Schedule of Events

Thursday, July 18

Pre-Conference Workshops and Welcome Dinner

12 Noon-4:00PM  **Registration**, PCL Learning Lab 3

1:00-2:30 PM  **Talking Research Data Management: A Guide to Good Practice for Librarians**
Jessica Trelogan
*University of Texas at Austin*
Learning Lab 4

2:30-3:00 PM  **Break & Coffee**
Learning Lab 3

3:00-4:30 PM  **Providing GIS Services and Support: An Introduction to GIS for Librarians**
Michael Shensky
*University of Texas at Austin*
Learning Lab 4

4:30-5:00 PM  **Q&A**

5:30-7:30 PM  **Welcome Dinner, Littlefield Home (302 West 24th St)**

After Dinner Talk:
**UT: A Raced and Gendered Landscape**
*Dr. Ted Gordon, Associate Professor of African and African Diaspora Studies & Vice Provost for Diversity*
*University of Texas at Austin*

(The dinner requires separate registration and fee.)
Friday, July 19
Learning Lab 1, Perry-Castañeda Library

8:00 AM  Breakfast & Registration

8:30-8:45 AM  Welcome & Opening Remarks
   Catherine Hamer, Director of Academic Engagement, UT Libraries

8:45-9:10 AM  Neurodiverse STEM Students and the Academic Library
   Erin O’Toole, Chelsea Anderson
   University of North Texas
   The likelihood of STEM librarians interacting with students who have been diagnosed with autism spectrum disorders (ASD) is increasing as recent research estimates 34% of college students with ASD are now entering the STEM disciplines. This presentation will provide STEM librarians with a general overview of the behaviors associated with ASD. Our focus will be on the corresponding strengths students with ASD bring to STEM and the needs that must be met for them to achieve academic success. We will also explore hypothetical situations with neurodiverse students in the classroom setting and one-on-one meetings. Participants will leave with resources to support further learning about ASD and positive interactions with students.

9:10-9:35 AM  Screen Readers and SciEng Interfaces: How Accessible is Database Content?
   Jane Stephens
   Texas A&M University Libraries
   The presentation will highlight the use of screen readers with common science and engineering database interfaces. An overview of how a screen reader (JAWS) interacts with the coding (buttons, drop down menus, etc.) on a page (i.e. search page, results page, etc.) will be provided. Users with print impairments cannot access database content if the database interfaces do not interact easily with screen readers. For each interface selected, a description of how the screen reader interacts with it – what works and what does not work? Will be presented. Finally, the author will discuss what developers can do to make these interfaces more accessible.

9:35-10:00 AM  Experiential Learning in the Library
   Jessica Simpson
   Texas Tech University
   This talk will provide a brief overview of constructivism and experiential theories of learning. The work of Chatterjee, Hannan and Thomson in their book "Engaging the Senses: Object-Based Learning in Higher Education," will be viewed through the lens of library services for the STEM and STEAM areas. Information regarding current library services as they concern supporting materials and programs such as makerspaces, fablabs, and tinker-spaces will be explored. This talk will attempt to draw connections between the known pedagogical literature and "real world objects" in libraries.

10:00-10:15 AM  Coffee Break

10:15-10:40 AM  A Model for Quality Education to Support STEM Student Success
   Sandy Avila, Ven Basco
   University of Central Florida
   In an evolving academic library environment, the duties of the subject liaison librarian are ever changing and being adapted as new responsibilities are added year after year. The Science Librarian and Engineering & Computer Science Librarian at the University of Central Florida are taking a model-based approach to handling these changes in STEM discipline support. During this session we will cover strategies for improving STEM student success based on a model for collaborative instruction, creative outreach, and cooperative service. This “STEM Team” based
approach involves working closely on STEM based initiatives by facilitating and organizing related events and workshops which may include working with other librarians like the Scholarly Communication Librarian or the Patent & Trademark Resource Center Librarian. We will share easy to apply tactics on how to increase your presence on campus and how to utilize resources available to at your institution. In creating an innovative approach to handling research activities on our campus, the STEM Team at the UCF Libraries has created a model that has helped to spur collaborative ways of thinking across the Research and Information Services Department.

10:40-11:05 AM Library Training in Data Research
Vedana Vaidhyanathan, Christina Chan-Park, Joshua Been
Baylor University
Objective(s): Students and researchers in health-related fields increasingly need to find, analyze, and manage data; but they often lack the skills to do so properly. The library has created a library-driven data certificate program in data research to meet this need.
Methods: The digital scholarship librarian along with the data management librarian partnered with librarians who work with the health sciences, social sciences, medical humanities, administration programs to pilot this certificate beginning Fall 2018. This team of librarians created a series of workshops covering finding discipline-specific data, analytical tools, and data management. Two tracks with slightly different requirements were outlined: one for undergraduates and one for graduate students and faculty. To allow for greater flexibility, the certificate is designed to be completed between one and four semesters, and participants can pick the most relevant workshops for their research. The workshops are not tied to the certificate program and are open to anyone in the university community. We initially expect 10% of the workshop attendees will pursue the library certificate.

11:05-11:30 AM An Open Access Data Workshop Curriculum for Researchers
Amanda Schilling, Brent Tweedy, Claire Curry
University of Oklahoma
OU Libraries recently began offering research data workshops. These workshops focus on skills and tools needed by students, staff, and faculty who are involved in research. In this talk we will discuss how we developed weekly, 1–2.5-hour workshops to improve research efficiency and reproducibility on campus. We organized the workshops into three categories to reflect researcher needs: Survival Skills 101 to teach research data basics (such as backups, data formatting, and file organization); Better Practices to teach data practices that many researchers will use but may not be applicable to all individuals (such as version control and data management plans); and Workflow Tools to teach specific beginner and intermediate tools (such as graphing in R and Python and formatting documents in LaTeX). We make our slides, instructor notes, and workshop materials open to the community at OU and beyond through Open Science Framework with a CC-BY license to facilitate curriculum sharing. We are in year one of this initiative and our future plans include developing new beginner and intermediate topics and expanding campus partnerships with interested departments.

11:30-12 Noon LIGHTNING TALKS

Learning Lounge Sandbox: Designing Resources, Services and Curriculum to Advance Health Literacy Needs
Imelda Vetter
University of Texas at Austin, Dell Medical School
The Dell Medical School, which opened in 2016, made a commitment to improve the health outcomes of the community it serves and to reach beyond traditional health care models in delivering care. The Design Institute for Health, a Dell Medical School entity, created the Learning Lounge in the Dell Medical School Health Transformation Building to enable a wide array of new learning opportunities for the population served at UT Health Austin (Dell Medical School’s outpatient clinics) and the greater community. The Design Institute for Health and the Dell Medical School Library collaborated on a research project to plan and implement services,
and to create and collate information resources to the visitors of the Learning Lounge. Patients of providers at UT Health Austin were referred to the Learning Lounge via an "information prescription" form. This presentation will highlight the four-phase plan to create and pilot this program: Understand/Frame, Strategize, Create, and Launch; the resources and website created; the results of the IRB-approved survey and ethnographic notes; major successes and challenges; and next steps.

**Texas Data Repository: a Two-Year Update**
*Dianna Morganti, Christina Chan-Park*
*Texas State University; Baylor University*

The Texas Data Repository (TDR) is a consensual effort to assist academic libraries in sharing and preserving the research data produced at their universities. The TDR’s Assessment working group has produced their 2-year review. Dianna will share information about the TDR; Christina will share the 2-year assessment statistics; and both will discuss plans for the future.

**Evaluating Engineering Databases: A Pilot Project**
*Jun Qian*
*Rice University*

The subject librarians continue to receive requests from faculty about new databases. However, the situation we face is we have to cancel some of our current databases to cover the cost for new subscriptions. In order to make sure the library's collection meets the current needs of our faculty, it is critical for us to evaluate current databases. We finished a project named “Conducting a Faculty-centered Information Needs and Resource Assessment” in 2017. We reached out to six science and engineering departments. Through the project, we have saved $50,758.18 from cancellations and used this savings to subscribe to new journals to meet faculty needs. Based on successful experiences that we had in 2017, we evaluated a different type of resource – engineering databases – for this new project. We analyzed usage data, conducted interviews and collected feedback from all engineering tenure track faculty. As a result, we made recommendations regarding purchases and cancellations.

12:00-1:00 PM  **Lunch**  
Catering by Pok-e-Jo’s Texas BBQ Smokehouse

12:30-1:15 PM  **KEYNOTE**  
Open Science: Refining and Revealing Scientific Practice  
*Johanna Cohoon*
*University of Texas at Austin, School of Information*

Open science is increasingly receiving attention and support from scientists, institutions, and publishers. The movement seeks to improve scientific practice by effecting cultural change in the research community. Current incentives and behavioral norms lead to issues like low reproducibility rates and “the file drawer problem,” both indications of a need for reform. Open science seeks to address those issues by using technology and policy to encourage transparency and intellectual egalitarianism. Furthermore, while budgets are stretched and datasets grow, the research community can benefit from open practices like data sharing to make better use of funds. Examples of open science in action show that the movement is having a dramatic effect, but individual researchers face continuing challenges to engaging in open behaviors.

1:15-1:30 PM  **Break**

1:30-1:55 PM  **Makerspace Collaboration between the Baylor University Libraries and the Maker’s Edge**  
*Christina Chan-Park, Andrew Telep, Vedana Vaidhyanathan*  
*Baylor University*

In Fall 2018, the Baylor University Libraries entered into a collaboration with a local makerspace: Maker's Edge. This collaboration was coincident with the opening of Baylor's makerspace which repurposed a 12' x 16' storage room in the library basement and is part of Techpoint, which offers audio and video booths in addition to laptop and technology checkout. Because of space and
staffing limitations, Baylor needed a solution to offer training and more tools and services than digital fabrication. Maker's Edge is a community makerspace in Waco located approximately 2 miles from the library. They opened in 2015 and offer a wood shop, metal shop, hot work area, computer lab, digital fabrication, fine arts studio, and textile lab in addition to the basic shop. Maker's Edge offers basic safety training and scaffolded training for each of these areas. Through an agreement with Maker's Edge, the libraries pay for 2-week passes to Maker's Edge for Baylor affiliates. After completing the two basic training classes at Maker's Edge, which has been approved by Baylor's risk management, Baylor affiliates can continue with more training at Maker's Edge to use the equipment there or take the introductory Digital Fabrication classes to use the equipment at Baylor Libraries. There is a limit of four, 2-week passes a Baylor affiliate can use per semester. In Spring 2019, the College of Engineering and Computer Science began a pilot program for students working on their senior design projects through the Libraries' collaboration with Maker's Edge. After completing training at Maker's Edge, students gain access not only to college lab spaces, but also the Maker's Edge and the library. The college plans to expand this program to all engineering freshmen in Fall 2020. In this presentation, we will share about the Baylor science librarians' experiences completing the six classes at Maker's Edge required for the engineering students and recommended for using the library's makerspace. We will also provide more details on the costs of the collaboration and present data on users and usage. We will comment on the pros and cons of program and discuss the future directions.

1:55-2:20 PM  **STEM Lesson Plans for Course-Embedded Academic Library Makerspaces**  
*Martin Wallace*  
*University of Texas at Arlington*  
This presentation is an overview of the UTA Libraries’ Maker Literacies website (https://library.uta.edu/makerliteracies/), including STEM curriculum developed during our IMLS-funded “Maker Competencies and the Undergraduate Curriculum” pilot program (https://www.imls.gov/grants/awarded/lg-97-17-0010-17). I will walk through the website as I explain its history and development, future direction and improvements, and requirements for adding your own course-integrated makerspace lesson plans. There will be time for questions and discussion about integrating academic library makerspaces into the undergraduate curriculum.

2:20-3:00 PM  **Ice Cream Break**  
Sponsored by American Chemical Society  
Featuring Amy’s Ice Creams

3:00-3:50 PM  **Science Communication Workshop**  
*Roxanne Bogucka*  
*University of Texas at Austin*  

3:50-4:00 PM  Break

4:00-4:25 PM  **Information Sources in Environmental Science: A Citation Analysis of Master’s Theses**  
*Kimberly Recraft, Gaby Whiteman*  
*Florida Gulf Coast University*  
While many analyses of citations from theses and dissertations in STEM have been published, none have focused on environmental science. We analyzed over 6,500 citations from all master’s theses completed in Environmental Science at Florida Gulf Coast University from the inception of the program to 2017. Our results illuminate information sources and trends in this highly interdisciplinary and timely field. We will present a novel method for collecting and processing the citations, as well as results in the data visualization software Tableau. Types and formats of sources cited, subject categories of journals and books, most-used journals and books, important web and government information sources, age of cited sources, publication dates and other results will be discussed.
Advocating for Student Course Material Affordability: Selling STEM Faculty on OER
Natalie Hill, Porcia Vaughn
University of Texas at Austin; University of New Mexico
With the cost of course materials outpacing the rate of inflation, students are struggling to afford necessary materials and, as a result, are suffering academically. What can the library as an institution built on student success and information access do to address this? One solution is advocating for greater faculty adoption of open educational resources (OER) to alleviate the cost burdens currently placed on students. Due to their subject knowledge and existing faculty relationships, STEM Liaison Librarians especially can serve as ideal advocates for OER. This presentation will introduce attendees to OER, including federal and state legislative mandates, with an emphasis on STEM applications. A case study from a R1 research university will cover approaches and examples to programmatically engaging with faculty in the biosciences regarding the use and creation of OER.

Science Library Consolidation: Collection Development after the E-book
Robert Noel, Amy Minix
Indiana University
Science branch and subject libraries at large, research universities have been closing with some regularity for the past two decades. With shared print repositories being established, the amount of print available on campus has steadily declined, as “just in time” request delivery options for users has increased. This study examines the consolidation of science libraries on a Research I campus, shows the quantity and subject breakdown of print collections, and reveals how information services continue in a leaner, online environment. It also shows which publishers are demanded the most as fewer print books are acquired. Collection development tools used include BLUEcloud Analytics®, GreenGlass®, and the enterprise-wide Indiana University Information Environment (IUIE).

Business Meeting & Plus/Delta

Dine-Arounds (Sign up at Registration table)