Inside this issue:
Letter from the Chair ........................................... 2
Letter from the Vice-Chair................................. 3
STS Survey .......................................................... 3
STS Conference Program ................................. 4
STS Research Forum .......................................... 5
STS Committee & Discussion Group News........... 7
ACRL News.......................................................... 9
About the Signal.................................................. 11

Join ACRL on Social Media!
Just click on one of the links below to connect:

![Facebook](facebook.png)  ![Twitter](twitter.png)  ![RSS](rss.png)

STS Events at ALA Annual

<table>
<thead>
<tr>
<th>EVENT</th>
<th>DATE</th>
<th>TIME</th>
<th>LOCATION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS Council I</td>
<td>06/22</td>
<td>7:00 - 9:00 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>All Committees Meeting</td>
<td>06/23</td>
<td>8:30 - 10:00 AM</td>
<td>TBD</td>
</tr>
<tr>
<td>STS Executive Committee</td>
<td>06/23</td>
<td>4:00 - 5:00 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>College Science Librarians DG</td>
<td>06/23</td>
<td>10:30 - 11:30 AM</td>
<td>TBD</td>
</tr>
<tr>
<td>STS Hot Topics DG</td>
<td>06/24</td>
<td>10:30 - 11:30 AM</td>
<td>TBD</td>
</tr>
<tr>
<td>Federal Science Agencies Update</td>
<td>06/23</td>
<td>1:00 - 2:30 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>Scholarly Communication DG</td>
<td>06/24</td>
<td>4:00 - 5:00 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>STS Research Forum</td>
<td>06/23</td>
<td>1:00 - 2:30 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>Conf. Program Planning (DC 2019)</td>
<td>06/23</td>
<td>2:30 - 3:30 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>STS Breakfast &amp; Poster Session</td>
<td>06/24</td>
<td>8:30 - 10:00 AM</td>
<td>TBD</td>
</tr>
<tr>
<td>STS Dinner</td>
<td>06/24</td>
<td>6:00 - 8:00 PM</td>
<td>TBD</td>
</tr>
<tr>
<td>STS Program:</td>
<td>06/25</td>
<td>8:30 - 10:00 AM</td>
<td>TBD</td>
</tr>
</tbody>
</table>

“Librarians are a Force for Science: Science Communication and Science Literacy”

* STS event information is subject to change. Please check the conference schedule at [http://2018.alaannual.org/](http://2018.alaannual.org/) for the most up to date information.
Dear STS Members,

I hope your spring is off to a great start-- even if it doesn’t feel like spring in your neck of the woods! It’s still super chilly in NYC, which is just making me look forward to our upcoming conference in steamy New Orleans. My very first ALA was in New Orleans in 1999, and every time we go back I’m reminded of how excited I was at that first conference to be joining this profession. We’re planning a wonderful slate of STS programming and events for ALA 2018, and I’m pretty sure it’s going to be good enough to inspire that same excitement that I felt in 1999!

Before I give you a sneak peek at our New Orleans conference plans, I’d like to give you an update on what ACRL is planning for the ACRL 2019 Conference, which will take place in Cleveland, OH, on April 10-13, 2019. The theme for this conference is “Recasting the Narrative,” and the conference will focus on how librarianship is evolving in the 21st century. Currently ACRL is accepting proposals for contributed papers, panels, pre-conferences, and workshops (deadline May 4, 2018) and for posters, roundtables, TechConnects, and webcasts (deadline October 12, 2018.) We would love to see as many STS-ers on the program as possible, so put your thinking caps on and submit your best and brightest ideas! I invite you to use STS-L to crowdsource ideas and identify collaborators-- we want to showcase the great work that our members do and ensure all of us STEM librarians have plenty of programming to draw us to Cleveland next spring. ACRL will also begin accepting conference scholarship applications in May 2018 (deadline October 5, 2018) in five categories: early-career librarians, mid-career librarians, support staff scholarships, student scholarships, and spectrum scholar grants. My first ACRL conference (Denver 2001) was made possible by an early-career scholarship, and I can’t emphasize strongly enough what a difference it made for me. I highly encourage you to apply for a scholarship if appropriate and attend the conference if possible. I look forward to seeing lots of STEM librarians in Cleveland!

Now on to New Orleans! We’ve got a whole conference-worth of events planned for June 22-25, 2018, and all of these events are made possible by the hard work of STS members, Megan Griffin (our ACRL Program Officer), and our supporting vendors. I’d like to take a moment to thank Mel Desart (University of Washington) for his tireless fundraising on behalf of STS, and I’d like to ask that you take a moment to thank our supporting vendors before, during, and after the conference. (You’ll see them prominently listed on the STS website and on all of our conference materials.) I’ve learned so much about what goes into planning our STS events this year, and I really can’t say enough good things about this group of folks and their hard work and dedication to STS! So what have they made possible for us? We’ll kick off our conference on Friday evening with an STS happy hour before our STS Council I, and we’ll continue on with discussion groups, committee meetings, and updates on Saturday. On Sunday we’re planning our annual breakfast and membership meeting along with our STS poster session, our research forum, and our ACS-sponsored annual STS dinner. The grand finale of our conference will be our Monday morning program, Librarians are a Force for Science: Science Communication and Science Literacy. I’m really looking forward to our “STS Conference” this summer. You’ll find more information about each of these events featured in this newsletter, coming up on STS-L, and in our STS LibGuides. So be on the lookout and get ready for a great conference-- I look forward to seeing you all in New Orleans!

Kara Whatley
(New York University)
STS Chair
kara.whatley@nyu.edu
212-998-2624
Hello fellow science and technology librarians. As the snow finally melts, in most places, we look forward to a warm summer and in particular ALA Annual Conference in New Orleans, LA. You will find a schedule of events in this issue of STS Signal, all put together by our fellow members working within STS committees and discussion groups. I have just finished appointments for the 2018-2020 appointment cycle. All new appointees will be starting their terms after ALA Annual Conference and joining our continuing members on those committees.

I want to thank everyone who volunteered, especially those who were willing to serve on their second or third choice of committees. We had an overwhelming interest in certain committees, but the Section need active participation in all of them in order to bring programs, networking, and continuing education to our members. I wanted to highlight one new group in particular the ACRL/STS Information Literacy Framework Task Force. They will be working closely with the STS Information Literacy Committee and ACRL’s Framework committee to create an information literacy framework for science and technology subject areas.

While our appointments are completed for this year, please contact me at any time if you are interested in serving on an STS committee. As Vice Chair/Chair-Elect, I am also interested in ideas our members have for how our Section can operate best to serve you as a professional organization. Reach out to me online, or I hope to see you at ALA Annual in New Orleans. Speaking of that conference, if you are able to attend, be sure to save the times of STS Events in your planner. If you are interested in learning more about STS Committees, the All Committees meeting is very helpful even if you are not yet appointed. Also be sure to save some time to see the beautiful Crescent City and explore its unique architecture, culture, and food.

Let the Good Times Roll!

John Meier
STS Vice Chair/Chair-Elect
Penn State University Libraries
814-867-1448
meier@psu.edu

We Want to Hear from You!

It’s survey time, STS! The Professional Development Committee invites all STS members to complete the new 2018 Professional Development Survey.

Go to: https://tinyurl.com/SurveySTS2018

Survey ends: May 11th

Questions?

Contact Committee Co-Chairs:

Chapel Cowden Chapel-Cowden@utc.edu, Abbie Basile abasile@odu.edu.
STS Conference Program at 2018 Annual:
Librarians are a Force for Science: Science Communication and Science Literacy

The STS Conference Program Committee is very excited to bring together experts in science, science communication, and science literacy for a panel discussion at the ALA Annual Meeting in New Orleans. The panelists will discuss how scientific research is communicated to students and the general public, and will consider the role of librarians and science communication professionals in making sure that the content is evidence-based and accessible. Speakers include a professional scientist, a science communication expert, and a librarian for a lively and high-impact discussion of these questions. This program will consider current events, and will also make sure that panelists and participants alike can see how current issues fit into the history of science communication. It will also highlight exceptional and best practices in science communication and science literacy.

- Craig McClain, Executive Director, Louisiana University Marine Consortium (panelist)
- Lauren Young, graduate of The Science, Health and Environmental Reporting Program at New York University, currently the web producer for NPR Science Friday (panelist)
- Alison Ricker, Head, Science Library, Oberlin College (panelist)
- Aimee Sgourakis, Liaison Librarian, University of Pittsburgh and STS Liaison to the March for Science (moderator)

Submitted by Fran Rosen and Ana Torres

Event: STS Conference Program: Librarians are a Force for Science: Science Communication and Science Literacy

Co-sponsored: in name by the ACRL Health Sciences Interest Group (HSIG)

Date: Monday, June 25

Time: 9am-10am

Location: TBD
Featured Paper:

From Preprint to Peer-Review: bioRxiv & Publication in Four Life Science Disciplines

Is the goal of scientific research to publish in a peer-reviewed journal or to disseminate findings to a broad audience of your peers? The nature of academic publishing beginning in the mid-20th century made this question moot; the former was the easiest and most efficient mechanism to achieve the latter. Preprint repositories, beginning in 1991 with arXiv in physics, complicated this linear process. Preprints provide a way to share research directly and openly before any peer-review or journal submission has taken place.

But is there broad adoption of preprint repositories across disciplines? How much research is ending up in journals from preprint repositories? This study ventured to answer those questions looking specifically at papers submitted to bioRxiv, a repository for biological and life sciences, between 2014 and 2016 in biochemistry, bioinformatics, ecology, and neuroscience. Initial results show marked differences in the number of repository deposits, ranging from 40 for biochemistry to 591 for bioinformatics, and publication rates, ranging from 46% for ecology to 68% for biochemistry. What these initial results point to is an uneven adoption and usage of bioRxiv across the life sciences. Of particular interest is the extremely small number of biochemistry deposits, the computational nature of a majority of publications, and the possibility that, like with some disciplines in arXiv, bioRxiv preprints could serve as stand-alone publications.

Jason Burton, University of Mississippi

Short Papers:

“Can’t take newspapers too seriously”: Using Simulations to Study Students’ Perceptions and Judgements of Online Scientific Information

What really happens when the student researcher meets the result page? Current focus on the integrity of news, as well as concerns about the credibility of scientific information point to a critical need to understand how students assess the resources that appear as their search results. Our three-year Institute of Museum and Libraries Services (IMLS)-funded study examines the behaviors of late primary, secondary, community college, undergraduate, and graduate students as they select resources for science-related school inquiry projects. The primary research objective is to examine the variable process of determining the credibility of digital search results, particularly the role played by container, or resource type. For this presentation, we will share our preliminary analyses of students’ perceptions and judgments of science news sources. Our innovative methodology involves engaging students in task-based simulations to study their real-time Internet searching and to enable comparison among study participants within and across age levels. A think-aloud protocol, used during the research simulations, allows us to capture cognitive data as students make credibility judgments and discern digital container types. Each simulation session produced both quantitative (simulation software variables) and
Short Papers Cont’d:

qualitative (think-aloud protocol and interview questions) datasets. These data sets are being analyzed in conjunction with prescreen survey results to ascertain themes and connections. Analysis will include: student assessments of the usefulness of a variety of science news resources, whether or not they would cite the resources, how they ranked source credibility, and whether they could identify a source as news.

Tara Cataldo (University of Florida), Amy G. Buhler (University of Florida), Ixchel M. Faniel (OCLC Research), Lynn Silipigni Connaway, (OCLC Research), Joyce Kasman Valenza (Rutgers University), Rachael Elrod (University of Florida), Randy A. Graff (University of Florida), Samuel R. Putnam (University of Florida), Brittany Brannon (OCLC Research), Erin M. Hood (OCLC Research), Robin L. Fowler (University of Florida), Kailey Langer (University of Florida), Shakiyl Kirlew (University of Florida)

Only Connect: Graduate Students, Mobile Devices, and Academic Workflows

Students often own multiple devices, including laptops, smartphones, and tablets, and work within these personal device ecosystems for academic purposes. This qualitative study explores the research question: how are graduate students using mobile technologies in their academic practices? Rather than simply counting how many devices a student uses, we delve into how they use the devices and how their workflow for completing academic tasks emerged and is adapted throughout the course of their studies. We selected graduate students, as this group is underrepresented in the literature and their responsibilities for employment and family life are often different than those of undergraduates.

We used a screening survey sent to the graduate student population of our college to recruit participants (N = 265) and selected students (N=18) of varying departments, ages, ethnicities, and degrees of engagement with technology for in-depth interviews. We coded and analyzed interview transcriptions to identify themes regarding information seeking behaviors, usage behaviors, and workflow processes.

Key findings include:

- Smartphones are academic toolkits
- For group projects, they default to using tech that the least savvy member of the group uses

They integrate campus and/or work-issued devices into their academic workflows

Graduate students are using a complementary array of devices that introduces myriad possibilities for collaborating, reading, and writing. A potential shift in library instruction could be made to teaching students how to manage and migrate content across devices for reading, writing, sharing, note taking, and annotation, as well as educating students about fair use and information ethics.

Lee Ann Fullington and Frans Albarillo, Brooklyn College
Membership and Recruitment Committee

How Do You Stay Informed?

Subscribe to the STS Listserv (STS-L). STS-L serves as the primary communication channel for the section. It is an electronic news and discussion forum in which STS members and other science librarians and information researchers participate. Many events, announcements, and questions are posted to the listserv. To subscribe or to view the archive of past messages go to: http://lists.ala.org/sympa/info/sts-l

Another popular resource is the STS Website. It can be found at: http://www.ala.org/acrl/aboutacrl/directoryofleadership/sections/STS/STSwebsite. There are many ways to become involved and the website contains links to the STS Committees, ALA Connect, newsletters, the STS Mentoring Program, Information Literacy Standards, and other professional development resources.

New Member Spotlight

Hello Science & Technology Section (STS) Members!

The STS Membership & Recruitment Committee would like to spotlight new and current STS members in an attempt to encourage professional connections.

Are you interested in getting your name out there? If so, click on one of the links below and fill in your information. The Membership Committee will post your information and a photo (with your permission) in the coming months as a spotlight on the STS-L Listserv. All you need to do is click on the form below and send us the answers to six questions. Sound easy? It is, so fill out a form now to get started!

STS New Member Spotlight

STS Current Member Spotlight

Professional Development Committee/Research Committee/Membership & Recruitment Committee

Posters, too! Extra-Special Membership Breakfast in New Orleans

If you are going to be in New Orleans for ALA Annual, we want to see you Sunday morning (06/24)! And be sure and bring potential new members with you.

The always-popular Membership Breakfast is going to be even better than usual, bringing together the forces of the STS Research Committee, the Professional Development Committee, and the Membership and Recruitment Committee.

Usually we have good food, good conversation, announcements of job openings, an activity to promote professional development, and more. This year we will have all of that plus the STS Poster Session, sponsored by the Research Committee.

Details later on the location but the time is 8:30 – 10:00 am. See you there.

Kimberly Bailey - hanold@pitt.edu - and Larayne Dallas - ldallas@austin.utexas.edu - (co-chairs, STS Membership and Recruitment Committee)
Measuring Research Impact: What Really Counts?

In recent years there has been a proliferation in the ways research impact can be measured. Over 45 people turned out for a discussion designed to explore the roles libraries and librarians can play in assessing research impact. The panel featured three speakers including Ann Beynon from Clarivate Analytics, Sara Rouhi from Altmetric.com, and Emily Wild from the United States Geological Survey Library. Discussion group co-chairs Edward Lener and Elizabeth Soergel served as moderators.

Starter questions for discussion included:

What would be your advice to a librarian just getting started with metrics? How can we best direct researchers to the right metric or set of metrics and avoid overwhelming them with metrics overload? What impact do newer metrics have on the research culture and how might they incentivize new kinds of behavior?

Ann Beynon led things off with a concise history of metrics and a review of traditional measures of research impact such as citation counts and journal impact factors. She also shared the news that under the new corporate ownership plans were underway at Clarivate Analytics to re-establish the Institute for Scientific Information (ISI) as a research group within the company. Next, Sara Rouhi explored the world of alternative metrics as a way for researchers to more fully document the impact of their different types of creative works and scholarship. The linking of data from multiple sources provides exciting possibilities to measure and track impact. Finally, Emily Wild shared her experiences working with both researchers and the general public as a librarian at the USGS Library in Denver. She also analyzed USGS publications that have been very widely downloaded and noted that their true impact is not always reflected in the corresponding citation counts. All three speakers provided a helpful look at the myriad ways in which research is generated and disseminated and its impact is measured.

Submitted by Edward Lener, Co-Chair, STS Publisher/Vendor Relations Discussion Group
RBMS 2018 Conference – Early Bird deadline May 18!
Convergence
New Orleans, LA
Tuesday, June 19, 2018 – Friday, June 22, 2018
New Orleans is a hotbed of convergences, ones so powerful that its lineage includes a dish as delightful as gumbo and a storm as destructive as Hurricane Katrina. This conference will focus on the idea of convergences including our field’s preparedness for increasing environmental vulnerabilities, our readiness for the inclusion of different people and cultures in our outreach and leadership, and, finally, our willingness to democratize all of our materials. Early registration rates end May 18!

http://conference.rbms.info/2018/

Build Your Library’s Professional Skills...
by bringing an ACRL RoadShow Workshop to your campus, chapter, or consortia. Led by expert presenters, these one-day immersive workshops engage participants and help academic librarians learn new skills and strengthen existing competencies. Current workshop topics include:

- Assessment in Action
- Engaging with the ACRL Framework
- Intersections of Scholarly Communication and Information Literacy
- Research Data Management
- Scholarly Communication
- Using the Standards for Libraries in Higher Education

For more information about each of these workshops, including program descriptions, sample schedules, and a list of presenters, visit www.ala.org/acrl/roadshows.

ACRL Preconference at 2018 ALA Annual Conference: Big Easy RoadShow

Join ACRL in New Orleans for the full-day preconference Assessment in Action: Demonstrating and Communicating Library Contributions to Student Learning and Success, an ACRL RoadShow offered in conjunction with the 2018 ALA Annual Conference on Friday, June 22, 2018.

Higher education institutions of all types are facing intensified attention to assessment and accountability issues. Academic libraries are increasingly connecting with colleagues and campus stakeholders to design and implement assessment that documents their contributions to institutional priorities. In this day-long preconference on strategic and sustainable assessment, participants will identify institutional priorities and campus partners, design an assessment project grounded in action research, and prepare a plan for communicating the project results. This preconference is based on the highly successful ACRL Assessment in Action program curriculum.

Complete details, including a full program description, learning outcomes, and registration materials, are available online.
ACRL Books
ACRL publishes a range of books to assist academic librarians in developing their professional careers, managing their institutions, and increasing their awareness of developments in librarianship, providing timely, thought-provoking, and practical content and research to academic and research librarians worldwide. Some recent titles:

Applying Library Values to Emerging Technology: Decision-Making in the Age of Open Access, Maker Spaces, and the Ever-Changing Library [linked to: https://www.alastore.ala.org/content/applying-library-values-emerging-technology-decision-making-age-open-access-maker-spaces-and]

- Framing Information Literacy: Teaching Grounded in Theory, Pedagogy, and Practice (Publications in Librarianship #73), 6-Volume Set [let’s link to the set in the Store here, and each individual volume below; if the links aren’t live yet, let’s use a “Coming soon!” burst]
  - Volume 1: Research as Inquiry
  - Volume 2: Information has Value
  - Volume 3: Searching as Strategic Exploration
  - Volume 4: Information Creation as a Process
  - Volume 5: Scholarship as Conversation
  - Volume 6: Authority is Constructed and Contextual

Interested in writing for ACRL? Contact Erin Nevius, ACRL’s Content Strategist, at enevius@ala.org for more information, or visit www.ala.org/acrl/publications/publishing to learn more about our book publishing program and submit a proposal.
About the Signal

STS SIGNAL is published twice annually in May and November. Editorial deadlines for each issue are March 1st and September 1st of each year.

Signal is made available to all section members at no charge on the STS Web site.

ISSN: 0888-6563

Issues in Science and Technology Librarianship is also available to all section members on the ISTL Web Site.