

STEM Librarians South Conference

July 19 - 20, 2018

M.D. Anderson Library, University of Houston

Schedule of Events

Thursday, July 19

1:00 PM Check-in (until 4:00 PM)

M.D. Anderson Library - Lobby

1:30 PM Group Tour of Blaffer Art Gallery

Meet in M.D. Anderson Library lobby

3:30 PM Pre-Conference Workshop

Three Simple Rules for Great Presentations! Lee Hilyer, University of Houston

M.D. Anderson Library, Room 10G

This is a hands-on workshop that will introduce you to three simple, evidence- and research-based rules that will help you create and deliver better presentations of any format (PowerPoint, chalkboard, flip chart, etc.). The rules are based on instructional design and learning theories, as well as the current understanding of how the human brain receives and processes information. When you leave, you will have a simple set of guidelines you can use to improve the learning outcomes of any presentation you give as well as a list of resources for graphics, templates, and techniques to use in

your presentations.

5:30 PM Check-in (until 6:00 PM)

Health 1 Building, Room 186 (TSO Room)

6:00 PM Welcome Dinner & Game Night (Trivia at 6:45 PM)

Health 1 Building, Room 186 (TSO Room)



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Schedule of Events and Abstracts

Friday, July 20

Elizabeth D. Rockwell Pavilion, M.D. Anderson Library

8:00 AM Breakfast & Check-in

8:45 AM Welcome

Lisa German, Dean of UH Libraries

9:00 AM Astronaut Health: Science Education Resources for K-12 and Beyond

Debbie Montenegro, University of North Texas Health Science Center, Gibson D. Lewis Library and the National Network of Libraries of Medicine South Central Region

Librarians can support science educators and students by fostering science and health literacy programs. This presentation from the NNLM will introduce librarians to science education resources from the National Library of Medicine (NLM), the NIH, and NASA. The resources pertain to these subjects: K-12 science education focusing on anatomy and genetics in relation to astronauts, and health science careers. Communities of Practice and organizations that assist libraries with integrating STEM programming will be highlighted. The overall goal of this course is to help librarians find STEM resources to engage meaningfully with the science education community.

9:45 AM Pushing the Limits: A Case Study in Promoting Community Conversations through Informal STEM Learning

Jessica Jones, Bryan and College Station Public Library System & Jennifer Wilhelm, Texas A&M University

The Bryan and College Station Public Library System was awarded a NOAA/NSF PLACE: Pushing the Limits grant in 2017 to facilitate a community dialogue on climate change and extreme weather events. Together with a Science Partner from Texas A&M University, a three-part program was designed to create an engaging environment that facilitated effective exchanges between experts and laypersons. The sessions were successful in communicating facts that are often politicized in other environments. This presentation will share observations and best practices that may be applied to any library seeking to engage the public on climate change and STEM topics.

10:30 AM Break

10:45 AM Removing the Invisibility Cloak

Stephanie Pierce, University of Arkansas

What do you do when it seems there's been an invisibility spell cast on your service desk? How do you make students realize that not only it exists but use it as well? This presentation will discuss low-cost methods a science academic branch library used to increase the service desk presence and readjust traffic flows as well as how these changes were measured and assessed for success.

11:00 AM Table It and They Will Come

Vedana Vaidhyanathan & Christina Chan-Park, Baylor University

Baylor University STEM librarians hold "office hours" in the Baylor Science Building (BSB) which houses the six science departments. We have a table and tablecloth which we set up near Starbucks where we meet with students and faculty both by appointment and spontaneously. Over Summer 2017, the table was stolen for a second time so we did not immediately replace it until we could find a secure storage space. We continued holding office hours in the BSB during the interim at unoccupied tables. However, interactions decreased despite using the table cloth. So, we bought a new table and a lock.

11:15 AM How Librarians Can Positively Impact STEM Students: Active Learning Design & Video Resources

Bethany McGowan, Purdue University & Jennifer Ostrosky, JoVE

This presentation will show how librarians are supporting the design of active learning curricula by assisting instructors with the selection of appropriate support material and by designing appropriate pre-class and in-class activities. Such support offers STEM librarians a scalable way to include information literacy competencies in instruction. We will discuss how streaming videos, like the JoVE Video Journal, can be assigned as pre-work to replace parts of lectures. And, we'll share results of a recent study from Clemson University and DeSales University, which suggest that students who watch just 5-minutes of video before class score better on quizzes.

12:00 PM Lunch & Keynote (Keynote at 12:30 PM)

Chronic Traumatic Encephalopathies: A Neurodegenerative Disorder as a Result of Mild Traumatic Brain Injuries Sydnee Spruiell Eldridge, University of Houston

Concussions and traumatic brain injuries (TBIs) caused by participation in contact sports are becoming a significant public health crisis, especially considering the number of individuals in the United States who are now living with the long-term effects of TBIs. Athletes who choose not to report that they are experiencing a possible injury event, or who choose not to make safe decisions about removing themselves from play after an injury, put themselves at increased risk of sustaining lasting neurological damage. There is an increasing body of evidence which suggests that concussive and sub-concussive impacts alike cause the development of chronic traumatic encephalopathy, a progressive, neurodegenerative tauopathy, which may cause declining mental and motor faculties, dementia, and possibly even death. This presentation will discuss multiple facets of CTE, including findings surrounding the psychosocial models the researcher used to explore the experiences of athletes and coaches, as well as the biological model for the progression of the disease, and the researcher's current projects using Xenopus tadpoles as the model organism.

1:30 PM Break

1:40 PM Lightning Talks!

Texas Data Repository: A Year in Review

Santi Thompson, University of Houston

The Texas Data Repository (TDR) is a consortial data repository administered by the Texas Digital Library and using the Dataverse platform. In this lightning talk I will briefly discuss: (1) progress that the TDR steering committee has made over the last year, (2) the value of participating in a consortial repository service, and (3) successes, challenges, and future goals.

Lightning Talks!

Depositing Biology Student Posters into an Institutional Repository

Christina Chan-Park & Vedana Vaidhyanathan, Baylor University

"Can I archive the poster presentations from my undergrad class?" In answer to this query from a Biology professor, Baylor University created a workflow to upload group projects into Baylor's institutional repository BEARdocs. Based on a model developed for graduate projects in museum studies, one student in each group is designated to upload the poster file along with the copyright acknowledgement forms from all the group participants. This endeavor has proven popular because the projects are now discoverable in Google Scholar; consequently, the biology department would like to expand it to other undergraduate classes.

Networking, Advocacy, and Outreach: Women in STEM at UTSA

Matt Hayward, University of Texas at San Antonio

It can be difficult to make connections with faculty, especially as a relatively new librarian. This year, for Women's History Month, the University of Texas at San Antonio Libraries hosted a Pop Up Event to promote Women in STEM. In addition to advocating for the advancement of women in STEM fields, the event opened a door for this librarian to introduce himself and the library to many faculty members, to bring students to interact with the library, and to provide social media content for outreach.

How to Save Your Faculty from Making a Horrible Professional Publishing Error

Suzanne Ferimer, University of Houston

Predatory publishers abuse the open access author pays model for their own profit. This talk will give a quick overview of how to help your faculty avoid the embarrassment of publishing in one of the nefarious journals that can hurt a career.

2:00 PM Creating and Updating a Faculty Publications List

Sonya Fogg, Texas Heart Institute

A faculty publications list is an asset that highlights an institution's productivity. Our library has progressed from assisting with the annual production of a print volume, to creating an online bibliography for each year, to using free tools to populate individual profiles and provide monthly updates. This has been in response to changes both in how people consume information and in our understanding of how this asset can be leveraged. As a nonprofit that relies on grants and philanthropy, our audience includes both those inside and outside of academic medicine. I'll briefly cover why and how we provide this service.

2:15 PM Conversations with Chemists Redux: Preliminary Results from an Interview-Based Study on the Information Needs and Habits of Chemistry Faculty

David Flaxbart & Lydia Fletcher, University of Texas at Austin

In the spring of 2018 librarians at the University of Texas at Austin interviewed 15 chemistry PIs as part of a local replication of Ithaka S+R's ongoing series of reports on how faculty in various disciplines gather, manage, and use information and data in the course of their research. Topics explored in the interviews included information access behaviors, data generation and management, publishing preferences, and attitudes toward open science. We will present preliminary findings from this study, including common themes and challenges expressed by the faculty, which we hope will inform the next generation of library services to a clientele that is at the same time demanding (in terms of access to content) and aloof (in terms of regular interactions with the traditional library).

2:30 PM Conducting a Faculty-Centered Information Needs and Resource Assessment: A Pilot Study

Jun Qian, Rice University

<u>Purpose</u>:The purpose of this paper is to present the pilot study of a faculty-centered collection evaluation at Rice University, which further informs both journal cancellations and subscription decisions. <u>Design/Methodology/Approach</u>: This paper records the project in detail, including outreach and data collection methods, and discusses the results from this pilot study and further implications. <u>Findings</u>:We were able to obtain data from all faculty members either directly through email, in-person interview, and faculty meeting, or indirectly through meetings with library liaisons and department chairs. At the end of the project, we were able to reach consensus on journal subscription and cancellation with faculty members. <u>Originality/Value</u>: This paper shows an original design for the pilot study that can be replicated in the future.

2:45 PM Scholarly Communications in the STEM Classroom

Dianna Morganti, Texas State University

Changes in publishing norms and funding requirements have caused responding changes (both good and bad) in the publishing industry. A review of undergraduate papers in Computer Science revealed that 10% of students had found and used likely-predatory publications in their research, and almost 20% incorrectly used pre-prints and post-prints found online. Core competencies in Scholarly Communication need to be established for STEM Information literacy to help students in identifying and avoiding these issues. Dianna will present a case study of incorporating Scholarly Communications into an undergraduate Computer Science class and a graduate Math Education class.

3:00 PM Supporting the Unsupportable: Assisting Anatomy & Physiology I & II Through OER

Susan Brazer, Salisbury University

"Traditional" science courses are tricky. Classes lack library-based assignments; emphasis on course content makes teaching faculty members feel they cannot bring students to the library; and memorization can be the key learning technique for the course, rather than theoretical/discussion type assignments that require library materials. How can you support classes that don't come to the library, ones without traditional research assignments – aka: how to support the unsupportable? Working outside the box was the answer. Partnering with a campus-based support unit and using open-access materials, I created an innovative way to support Anatomy & Physiology courses in nontraditional ways.

3:15 PM Partners and Proposal Readiness

Erin O'Toole, University of North Texas

Subject librarians at the University of North Texas have partnered with the graduate school and teaching faculty to prepare STEM students for a major milestone in the graduate life cycle – writing the dissertation or thesis proposal. This presentation will share the challenges UNT graduate students face in starting a proposal; details of the Proposal Preparation Workshop for STEM Students, offered since Fall 2016; and student responses to the workshop.

3:30 PM STEMPunk Cafe: Supporting Scholarship as Conversation for Informal STEM Research

Jessica McClean & Dianna Morganti, Texas State University

Many students have extracurricular interests they research outside of class. With the increasingly flexible rules of scholarly communication, students are becoming a part of the scholarly conversation without realizing it. STEMPunk Café was born out of a desire to help students see that their interests can have an equal scholarly weight to their schoolwork. This bi-weekly conversation series gives students an informal forum to share their research. We tied the series to the framework concept "scholarship as conversation" by coaching students through publishing their presentation in the institutional repository and citing it on their resume or CV.

3:45 PM Visualizing Science: Local Insights from the VOSviewer and Leiden Ranking

David E. Hubbard, Texas A&M University

This case study reports on the use of two scientometric tools, both developed at the Centre for Science and Technology Studies, to gain additional insights into research conducted at a large research university through visualizations. In addition to exploring industry/international collaborations and maps of science at the institutional level, the creation and analyses of author networks, research evolution, and citation impact focusing on chemistry will also be reported. Other applications of these tools will be discussed.

4:00 PM Plus/Delta – Please be ready to provide feedback in lieu of a post-conference evaluation!

4:15 PM Business Meeting

5:30 PM Dinner Dine-Around



Special Thanks to our Sponsors:









We would also like the thank the following individuals for volunteering their time and resources to help make this conference possible:

Marissa Aiello, Christine Bayol, Melody Condron, Mark Cooper, Taylor Davis-Van Atta, Emily Deal, J Fisher, Emma Fontenot,

Lauren Freel, Dr. Lisa German, Lee Hilyer, Ian Knabe, Mauricio Lazo, Cierra Frances Linander, Carolyn Meanley,

Sydnee Spruiell Eldridge, Erika Rendon, Dr. Earl L. Smith, III, and Katherine Veneman

Dinner Provided By:



Breakfast and Lunch Provided By:



2018 STEM Librarians South Conference Committee:

Nancy Linden & Erica Lopez, co-chairs Suzanne Ferimer, Rachel Helbing, Cherie Turner, Mea Warren