behalf of ASIS&T SIGs, the 2015 SIG-of-the-Year Award goes to two members: Gary Burnett and Jeremy McLaughlin.

Gary Burnett has been extremely active in SIG/Information Needs, Seeking and Use (SIG/USE) for nearly a decade. His passion and dedication to the SIG have been evident throughout his activities, which range from active participation in the SIG’s business meetings to service on committees and projects undertaken by the SIG. He has served on the SIG/USE Awards Committee continuously for the past five years. He has chaired it for the last three, during which time he created a new award – the SIG/USE Innovation Award honoring individuals whose work may not fit within more traditional models of scholarly research. Gary presented a very moving bio/rememberance of Elfreda Chatman on the occasion of her nomination as a Fellow of the Academy of SIG/USE. He co-authored (with Sanda Erdelez) an article in the Bulletin of the Association for Information Science and Technology that was rewarded with the 2010 SIG Publication-of-the-Year Award. Currently, Gary is SIG/USE chair-elect, preparing to lead the group in 2015/2016. SIG/USE has benefited enormously from Gary’s generosity with his time, his devotion and his invaluable expertise.

Jeremy McLaughlin has demonstrated exceptional leadership this year as chair of SIG/Arts & Humanities (SIG/AH). Elected to the position at the 2014 Annual Meeting, Jeremy carried out an ambitious set of activities centered around member engagement. First, Jeremy successfully planned and executed collaboratively with SIG/Visualization, Images & Sound (SIG/VIS) a virtual symposium on information and technology in the arts and humanities, held online in April. In conjunction with the virtual symposium, Jeremy coordinated a Student Research Paper Award that honored two winners selected to present their works at the symposium. The symposium also featured six professional speakers. Jeremy’s achievement was a landmark springtime event that purposefully energized SIG/AH’s membership between Annual Meetings. Second, Jeremy jump-started member engagement by giving SIG/AH an active social media presence on Twitter, Facebook and YouTube for the entire year. By utilizing these ubiquitous communications media, he brought new members to ASIS&T resulting in a significant boost in SIG/AH membership as well. Jeremy also enthusiastically promoted ASIS&T special interest groups (specifically SIG/AH) on the ASIS&T blog. In addition to his SIG/AH work throughout the year, he also served as a 2014-2016 ASIS&T New Leader and as a student chapter chair. Jeremy has proven himself to be both a skillful leader and a model ASIS&T member whose involvement in multiple groups redefines student contributions to ASIS&T.

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Rob Capra, assistant professor in the School of Information and Library Science at the University of North Carolina-Chapel Hill, has received a National Science Foundation CAREER Award to support his research for the next five years on a project titled “Knowledge Representation and Re-Use for Exploratory and Collaborative Search.” Capra will develop and evaluate new techniques for capturing, saving and re-using search information, enabling individuals and collaborators to more efficiently conduct exploratory searches and providing valuable search assistance to future users.
CALL FOR PARTICIPATION
79th ASIS&T Annual Meeting
Creating Knowledge, Enhancing Lives Through Information and Technology

It’s time to start planning for your participation in the 2016 ASIS&T Annual Meeting, our first ever outside of North America. Come October 14-18, 2016, Copenhagen, Denmark, will be information central for the 79th ASIS&T Annual Meeting. And it’s not too early to begin considering the papers, panels and tutorials that you might like to present to the organizing committee.

This year’s meeting, Creating Knowledge, Enhancing Lives Through Information and Technology, is an opportunity for scholars and practitioners from around the globe to share research, innovations and insights regarding how information and technology mediate the creation and use of knowledge within and across cultures and how the knowledge created impacts and enhances lives.

Submissions of various types that focus on production, discovery, recording, storage, representation, retrieval, manipulation, dissemination, use and evaluation of information and on the tools and techniques associated with these processes are welcome.

A new feature at the upcoming Annual Meeting is a mentoring service for students and other researchers who have not yet presented academic papers at ASIS&T Annual Meetings. Feedback on complete draft papers will be provided on a first come, first served basis as long as resources permit. Papers must be submitted to the mentoring service before the paper submission deadline. In addition, there will be a “revise and resubmit” opportunity for papers that reviewers judge to have publication potential but require additional work.

Submissions
Submission guidelines and deadlines for the paper mentoring service, papers, panels, posters and workshops and tutorials are detailed at the ASIS&T meeting website: www.asist.org/events/annual-meeting/annual-meeting-2016/. Deadlines vary according to submission type.

Conference Committee
Diane H. Sonnenwald and Lauren Harrison, are conference co-chairs for the 79th ASIS&T Annual Meeting. Catherine Blake and Christian Schlögl are paper co-chairs. Isabella Peters and Barbara Endler-Jobst are panel co-chairs. Colleen Cool and Yin-Leng Theng are poster co-chairs. Richard Hill, ASIS&T executive director, will chair the workshop and tutorial effort.

Additional Information
For additional meeting information, including details and deadlines for submissions of proposals, please visit the ASIS&T website regularly.
Aaron Doering characterized his plenary presentation at the 2015 ASIS&T Annual Meeting as “sharing a decade of passion,” a passion he also hopes to instill in students.

He noted that the Learning Media Lab that he directs at the University of Minnesota was put together to explore how we can use technology to transform education. Technology affects the way we think, act and feel. Transformational learning, he said, is about placing opportunities in the hands of learners, regardless of their age, race or wealth.

He then outlined “9.5 Technology Transformation Guidelines” as follows:

1. **Design experiences, not products.** Think engagement, not completion. He wants students to have experiences they will tell others about.

2. **Build trust.** Demonstrate commitment through experience and attitude. The old way of doing things involved an instructor developing content and then designing lessons to convey it. That’s now turned upside down: the design leads into the content, facilitated...
by the instructor. How do we get students involved in the environments we create?

3. **Guide learners as designers.** It’s the power of the story that engages us. Doering referred to the North of Sixty project (http://chasingseals.com/north-of-sixty/), in which he worked with Inuit elders, who shared their voices with the world. He worked with six Canadian Arctic communities and tied what they shared to an expedition. Using an iPad, they could upload their stories to the learning environment so everyone could see. The arrangement provided lessons and educational resources for teachers.

4. **Recognize learners as experts by experience.** Everyone has an expertise in some area; how can we tap that? He showed an Arctic blog in which students shared their expertise about whaling and living in the community. It became the most active area of the online community. Let students be experts within an area identified by GIS. The Geothentic project (http://chasingseals.com/geothentic/) has participants identify an issue and then deal with it through analysis. For example, where’s the best place to build a hospital in San Francisco? The project brought students in and excited them about the tasks they needed to solve.

5. **Encourage collaboration, working together without boundaries.** We’re in a world with no boundaries, Doering said. Community is built at the point where our stories intersect. Earthducation (http://chasingseals.com/earthducation/) is a series of seven expeditions to every continent over the course of four years, designed to create a world narrative of the dynamic intersections between education and sustainability. Participants designed new learning environments every time they went to these places, doing live updates at each location. The project was set up so that students could ask about various issues. The project got students, teachers and other adults to collaborate. It’s now being funded through an angel ambassador. It has impacted 76 communities, more than 15 million students, all 50 United States, 3,000 classrooms, 6 continents, 41 journal articles and more than 150 conferences.

6. **Delight in aesthetics.** More than beauty, this concept deals with usefulness. How can we design something that will engage learners and make them come back to it? Doering and his team put the design phase at the top of the process, instead of the bottom.

7. **Inspire self-narrative.** Focus it around real world issues. Expedition 1 of the Earthducation project (http://lt.umn.edu/earthducation/expedition1/) traveled to Burkina Faso, collecting interviews with elders, kings, farmers and others. Expedition 6 went to Nepal (http://lt.umn.edu/earthducation/expedition6/), where people shared their stories. The project showed the power of social media. He decided to tweet at CNN. CNN called the university, and Doering wound up on CNN reacting to a White House announcement on climate change. The video went viral (www.youtube.com/watch?v=NayfbGCGXdw). Also, the Weather Channel provided updates from their Arctic expedition every six hours. One narrative was written from the perspective of one of their dogs, named Timber. Timber’s postings became one of the most visited areas on the website. They gave students something to get excited about.

8. **Reference knowledge domains.** TPCK (Technological Pedagogical Content Knowledge). How can we build it within our learning environments?

9. **Innovate! Teach for change.** In 1922, Thomas Edison predicted motion pictures would make textbooks obsolete. Doering showed a TV commercial in which a teacher apologizes for the failure of the old-fashioned educational system. It’s one of his favorite ads, he said. For him, it’s time for innovation in education. What about user-driven
adventure learning? He designed an environment called WeExplore (http://chasingseals.com/weexplore/). Students and teachers can go there and build their own content. This is how we get students to innovate. People want to fund these tools, too.

9.5. **Design as a learner.** Doering quoted Einstein: “It’s a miracle curiosity survives formal education.” What’s next? Developing Earth Explorers – using GIS in classrooms (http://chasingseals.com/earthexplorers-2/). The idea is to have GIS in all classrooms and teach students and teachers how to use it effectively. Knowing how to use GIS is crucial in our connected world. It ties together various topics. But GIS is nothing without good content. One possibility is AgCultures (http://agcultures.com/). Participants travel the world to get students excited about innovations in agriculture. What opportunities exist for you to help solve the world’s food challenges? Participants work online alongside the innovators. A few are even chosen to travel with the AgCultures team. There’s a focus on storytelling in all these projects. The Changing Earth project (http://chasingseals.com/the-changing-earth/) is a plan to visit various locations worldwide starting in 2016 to educate learners about “sustainability, resilience and the role of traditional knowledge.” It will use the GoX app, which Doering described as “Instagram on steroids.”

Doering pointed out how important it is to stop and take time to think. He asked audience members what their next challenge would be. He concluded with the observation that academia is a great place to be because you get to wake up every morning and think about what you’re going to do to transform.

During the question-and-answer session, Doering said he travels with small teams. They design before they go into the field. The team must come together and have the passion to do something that’s never been done this way. Egos, he said, must be left behind; they hurt collaboration.

Doering said he always tries to find corporate partnerships to help finance his expeditions. There’s usually a corporate sponsor who wants to be known as a company that helps out with these things. He also talks with school administrators about giving teachers the time to develop the expertise they need. Doering has found their websites get used a lot right before state testing times and then usage drops. So they try to align them with state and national standards.

Doering remarked that one tribal elder told him he was sick of white men coming to interview him to get PhDs. We need to be giving something back. Go into their community to help them with something, whatever that might be: cleaning up oil barrels, etc. There’s always guilt associated with any of this. But Doering said that in 15 years of travel he’s never had a bad experience. Everyone likes to smile and laugh. Work with the locals and make sure you’re doing things their way before you get there. He said he tries to fade back and let people tell their stories.

What makes him want to keep telling the story is the excitement of seeing people learn about these things. The projects take a lot of time and energy. But he said he can’t think of life in any other way. The world is a beautiful thing, and he can’t wait to meet people and hear their stories. He wants to share it through books he doesn’t have time to write. Sometimes he asks himself why he does this when he could just go back and write in his office. But he has a commitment to do education in a different way that motivates students and teachers.

Doering finished his presentation by inviting audience members to share in his activities by reaching out to him. His website is http://chasingseals.com. You can also follow him on Twitter: @chasingseals.
Sarah Morton, speaker at the second plenary session at the 2015 ASIS&T Annual Meeting in St. Louis, Missouri, began by asking what we mean by research impact. She used the term knowledge exchange (KE) to refer to all the processes of research use between researchers and others. Her definition of impact has three sections:

1. **Research uptake**: people being interested in research, collaborating, reading, talking about it, coming to presentations and so forth
2. **Research use**: people doing something with research, changing their views, passing research on to someone else and applying it to practice or policy
3. **Research impact**: a contribution to change as a result of research use.

**How Does Research Impact Happen?**

Research use isn’t straightforward, Morton said. Carol Weiss defined six ways research can be used in policy:

1. **Problem solving**: research used to provide evidence to solve policy problems
2. **Knowledge-driven**: research driving new technological developments
3. **Interactive**: interactive, non-linear model with many actors communicating with each other
4. **Political**: research used to lobby for political viewpoints
5. **Tactical**: research used to delay action, avoid taking responsibility, deflect criticism, maintain prestige or rally academic support
6. **Enlightenment**: research changing conceptualization of a problem through slow percolation of ideas in policy and society.
Morton then explored 11 statements about research impact issues, based on principles developed by Davies and Nutley in a forthcoming work:

1. Research does not speak for itself. It needs to be communicated, tailored for different audiences to incentivize different people.
2. Research doesn’t stand alone. Research must be seen in the context of other evidence, other systems and cultures.
3. Research has to be integrated. For practitioners, it has to be integrated into practical experience.
4. Using research is often not an event. It’s a more gradual process.
5. Research impacts not just learning: unlearning matters too. Part of it is letting go of previously held ideas that were very dear. People are reluctant to accept evidence that alters their beliefs.
6. Knowledge is often co-produced. Collaborative research can be very helpful, offering new insights. Researchers have posted a manifesto for partnership research between academic and other organizations at www.crfr.ac.uk/manifesto-for-partnership-research/.
7. Knowledge creation is deeply social. It occurs through interaction and dialog. Relationship building is crucial.
8. Research impact is not about products, but processes. We need to have good products.
9. Research impact is not all about decisions but often more about framings. It can be most powerful when it causes shifts in thought processes.
10. For organizations to be serious about research use, they need “skin in the game.” Morton has found organizations with more formal settings for research are more likely to use it.
11. Leadership in impact settings needs to demonstrate active support for research creation and use.

What Helps and Hinders Research Impact?

Morton cited barriers to research use including lack of time, low priority and poor communication of research. Sometimes research is not timely or relevant to users’ needs or it may not be the most important source of information. There may be other factors such as organizational resistance or a lack of skills.

The UK Economic & Social Research Council impact assessment activities (www.esrc.ac.uk/research/evaluation-and-impact/) found the most important drivers of impact include established relationships and networks with user communities, involving users at all stages of the research, and well-planned user engagement and knowledge exchange strategies.

Morton turned her attention to ideas about whether there is a gap that needs to be bridged between researchers and users. Rather than a gap, she encouraged thinking about all of the organizations, like the media, professional bodies, think tanks, audits, inspections, scrutiny, advocacy groups, knowledge brokers and lobbyists, who can help with research use.

Best & Holmes (2010) [2] suggest that from the 1960s to the mid-1990s there was mainly a linear model of research use, focused on dissemination, diffusion and knowledge transfer leading to impact. Knowledge was seen as a product. From the mid-90s, relationship models became more dominant, acknowledging knowledge from multiple sources: research, theory and practice. Interpersonal, social relationships became more important. Finally, Best and Holmes argue a systems model is needed, featuring knowledge woven within priorities, culture and context. Relationships mediate throughout the cycle. These three generations of models are nested, Morton said: rather than superseding each other we need all three to be interlinked.

What Have We Learned About Research Use Since 2001?

Key messages include that research use is a process, not a product; it is complex and context specific and often involves long time frames.
Translation, relationships and systems matter. There are many kinds of evidence: research, evaluation, data, practice, knowledge. We have to have the humility to see that that research doesn’t trump everything else.

To take research use forward there is a role for both academic researchers and non-academics. Researchers can network, build relationships with key users, involve them in research and KE and strategize KE. Non-academics can systematize research use, ensure leadership and learning time, and work with key academics.

Morton concluded by pointing out there’s even more information available in one of her articles [3] and a forthcoming article [4].

Resources Mentioned in the Article

THE 2015 CLASSIFICATION RESEARCH WORKSHOP

CONCEPTUAL CROWBARS AND CLASSIFICATION AT THE CROSSROADS: THE IMPACT AND FUTURE OF CLASSIFICATION RESEARCH

by Melissa Adler

The 2015 Classification Research workshop consciously and critically engaged the general Annual Meeting theme, “Information Science with Impact,” in order to frame conversations about the results and significance of classification research. With the increasing emphasis on impact in and around information science, the organizers seized the opportunity to consider some of the ways in which we define ourselves as a classification research group and how we understand our research to affect and influence theory and practice. Classification matters not only in the functioning of information systems and technologies, but also in the lived experiences of individuals and in society, organizations and all information contexts. It is important to evaluate the positive and negative as well as the intended and unintended consequences of classification and classification research.

The spate of recent violent events, together with the resistance and response, quickens a crucial set of questions about the nature of our work. One of the aims of the workshop was to cast such violence as a knowledge organization problem. The organizers also wanted to consider whether and how classificatory acts and systems can be reparative or transformative. They asked the following questions in their call: What bearing does the structuring of knowledge have upon the seeking, reception, circulation and use of knowledge and information? Do classifications tell us something about agendas, political contexts or authority? What role do our classification systems play in constituting and challenging categories of difference? In what ways have communities used and/or challenged classifications in civic action and protest?
Students and faculty in various stages of their careers and several research practitioners delivered eight papers in the half-day workshop. Attendees and presenters brought a wide range of perspectives and knowledge to bear on the workshop theme. We were pleased to have some of the most highly regarded experts in the field of knowledge organization and a number of newcomers.

Sessions were organized loosely around the themes of the papers. The first session featured papers that directly addressed classification models and cases in practice. The papers in the second session took stock of fundamental classification theories and methods and suggested new directions for research and evaluation of impact. The third session dealt with social and political questions regarding classification and metadata creation.

The morning kicked off with a brief introduction. Melissa Adler welcomed the participants and provided an overview of SIG/CR and the purpose and intent of the workshop.

The first presenter was Karen Wickett, who explained how situation semantics can be applied in descriptive metadata modeling to capture the roles of the various agents and contexts involved in the development, selection, use and interpretation of value vocabularies and classifications.

Yejun Wu presented a paper co-authored by Li Yang that explores how seven different knowledge organization systems classify and name violence and man-made disasters.

Joseph Busch revisited a paper written in 1992 about the Getty system for modeling the variability of historical source information [1]. He reconsidered and updated research on the cognitive process of inquiry and methods used by historians to organize information, and he discussed the progress of longitudinal methods in system design.

Joseph T. Tennis outlined the ways in which fundamental philosophical positions have been operationalized and evaluated in the literature to understand the strengths and weaknesses in our current practices of assessing impact.

Richard Smiraglia explored social epistemological questions about knowledge organization systems, including ways to understand systems as pervasive mechanisms of control, the paradoxical limits and liberatory aspects of knowledge organization systems and how impact and effects of systems change over time.

Audrey Lorberfeld and Elan May Rinck examined the cultural, political and theoretical consequences of constructing a controlled vocabulary for an unstructured, niche domain within the framework of a prototype thesaurus for indexing the domain of do-it-yourself (DIY) biohacking.

Lala Hajibayova’s paper discussed the possibilities and limitations for crowdsourcing metadata, using the example of the New York Public Library’s “What’s on the menu?” collection, the largest restaurant menu collection in the world.

Ronald Day presented the final paper of the day and directly addressed the workshop’s call to confront classification and violence. He argued that research on classification in social and cultural issues needs to be done at the levels of primary and secondary documentation, as a problem of epistemic and practical infrastructure, and as political economy.

Following the paper sessions we had a rich discussion about future directions of classification research and initiatives SIG/CR should take to draw upon and speak to wider reaches of the information science community.

Before the meeting adjourned, new officers of SIG/CR were introduced. Barbara Kwasnik, professor, Syracuse University, is chair-elect. Lala Hajibayova, assistant professor, Kent State University, is secretary/treasurer and Laura Ridenour, doctoral student, University of Wisconsin-Milwaukee, is the communications officer. Melissa Adler, assistant professor, University of Kentucky, is the current chair.

SIG/CR student scholarships to cover the workshop registration fee were awarded to Audrey Lorberfeld and Elan May Rinck, both from the University of Washington.

Papers and abstracts from the workshop will be published in Advances in Classification Research Online.

The workshop organizing committee members were Melissa Adler, University of Kentucky; Barbara Kwasnik, Syracuse University; Joseph Tennis, University of Washington; and Jonathan Furner, UCLA. ■
Authors and Papers

Session 1 – Space/Time/Semantics
Karen M. Wickett, University of Texas at Austin, “Modeling Classifications and Value Vocabularies with Situation Semantics”
Yejun Wu, Louisiana State University, and Li Yang, Southwest Petroleum University, China, “Exploring Completeness and Balanced Perspectives in Classifications: Case Studies of Violence and Man-Made Disaster”
Joseph Busch, Principal, Taxonomy Strategies, “Revisiting Historical Source Information”

Session 2 – Ontology/Epistemology/Culture
Joseph T. Tennis, University of Washington, “On Operationalization and Evaluation of Epistemic and Ontological Claims to Knowledge Organization”
Richard Smiraglia, University of Wisconsin-Milwaukee, “Cultural Pervasiveness or Objective Violence?: Three Questions about KOS as Cultural Arbiters”

Session 3 – Social/Personal/DIY
Lala Hajibayova, Kent State University, “Participatory Systems of Knowledge Representation and Organization”
Audrey Lorberfeld and Elan May Rinck, University of Washington, “Structural (In)visibility: Possible Effects of Constructing a Controlled Vocabulary on a Niche Domain”
Ronald Day, Indiana University, “Social Classifications, Affect and Human Actions”
For the fifth time SIG/MET, ASIS&T’s special interest group for the measurement of information production and use, held its workshop in conjunction with the ASIS&T Annual Meeting. The full-day workshop was organized by SIG/MET chairs and officers Isabella Peters, ZBW Leibniz Information Centre for Economics, Germany; Stefanie Haustein, University of Montreal, Canada; Chaoqun Ni, Simmons College; Kun Lu, University of Oklahoma; and Timothy D. Bowman, University of Turku, Finland. Fifteen presentations and 3 posters at METRICS 2015 attracted 45 participants. In addition to submitting a peer-reviewed poster ahead of the workshop, participants were for the first time invited to bring posters with their latest findings to discuss during two open poster sessions. Workshop presentations, posters and discussions revolved around SIG/MET’s central topics related to the measuring of information, including metrics research and application in bibliometrics, informetrics, altmetrics and information retrieval, as well as social network analysis and visualization of scholarly communication.
The workshop opened with a session devoted to bibliometric case studies. George Lan, Elsevier, presented on the impact of interdisciplinary publications. He differentiated between multiple audiences or consumers of academic research, comparing the effect of the level of interdisciplinaryity of papers based on their citations from articles and patents as well as downloads. Philippe Mongeon, University of Montreal, demonstrated the positive effect of funding on researchers’ collaboration networks. Based on researchers in Quebec, he found a linear positive correlation between the funding amount and the number of new co-authors of funded authors. While Mongeon’s analysis of collaboration patterns was quantitative and based on co-authorship patterns, Katherine W. McCain, Drexel University, took a different and more qualitative approach to identify scientific collaboration: she analyzed personal mentions of researchers in the acknowledgement texts of research papers using the starlet sea anemone as a model organism. Acknowledgements were classified into 10 different types including “providing animals,” “providing comments on manuscript” or “inspiration, valediction.”

The second session of the METRICS workshop focused on information retrieval and its relationship with bibliometrics. Kun Lu, University of Oklahoma, and Dietmar Wolfram, University of Wisconsin-Milwaukee, dedicated their study to the problem of computational limitations that occur due to an ever-growing amount of data and increasingly large corpora. In their presentation entitled “Vocabulary Size and Its Effect on Topic Representation for Informetric and Information Retrieval Data Processing,” they showed, based on an analysis of three datasets, that cutting off the so-called long tail could increase processing without affecting retrieval results. Andrea Scharnhorst, Royal Netherlands Academy of Arts and Sciences KNAW, introduced Ariadne, an interactive context explorer for bibliographic data. Ariadne is trained on 65 million publications from OCLC’s ArticleFirst database but can be used as an exploratory tool for any dataset. Ariadne’s algorithms were tested and compared to other methods of topic extraction and visualization in the study by Theresa Velden, University of Michigan, and colleagues, who concluded the information retrieval session. The contribution entitled “Same Data, Different Results? On a Comparative Topic Extraction Exercise” presented a systematic comparison of different approaches and algorithms to visualize the structure of an astrophysics and astronomy dataset with more than 110,000 papers. Velden emphasized that several solutions are valid and that the aim of the exercise was to find the best solution for a given purpose. So-called “blind spots” of some of the methods were identified and visualized.

Similar to past workshops, SIG/MET recognized outstanding contributions of students with a Best Student Paper Award sponsored by Elsevier. This year the jury determined two winners, who were given the opportunity to present their papers during the third session of the workshop. Misha Teplitskiy, University of Chicago, who co-authored his paper “Amplifying the Impact of Open Access: Wikipedia and the Diffusion of Science” with fellow student Grace Lu and supervisor Eamon Duede, showed that open-access and high-impact-factor journals were more likely to be cited in Wikipedia. The paper “Evolution of iSchool Movement (1988-2013): A Bibliometric View,” co-authored by McGill and University of Montreal PhD students Fei Shu and Philippe Mongeon, won the other Best Paper Award. Shu presented the history of the iSchool movement based on more than 4,000 LIS dissertations indexed in ProQuest. He highlighted that interdisciplinarity increased over the years and that computer science gained importance. Elsevier’s sponsorship allowed SIG/MET to
award each of the two best student papers with $500 and finance ASIS&T student memberships for all students participating in the workshop.

Altmetrics has been a hot topic of the metrics and scholarly communication community in the past years. This trend is also reflected in the METRICS 2015 program, as the fourth session consisted of four talks on alternative indicators and altmetrics. Stacy Konkiel, Altmetric, presented an exploratory case study based on scientific papers cited in public policy documents. She emphasized that policy documents represent an interesting source for societal impact metrics but that the set of documents covered by Altmetric is still limited to a small number of selected sources. Adèle Paul-Hus, University of Montreal, presented the results of her study co-authored with Philippe Mongeon and Fei Shu. The three PhD students from Montreal identified the Twitter accounts and tweeting activity of faculty members of LIS schools accredited by the American Library Association (ALA) and compared their Twitter followers to their co-authorship networks. They concluded that connections on Twitter reflected mostly institutional affiliations instead of research interests. Jim Pringle, Thomson Reuters, introduced “A New Interest Indicator Based on Researcher Behavior in the Web of Science.” The new usage count was designed to complement the article citation count by a usage indicator to enhance article discovery. Pringle presented interesting disciplinary and journal-based patterns comparing usage and citation counts. The alternative metrics session concluded with a presentation by Stefanie Haustein, University of Montreal, who, together with her colleague Rodrigo Costas, CWTS, Leiden University, analyzed terms appearing in Twitter bios of users mentioning scientific papers to determine who is tweeting about science. Their preliminary findings suggest that a large share of tweeters identify as academics, which contradicts the assumption that tweets reflect impact on society at-large.

For the first time at the SIG/MET workshop, Altmetric and figshare sponsored an altmetrics paper award. The jury decided to award two contributions: the papers by Mongeon, Paul-Hus and Shu and one by Haustein and Costas were selected for Best SIG/MET Altmetrics Paper Awards; each team won $500.

Bradford Demarest, Indiana University, presented his doctoral research on comparative discourse epistemetrics in the session entitled “Broadening the Scope of Bibliometrics.”

Analyzing the abstracts and full texts of philosophy and psychology papers, Demarest showed that the two disciplines can be well distinguished based on the adverbs and pronouns used.

The workshop concluded with two presentations showcasing the application and use of metrics. Betsy Martens, University of Oklahoma, presented the Oklahoma Mesonet platform and analyzed more than 650 papers citing the tool. Edwin Henneken, Smithsonian Astrophysical Observatory, demonstrated the new retrieval interface of the Astrophysics Data System (ADS). After the search interface of ADS had remained practically unchanged since 1992, the new platform offers a variety of analytical and visual possibilities to enhance retrieval with a modern interactive design. New functionalities can be applied to any set of results and include a variety of metrics, histograms and time series as well as co-citation and co-author network visualizations.

More information about the SIG and the METRICS 2015 workshop, including abstracts and slides of all presentations, can be found on SIG/MET’s website at www.asis.org/SIG/SIGMET/. For the latest information and news, follow SIG/MET’s mailing list (http://mail.asis.org/mailman/listinfo/sigmetrics) and Twitter account (https://twitter.com/sig_met).
### METRICS 2015 Workshop Program

#### Case studies in bibliometrics
- George Lan, Lei Pan and Sophia Katrenko: “Analyzing Interdisciplinary Research Along Multiple Dimensions of Research Impact”
- Philippe Mongeon: “The Impact of Funding on Research Collaboration: The Case of Quebec Researchers”
- Katherine W. McCain: “Collaboration Patterns in Model Organism Research: Co-Authorship, Acknowledgement and the Starlet Sea Anemone (Nematostella vectensis)”

#### Poster session
- Hamed Alhoori, Richard Furuta, Sagnik Choudhury, Tarek Kanan, Myrna Tabet, Mohammed Samaka, Edward Fox and Lee Giles: “Mining Altmetrics at Different Levels” – *open poster presentation*
- Virgina A. Dressler: Beyond Google Analytics: Using the “Toolkit for the Impact of Digitized Scholarly Resources to Embed Metrics and Gauge Use of Regional Digital Collections” – *peer-reviewed*
- Shenmeng Xu and Bradley M. Hemminger: “What Flavors Are Different Types of Scholarly Articles? An Investigation of PLOS Publications” – *open poster presentation*

#### Relationship between bibliometrics and information retrieval
- Kun Lu, Xin Cai, Isola Ajiferuke and Dietmar Wolfram: “Vocabulary Size and Its Effect on Topic Representation for Informetric and Information Retrieval Data Processing”
- Theresa Velden, Kevin Boyack, Nees Jan van Eck, Wolfgang Glänzel, Jochen Gläser, Frank Havemann, Michael Heinz, Rob Koopman, Andrea Scharnhorst, Bart Thijs and Shenghui Wang: “Same Data, Different Results? On a Comparative Topic Extraction Exercise”

#### Best student papers – awarded by Elsevier

#### Alt(ernative) metrics
- Stacy Konkiel: “Citation Lags for Articles Referenced in Public Policy Documents: An Exploratory Study”
- Philippe Mongeon, Adèle Paul-Hus and Fei Shu: “Twitter Activity and Scientific Collaboration of LIS Schools and Faculty Members” – *winner of award sponsored by Altmetric and figshare*
- James Pringle: “A New Interest Indicator Based on Researcher Behavior in the Web of Science”

#### Broadening the scope of bibliometrics
- Bradford Demarest: “Comparative Discourse Epistemetrics: Research Article Abstracts and Full Texts”

#### Metrics in use
- Betsy Martens, Christopher Fiebrich and Bradley Illston: “Mapping Oklahoma Mesonet Sensor Datasets”
- Edwin Henneken: “Metrics and Visualizations in the Astrophysics Data System”
Beginning our second decade of successful and vibrant gatherings at the ASIS&T Annual Meetings, Special Interest Group/Social Informatics (SIG/SI) held the 11th Annual SIG-SI Research Symposium, on Saturday, November 7, 2015 at the Annual Meeting of the Association for Information Science and Technology in St. Louis, Missouri. The symposium, organized by Pnina Fichman and Howard Rosenbaum, both of the School of Library and Information Science at Indiana University and co-chairs of SIG-SI, was co-sponsored by the Rob Kling Center for Social Informatics.

Since 2004, established scholars, young researchers and doctoral students have shared more than 100 panels, papers and posters illuminating the intellectually challenging and engaging work of social informatics, and this year was no exception. The theme of the symposium was “The Impacts of Social Informatics Research,” and presenters discussed issues related to this theme in five papers and a panel discussion. The call was for research with particular focus on the impact of social informatics work on industry, government, local/national/global community groups, individuals, information systems and other practice contexts.

After opening remarks by Howard Rosenbaum, Natalie Pang (presenter) and Shubert Foo described the contribution of social informatics to the study of information and communications technology use in marginalized communities. This presentation was followed by Kaitlyn Costello (presenter), John Martin III and Ashlee Edwards’ paper that examined linguistic structures found in banter about illicit behaviors among participants in an online discussion forum.

After a break during which the 30 or so participants were able to network...
with each other, there was a panel discussion about IT education in iSchools and the role of social informatics in the curriculum. Participants included Laura Spears, Marcia Mardis, Nicole Alemmane, Ken Fleischmann, Susan Winter, Flora McMartin and Larry Dennis. The panel raised a number of important pedagogical issues of concern to those of us working to incorporate social informatics into our courses and programs.

Following the panel, Abdul Roman (presenter) discussed the significance of a values-oriented approach in social informatics research, using a case study of human rights in Indonesia. J.P. Allen (presenter) focused squarely on the symposium theme, using social informatics as a critical lens to analyze the “Bright ICT” initiative proposed by a fellow organization, the Association for Information Systems, questioning the role of the organization in efforts to develop a safer internet. The last paper, from Theresa Anderson (presenter) and Simon Buckingham Shum, also addressed the theme, using social informatics to critique the tendency they see in the rise of big data to marginalize people in the quantitative analyses that result from algorithmic-driven data mining. This paper was notable because Anderson was discussing her work with the audience from her home in Australia; unable to travel, she was able to take advantage of ICT to deliver an engaging presentation.

During the last session in the symposium, the 2015 Social Informatics Best Paper Award was given to Mary Chayko of Rutgers University for her paper “Techno-Social Life: The Internet, Digital Technology, and Social Connectedness,” published in Sociology Compass in 2014 (full citation below). Her presentation was very well received and engendered much discussion from the audience.

The symposium ended with closing remarks from Emad Khazraee, who provided a clear and concise summary of the papers and the panel, emphasizing that the state of research and theorizing in social informatics is healthy and exciting.

The symposium was a success with high quality papers, a lively panel and discussion and an international audience. SIG-SI is already planning the symposium for ASIS&T 2016 and we expect to have another stimulating event in Copenhagen.
Special Interest Group/Information Needs, Seeking and Use (SIG/USE) convened at the 2015 ASIS&T Annual Meeting to explore the links between theory and practice in information behavior. In his keynote address, Ross Todd urged the audience to go beyond models and aim for synthesis and meta-analysis, focusing on the user. Lightning talks addressed a social cognitive theory analysis of a program for disadvantaged youth; adults with limited literacy and health information; mobile information workers; forming a community of practice; and information sharing practices among online communities. A key takeaway was that research should actively involve communities and their members rather than simply being about them. Safiya Noble’s keynote highlighted hidden biases in automated search engine returns with encouragement to design algorithms enabling users to opt in or out of filtered returns. Attendees explored the topics raised further during a mixer chat and table talks. The symposium ended with presentations for the best paper, poster and research proposal awards for student and international conference travel.

2015 Annual Meeting Coverage

SIG/USE Research Symposium
Making Research Matter: Connecting Theory and Practice
by Rebekah Willson, Devon Greyson, Gary Burnett and Lisa Given

Special Interest Group/Information Needs, Seeking and Use (SIG/USE) held its 15th Annual Research Symposium at the 2015 ASIS&T Annual Meeting in St. Louis. The symposium was entitled “Making Research Matter: Connecting Theory and Practice” and drew close to 50 information behavior researchers, professionals and students interested in exploring how to make connections between information behavior theory and practice. The symposium featured two keynote addresses, one by Ross Todd of Rutgers University (http://comminfo.rutgers.edu/~rtodd/) and the other by Safiya Noble of University of California, Los Angeles (https://gseis.ucla.edu/directory/safiya-umoja-noble/). In addition to the keynote addresses there were five lightning talks presented by speakers on their research, two facilitated group discussions and the presentation of the SIG/USE awards.

The 2015 SIG/USE symposium planning committee was co-chaired by Amelia Gibson, University of North Carolina at Chapel Hill; Devon Greyson, University of British Columbia; and Rebekah Willson, Charles Sturt University. Committee members included Vanessa Pena, Science and Technology Policy Institute at Institute for Defense Analyses; Deborah Hicks, University of Alberta, Edmonton; Zachary Frazier, University of South Carolina; Sara Mooney, Acuity Systems; Houda El Mimouni, Drexel University; and Yan Zhang, University of Texas at Austin. The committee worked with SIG/USE chair Lisa Given, chair-elect Gary Burnett and immediate past chair Rong Tang in planning the event.

The symposium began with a welcome from Rebekah Willson and opening remarks by Lisa Given. Then, Devon Greyson introduced the first keynote speaker, Ross Todd.
First Keynote Address

Ross Todd is an associate professor in the School of Communication and Information, Department of Library & Information Science at Rutgers University. Drawing on his body of work on school libraries, Dr. Todd’s talk, “Transforming Research to Practice: A Holistic User-Centered Framework,” highlighted his insights into the interconnections between research and practice. Urging researchers to listen to and work with practitioners, he encouraged attendees to move beyond the generation of multitudes of mid-level models into methods of synthesis and meta-analysis.

Lightning Talks

The next portion of the symposium featured the five lightning talks listed below. The talks explored connections among theory building, research and practice as they relate to information needs, seeking and use. This area included the examination of multidirectional connections between theory and research as well as societal and practice implications of information science research. The talks presented research and its implications for practice on a wide range of topics from health to hobbies and with a wide range of participants, from disadvantaged youth to vulnerable adults.

“Following the Thread of Social Cognitive Theory Through the Development, Implementation and Outcomes of the HackHealth After-School Program for Disadvantaged Youth.” Beth St. Jean, Mega Subramaniam, Natalie Greene Taylor, Christie Kodama, University of Maryland, and Dana Casciotti, National Library of Medicine

“Methodological Challenges Related to Working with Vulnerable Participants: Adults with Low Literacy and Health Information Behavior.” Miraida Morales, Rutgers University


“Knitting Together an Online, Hobby-Based Community of Practice.” Nicole Cooke, University of Illinois, Urbana-Champaign


Denise Agosto, Drexel University, served as discussant for the lightning talks. She highlighted commonalities across the presentations and the strengths of the various approaches to research, urging information behavior researchers to do research with communities rather than imposing research on communities.

Following Agosto’s discussion, SIG/USE symposium co-chair Devon Greyson introduced the mixer chat, a free-form discussion that allowed symposium participants a chance to discuss issues brought up in Dr. Todd’s keynote and the lightning talks.

Second Keynote Address

Safiya Noble, assistant professor in the Department of Information Studies at the University of California, Los Angeles, delivered the second keynote address. Her talk, “Power, Privilege and the Imperative to Act,” provided a thought-provoking look into search from racist and sexist automated search suggestions to the influence of top search results on outcomes from the personal to the political. Dr. Noble used examples from her work to demonstrate that the information retrieval algorithms of for-profit search engines such as Google are in actuality advertising algorithms. Urging attendees to be concerned that library and information expertise was being bypassed as the public’s information seeking moves increasingly into biased commercial information spaces, Dr. Noble presented intriguing ideas regarding possible future search tools that might require users to opt in to prejudice rather than centering oppressive online content.

Table Talks

Following Dr. Noble’s keynote, there was a facilitated discussion about research and practice. Five senior scholars in the field led the table talks: Gary Burnett and Heidi Julien, University at Buffalo; Heather O’Brien, University of British Columbia; Ross Todd, Rutgers; and Barbara Wildemuth, University of North Carolina at Chapel Hill. The facilitators discussed their own experiences with the challenges and benefits of working
in both research and practice within the field of information behavior. A lively discussion followed.

**2014 SIG/USE Research and Travel Awards**

Awards committee co-chairs Heather O’Brien and Wade Bishop, University of Kentucky, presented this year’s winning submissions at the symposium.

- The Best Information Behavior Paper Award: “Social Search Behavior in a Social Q&A Service: Goals, Strategies and Outcomes” by Grace YoungJoo Jeon and Soo Young Rich, University of Michigan
- The Best Information Behavior Poster Award: “Health Information Triangulation: A Complex and Agentic Practice Among Young Parents” by Devon Greyson, University of British Columbia
- The Elfreda A. Chatman Research Proposal Award: Debbie Rabina and Emily Drabinski, Pratt Institute, for their project titled, “A Blueprint for Information Intervention for Incarcerated People”
- The Student Travel Award was given to three recipients: Leslie Thomson, University of North Carolina at Chapel Hill; Sarah Chizari, University of South Carolina; and Danielle Pollock, University of Tennessee.
- The Interdisciplinary Conference Travel Award: Jenna Hartel, University of Toronto, to support her attendance at the 4th International Visual Methods Conference (IVM), University of Brighton in England

The presentation of results from the 2014 Elfreda A. Chatman Research Proposal Award was deferred to the 2016 meeting.

More information about the SIG/USE awards is located at http://siguse.wordpress.com/awards/.

**Symposium Conclusion**

Incoming SIG/USE chair Gary Burnett offered closing remarks for the 2015 SIG/USE Symposium, highlighting common themes discussed in the keynotes, lightning talks and discussions.
The 2015 SIG CON symposium, the annual event offered by ASIS&T SIG/CON, got off to an unusual start when, with ceremonial wand in hand, Gary Burnett, convener of the previous year’s session, passed along an announcement from the family of the SIG’s figurehead, Dr. Llewellyn C. Puppybreath III. It seems that the family had gotten word of the 2014 session’s keynote talk by a man purporting to be Dr. Puppybreath’s long-lost nephew Aloysius. The family strongly disavowed any connection whatsoever to the speaker, took legal action to retrieve the ceremonial wand and demanded an apology. Dr. Burnett offered a heartfelt apology, noting that he had harbored his own doubts about the credibility of the speaker, who appeared looking quite disheveled and carrying a wine bottle from which he drank regularly during his presentation. Since the wand had disappeared the previous year along with the imposter and was never properly passed along, Dr. Burnett formally presented it to Ken Fleischmann to officially begin the 2015 symposium.

Sean Goggins opened the symposium with his talk, “Revolutionizing Alt Metrics: Introducing the I-Index.” Goggins explained that scientists and researchers face increasing scrutiny from citizens, especially in the United States. Much of this scrutiny emerges from anti-intellectualism. Scholars, researchers and educators face increasing scrutiny from citizens, especially in the United States. The session also featured a Monty Python character reporting on fatal answers at the Bridge of Death, multiple personalities of Dr. N. E. Doolus and a séance with illustrious ASIS&T members spanning the spectrum from living to dead.

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historically, look to various intellectually social measures to determine scholarly impact. For example, all scholarly measures of impact rely on some form of determining how many other people cite the work and typically explicitly discount self-citation. In US Culture writ large, however, rugged individualism is how a life’s work is measured: Are you bold enough to break from the pack and do something different? And if you succeed, it does not matter that you were not cited in the New York Post, the National Enquirer or even in The Onion: America’s Finest News Source. What matters is that individuals made it – on their own. The I-Index is a proposed new measure of scholarly impact that is designed to explicitly reflect how society values novel contributions and disruptive innovations. In contrast to the H (or Hirsch) Index [1] if a scholar is citing his or her own work, the index rises. Also, the more highly cited the work that a scholar cites, the lower their I-Index. Epistemologically, the new index recognizes that citing articles that are already highly cited merely makes one part of a “Herd of Nerds.” In closing, Goggins proposed developing hamsters with laser beams attached to their heads as a model for this new type of uniquely American scholarship.

Next, there was another unusual guest appearance, this time by the old man from scene 24 of that revered work of scholarship, Monty Python and the Holy Grail [2]. The old man asked each audience member seeking to cross the Bridge of Death the three questions. Sadly, there were a few new additions to the list of dearly departed ASIS&T members by the end of the proceedings (cause of death: being launched from the Bridge of Death due to failure to correctly answer any of the three questions).

Immediately thereafter, Theresa Anderson restored order with her paper, “Information à Data: Climate of Readiness for Data Science?” This paper reported on research undertaken in collaboration with the Australian Branch of the Puppybreath Institute for the Study of Markets Under Government Supervision (MUGS). The work was presented by MUGS researcher Kylie O’Reilley, who introduced the audience to the work of the institute and their motto: Never miss an opportunity to cash in on a trend.

It was in fact the global demand for data science skills that inspired the O’Reilly-Anderson collaboration in the first place. Intrigued by survey data projecting the top four careers in demand in the United States as video game designer, data scientist, sustainability consultant and solar sales consultant [3], the team undertook to investigate potential opportunities for the Australian market. When the team noticed there were some interesting correlations between computer science doctorates and total revenue generated by arcades [4], they suspected they were on to something big that could harness the strategic advantages of being in a location where solar sales consultants, data scientists and video game designers might all be drawn on to develop new job growth in response to Australia’s changing climate conditions.

The authors presented data from the United States about correlations between mathematical and computer science doctorates awarded in relation to sunlight levels [4], taking the audience through their thought process as they asked questions of this data. Given that Australia is the driest continent, has high levels of sunlight (especially in the current state of drought and rising temperatures) and is increasingly needing to create new data measures to account for the dramatic change in climate, they surmised there was a strong likelihood that even more technical doctorates would be produced if we moved everyone doing their program to Australia. The team’s findings support a startup program that could harness the combined advantages of Australia’s open spaces policy that allows for the migration of high-level technical people and the rising temperature and drought conditions prompted by climate change. In short, the team concluded there is indeed a favorable climate for attracting all four industries.

Next was a presentation by N. E. Doofus from Sum Where University. During the talk, it became immediately apparent that Dr. Doofus was exhibiting at least eight separate personalities (each of which, entirely coincidentally, corresponded with a different physical manifestation).

After that, Adam Worrall presented "Asking for a Friend: An Analysis of ASIS&T Social Media Followers.” In his last contribution as an ASIS&T social media contributor – albeit without the express written consent of ASIS&T social media manager Diane Rasmussen Pennington or Major League Baseball – Worrall sampled 150 Facebook posts, 150 Twitter tweets and 12 LinkedIn posts (the latter not a sample, but the population) from those who had liked the ASIS&T Facebook page, followed the @asist_org Twitter account or were members of the ASIS&T LinkedIn group,
respectively. Frequency analysis of posts, mentions and hashtags and of the
content of “typical” posts (identified using RANDOM sampling: Really
Awesome Noggins Determine Original Messages) was presented.

Through frequency analysis, Worrall identified a long tail distribution
(analyzed using Klikki, 2007 [5]) among Facebook posts with a median of
two posts per week and clear evidence of the most frequent poster, who
happened to have lead off this evening’s talks. Twitter posting frequency in
the sample was less frequent, for reasons that were not entirely clear.
However, hints were found in the popular press [6] as to why Twitter was
not as popular among ASIS&T members. ASIS&T members frequently
mentioned the @asist_org and @pewresearch Twitter accounts, along with
@RealBenCarson and @realDonaldTrump. Worrall concluded some
ASIS&T members did not deserve scholarships to West Point and that,
perhaps, a wall should be built to keep those members out.

Through the content analysis, Worrall found ASIS&T members sampled
mentioned Bates more frequently than Hjørland (for context see Hartel, 2011
[7]), but this was due to the presence in the sample of tweets from ASIS&T
executive director Dick Hill mentioning his love of the Bates Motel TV series.

“Typical” posts identified using RANDOM sampling included a post from
past ASIS&T president and current ALISE president Sam Hastings asking,
“Can any of you help me find a suitable service opportunity in LIS? Asking
for a friend.” Another “typical” post was a tweet from outgoing ASIS&T
president Sandy Hirsch: "New @asist_org Strategic Plan: Do whatever
@lcppuppybreath tells us to." We thank those who gave their permission for
their "typical" social media posts to be shown to the SIG/CON audience.

Next, the audience conducted a séance with illustrious ASIS&T
members (living, dead, undead and mostly dead). See Reiner, 1987 [8].
Audience members who correctly guessed the ASIS&T members got to
drink from the fire hose, c.f., Levey, 1989 [9].

Finally, Ken Fleischmann concluded an otherwise memorable evening
with a thoroughly unmemorable paper, which will be remembered only for
its three identically adorable conclusions.

In concluding, it is important to note that no animals (including ASIS&T
members) were harmed in the making of this production and that all
characters and events described – even those based on real people – are
entirely fictional [10].

Resources Mentioned in the Article

My sister calls me every few months to complain that an organization we belong to must have sold or given her email address to another group, because she can’t think of any other way she would have received an email from an unfamiliar charitable organization. The organization has a strict policy not to share or sell its members’ contact information, of course. But she’s angry that someone has obviously broken the rules.

I have a few friends who reliably post satirical articles on Facebook, thinking the articles are actual news stories. The stories are inevitably good satire, and they’re usually from a website that’s not familiar to the general population, unlike a well-known satire site like The Onion. The results are also predictable: Several people get up in arms about whatever the supposed “news” story says, someone else finally runs it through Snopes and they return to berate the original poster and all the previous commenters, who are then embarrassed or angry in return.

A few years ago, I was a student in a grad school class held online, with students meeting virtually but residing physically in multiple cities around the United States. We compared the first page of our search results for several inquiries, and some classmates were surprised to see how much results differed, even on topics that seemed as if they should have no local variation.

In the past few months, we’ve all seen the outcry about whether terrorist attacks in one city and country were covered by the international news media in the same quantity and quality that attacks in another city were. This discussion follows a similar pattern – after the initial upset, someone points out that those angry media critics are actually missing large segments of news available to anyone, usually due to the critics’ filter bubble.

The filter bubble really gets at it for me. If you didn’t read Eli Pariser’s 2012 book by that title, it’s worth your time. One of the important points is that your users don’t always see or understand the invisible bubble around them that filters the information they can easily receive.

My sister got an email she didn’t expect, and it didn’t say, “Your friend Susan shared your email address with our organization.” Many satire sites design themselves to look as much like real news sites as possible on purpose. Your search results and your news media don’t always give you an easy way to see what you aren’t seeing, or what they chose not to cover or how what you see is different from what someone else sees.

All of these situations are ones that information architecture can change in a positive way. When you are designing an information environment, are you giving your users the clues they need to fully understand the context that your information design decisions imply?
I remember when breadcrumbs became popular on websites many years ago. They were a digital enhancement of chapter or topic titles printed in the upper and lower margins of book pages – a subtle reminder of where you are and a way to navigate somewhere else if need be. Today’s digital experiences are far more complex than the websites of 15 or 16 years ago, however. The best designers do spend a lot of time trying to understand the users’ contexts – what are the assumptions, experiences and needs that users bring to the information encounter? But we don’t always spend as much time thinking about how to show our users the assumptions, ideas and goals that we bring to the information encounter and deliver through the design we craft for them.

There are so many different factors that impact a user’s experience that a user has no way to see or evaluate or even to be aware of their existence. As designers, we create or take advantage of many of these factors, but we don’t always demonstrate to our users what we’re doing.

I love the idea of delight in the user experience. Abby Covert made this concept an explicit criterion for IA critique in her 2012 IA heuristics document (http://abbytheia.com/2012/04/12/ia-heuristics-journey/). There are many wonderful digital experiences that truly create delight for their users, with the unexpected but welcome understanding of your needs or a fun interface or even a shopping cart that made checkout fast and seamless.

I’d argue that we cross the line from delight to unhappy surprise when we remove (or never support in the first place) the user’s ability to fully understand and control the information environment that we have designed.

Last year, I wanted to buy a pair of sandals. I wanted a particular pair that I’d owned in the past, made by a certain brand, which I’d literally worn until they fell apart. I easily found the sandals online, but every store I checked was out of my size. Every single store.

Imagine my unhappy surprise when the online advertising algorithms figured out how much I wanted that pair of shoes and therefore built a banner ad with that exact sandal, in the color I wanted, but the size unavailable anywhere for actual purchase – and had the ad featuring my unavailable sandals following me all over the internet for weeks afterward. I wasn’t delighted. I was angry. As a digital professional, I at least understood what had happened. As a user, there was no way for me to contact the algorithm gods to say, “Enough already!”

Our users aren’t usually practicing IAs, of course. When we design opaque systems for our own purposes or because we haven’t considered their perspective, we remove their agency and increase their frustration.

On your next project, think about how you can design the information environment to give control and understanding back to your user. That is delightful!
Is Research Reproducibility the New Data Management for Libraries?
by Cynthia R.H. Vitale

Research reproducibility has become a hot topic among academics in the last few years. With organizations such as Retraction Watch cataloging retractions of peer-reviewed literature, replication studies finding many research outcomes to not be reproducible [1, 2] and journals signing on to transparency polices [3, 4], strategies to address these topics have been at the forefront of much academic discussion. In response, many libraries are beginning to evaluate what role they may play in improving the reproducibility of the research conducted on their campuses. Though still mostly in the exploratory phase, this interest by libraries has, in many ways, resembled the growth of research data management services. What follows is an analysis of the current state of research data and research reproducibility movements in libraries, focusing on the catalysts for services, library-staffing strategies and services provided.

Catalysts for Change

In the years before the National Science Foundation (NSF) released its data management plan (DMP) requirement, libraries and library organizations were building socio-technical infrastructure for data management services, and more broadly, E-Science support, in the information science profession. Major professional organizations, such as the Association for Information Science and Technology (ASIS&T), the Association of Research Libraries (ARL) and the American Library Association (ALA) established initiatives focused on this topic [5]. Ideologically, studies have argued, data management is similar to information management and is something libraries and librarians know much about [6, 7]. Thus, when the NSF announced the DMP requirement in 2010, university libraries took it upon themselves to develop services to support their researchers in this area.

In contrast, the federal funding requirements for reproducibility are spread across numerous notices and guidelines. One notice released in October 2015 by the National Institutes of Health (NIH) and the Agency for Healthcare Research and Quality (AHRQ) updated proposal instructions and review language under the Implementing Rigor and Transparency in NIH & AHRQ Research Grant.
Applications notice. In brief, the updates ask faculty to describe the experimental design and methods proposed in the research strategy section of the proposal and to indicate how they will achieve robust and unbiased results. In complying with this requirement, the researcher establishes a trail of verifiability, which may be considered a step towards reproducibility. In December 2015, the NIH and AHRQ released *Advance Notice of Coming Requirements for Formal Instruction in Rigorous Experimental Design and Transparency to Enhance Reproducibility*. This notice, effective in 2017, will require institutional training grant and institutional career development applications to include a plan to ensure the training programs provide skills necessary to design and conduct rigorous experiments. For individual fellowship applications, this notice will require the researchers to articulate their methods for ensuring rigorous research to ensure reproducibility. In addition to these two federal examples, as mentioned earlier, a great deal has been published recently by scholars calling for greater standards for reproducibility and revealing inabilities to replicate studies in their fields [8, 9].

**Staffing**

Social science librarians have provided data related services for years, but the growth of librarians specifically for research data management services has been significant to say the least. Recent evaluations of data management-related job announcements have highlighted the expectations many universities have in the skills a single librarian must possess to provide data related services [10, 11]. Luckily, though, as data management services grow, many university libraries are moving more resources and staff into this burgeoning area and even retooling liaison librarians to add this skill to their toolkits [12].

Given the newer focus of reproducibility in libraries, staffing for this role specifically is still relatively limited. New York University Libraries has established one of the few known reproducibility positions, which is also split with research data management [13]. Recently, library and information science schools have also added faculty, such as Victoria Stodden at the University of Illinois, and courses in research reproducibility to master’s and Ph.D. programs. Thus, the library domain may expect more librarians intentionally trained in this area in the coming years.

**Services**

Following a common roadmap of sorts, libraries determined what data management services to offer by first conducting surveys and data management need assessments among their faculty members [14]. As services sprang up to address the needs discovered, institutional data repositories and curatorial practices evolved and continue to develop as viable storage and discovery layers for research data created at an institution [15]. Other outcomes of this movement have been libraries offering consultations and workshops on data management planning, building databases for faculty projects and actively managing data, among others [16].

Turning the federal funding update on rigor and transparency, as well as the local groundswell for improved protocols for reproducibility, into library services is not hard to imagine. Librarians could collaborate locally or with non-profits such as the Center for Open Science or the Center for Scientific Integrity to create documentation on best practices for research transparency in specific domains and offer workshops on tools that help document the research workflow. Indeed, some libraries have partnered with the research office or research computing departments...
on campus to bring outside speakers to campus to discuss methods and tools for improving reproducibility [17].

**Discussion**

Whether libraries can claim that their existing knowledge prepares them to provide reproducibility services has not been fully explored. While it is true that libraries are well positioned as neutral in the academic landscape to provide this support, to understand what makes research fully reproducible requires domain knowledge, perhaps more than a subject specialty provides. But it can also be argued that a significant portion of reproducibility has to do with proper data management and making data resulting from research widely available. Many data management librarians are well acquainted with these practices. Perhaps more than being a new stand-alone service, though, research reproducibility will develop into an extension or additional offering in the suite of services provided by research data, subject liaison or scholarly communication librarians. Undoubtedly, research reproducibility is not a topic or concern that will go away, though library support for faculty in this domain remains to be fully realized.

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**Resources Mentioned in the Article**


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### Resources Mentioned in the Article, continued

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