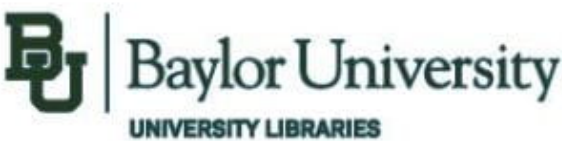


Program and Abstracts



STEM Librarian South Conference 2024



Keynote Speaker



This year our keynote address will be given by [Dr. Bryan Shaw](#), a bio-inorganic chemist whose work supports people living with blindness and other disabilities. Founder of the [Shaw laboratory](#), Dr. Shaw’s interdisciplinary work is engaged in serving young adults and youth who are visually impaired. The Shaw laboratory is engaged in multiple outreach projects including the development of tools to improve a parent’s ability to detect retinoblastoma with consumer-based digital photography and the creation of atomically correct 3-D printed protein models for use in school districts across central Texas.

Join us on Thursday, November 7, at 4pm CT
“...And Science For All: Making Science Accessible to People with Blindness and Low Vision”
<https://baylor.zoom.us/j/84841919137?pwd=qbRor48L8Ca5g7XBMYO6q4xAqaDVRm.1>

Slides of Presentations are available in the [STEM Librarians South 2024](#) collection in Figshare

Session 1: Resources (Wednesday 11/6, 10:00am-11:30am CST)

Title	Author	Abstract
The Perfect Formula: Engineering + Government Information Librarians = Success	Patricia E. Kenly, Georgia Institute of Technology Bette Finn, Georgia Institute of Technology	Research consultations by faculty, staff, and students often involve interdisciplinary collaboration among librarians with different specialties. This teamwork helps address research needs effectively. In this session, we'll focus on using free federal government information sources, which cover a wide range of topics, including STEM. These resources are valuable for their clear explanations and practical approaches, fostering lifelong learning and real-world problem-solving skills.

Title	Author	Abstract
If You Guide Them, They Will Come: A Books for Teaching Math Guide for Pre-Service Teachers	Elisabeth B. White, Towson University	When I started as a STEM librarian, an education librarian colleague lamented the difficulty of finding math trade books for education students to use in their classrooms. This presentation will share my process of creating a Books for Teaching Math libguide to connect students to suitable books and help me to identify gaps in our collection.
Discover AI: Creating a Student-centered AI LibGuide	Amy Cooley, East Carolina University Brandon Stilley, East Carolina University	We created a LibGuide, “A Guide to Artificial Intelligence (AI) for Students,” to help students understand and use various AI tools responsibly. The guide covers ethical and environmental concerns, plagiarism prevention, and practical applications. We’re also conducting a student AI usage survey to better tailor our AI literacy instruction.
Zines in STEM: Using art to practice science communication, interdisciplinary studies, and empowerment	Easton Brundage, Loyola University Chicago	In the often-rote curriculum of undergraduate STEM, zine-making is a creative intervention that can reignite students’ love for scientific learning and curiosity. While creating zines, students also practice how to write for different audiences and learn best practices for researching trending topics in their fields, which prepares them for their future careers.

Session 2: Outreach (Wednesday, 11/6, 12:00pm-1:40pm CST)

Title	Author	Abstract
Enhancing the Lab Experience: Creating And Comparing Skulls Using 3D Printing	Eric Resnis, Coastal Carolina University	This presentation will share the experience gained in a multi-year project to integrate imaging technology and 3D printing in a comparative vertebrate anatomy laboratory. Students were taught about medical imaging and CT scans, their conversion into 3D printable models, and how to create model facsimiles by 3D printing for analysis.
Reaching Reluctant STEM Faculty & Students – 10 Years On	Isabel M. Altamirano, Auburn University Jenni Burke, Butler University	Nine years ago, I presented this same topic at Baylor, which ensued in a lively discussion. But now, it’s harder to reach both faculty and students. I will discuss some methods that still work for me at two R1 institutions, as well as different approaches for post-Covid and AI world.
Adding Libraries to the Equation: Mathematics Faculty’s Underutilization of Academic Librarians	Dan Kipnis, Rowan University Elizabeth Novosel, University of Colorado Rasitha Jaysekere, Butler University	Despite outreach efforts, Mathematics departments hesitate to engage with academic librarians. Our team of 3 frustrated librarians and 1 mathematics faculty member sought to understand faculty’s needs and perceptions of librarians. We launched a 10-minute survey for higher education mathematics faculty in the USA and Canada (fall 2023), receiving 189 responses. In this presentation, we will share preliminary findings and examples of respondents’ perspectives and facilitate discussion of collaborations with less responsive disciplines
The Power of Teamwork: Bringing Different Skill Sets to Medical Librarianship	Amy Martin-Klumpp, Texas A&M University Angelique Lackey, Texas A&M University Kathy Carter, Texas A&M University	Three librarians with different backgrounds discuss their collaborative efforts to enhance a university medical library’s services. They showcase projects, from research guides to user-friendly technologies, highlighting the benefits and challenges of collaboration with people who come to the table with varying perspectives. This presentation demonstrates how diverse expertise drives excellence in STEM education and research.
Serving Neurodivergent STEM students in Academic Libraries with a Focus on Femme, Female, Nonbinary, and Agender Students	Angie Price, University of Florida	Neurodivergent students in STEM face significant challenges due to inadequate institutional support, particularly among female, femme, and nonbinary individuals. This presentation highlights strategies for academic librarians to foster a neuroinclusive culture, enhancing understanding and support for these students to improve retention and success in STEM fields.

Session 3: Instruction (Wednesday 11/6, 2:10pm-3:50pm CST)

Title	Author	Abstract
From Inquiry to Innovation: Librarians’ Expanding Role in Scholarly Integrity	Karen Burton, Clemson University	This presentation explores how a request to create a ‘Journal Evaluation Workflow’ for identifying predatory journals evolved into a significant interdisciplinary collaboration, including co-teaching a credit bearing class on utilizing machine learning to detect predatory publishers. It underscores the transformative potential of STEM librarians in safeguarding scholarly communication and fostering innovative partnerships
Technical Communication Instruction Partnership with Engineering	Ashley S. McGuire, University of Alabama at Birmingham	The author collaborated with engineering faculty to redesign a graduate course, Technical Communication for Engineers, to provide students with a comprehensive course in scientific writing and presentation. Course philosophy and design will be discussed as well as lessons learned and plans for promoting this course to the School of Engineering.
Night On Call: A Dream Team Collaboration	Sandra Yvette Desjardins, Texas Medical Center Library Sonya E. Fogg, Texas Medical Center Library Tracy Ashby, Texas Medical Center Library Bronwyn Sutherland, Texas	Night-onCall is a simulation to evaluate fourth-year medical students’ preparedness in a night on duty in an emergency department. Students’ informational literacy skills were assessed by librarians to showcase and simulate how students would fare in emergency departments by diagnosing patients in real time through database searching.

Title	Author	Abstract
	Medical Center Library Beatriz Varman, Texas Medical Center Library Kelsey Koym, Texas Medical Center Library Jennifer Stockton, Texas Medical Center Library Celeste Perez, Texas Medical Center Library Katie Prentice, Texas Medical Center Library Hilary Fairbrother, UTHealth Houston Allison Ownby, UTHealth Houston	
Enhancing STEM Writing and Research Skills: A Workshop for Physics Graduate Students	Erica Newcome, University of Miami	Learn how a STEM and Interdisciplinary Research Librarian addressed faculty concerns about physics graduate students’ writing skills by developing a STEM writing workshop in collaboration with the university’s Writing Center
ChatGPT in STEM Information Literacy: Teaching Critical Evaluation in the Age of AI	Sheldon Salo Martinez, Vanderbilt University	This session discusses the incorporation of lessons on large language models such as ChatGPT into academic librarian STEM instruction sessions, highlighting strategies to teach learners from high school to graduate students how to effectively use AI tools and critically evaluate AI-generated content.

Session 4: AI & Data (Friday, 11/8, 9:30am-11:00am CST)

Title	Author	Abstract
Texas Data Repository: A State of the Repository Address	Sylvia Jones, Southern Methodist University Christina Chan-Park, Baylor University	The Texas Data Repository (TDR) is hosted and maintained by the Texas Digital Library and overseen by members from the twelve TDR institutions. We will introduce the TDR and focus on three of recent and current projects: a user survey, a data retention policy, and a larger data storage model.
Let’s (Not) Talk About Keywords: Teaching Scopus AI to Second-Year Students	Dennis Donathan II, Trinity University	This presentation explores the use of Scopus AI to enhance library instruction for second-year biology students. By providing natural language-based search options and generating summaries and references, Scopus AI aims to make the scholarly literature more accessible. The presentation will discuss the implementation process, student outcomes, and ethical considerations of using generative AI in undergraduate education.
Teaching Data Literacy and Understanding Statistics in Undergraduate Information Literacy Courses	Sarah Dornback, University of Texas at Dallas	At the University of Texas at Dallas, librarians teach online information literacy courses that include coursework related to data literacy and understanding statistics. This presentation explores current learning objectives, student progress, and future course updates, while offering strategies for academic librarians to enhance students’ statistical knowledge and data literacy skills.
Five Free Tools to Support Open Science	Katie Pierce Farrier, University of North Texas Health Science Center	From exploring biochemical information, to analyzing genomics data, to finding specialized data repositories, these freely available resources support biomedical research. Explore popular uses and features of NLM Resources (Dataset Catalog, Repository Finder, CCOI Dataset Profiles, and Comparative Genomics Resource) and how to promote them to STEM research faculty.

Session 5: Lightning Talks (Friday, 11/8, 11:15-11:30am CST)

Title	Author	Abstract
Making with Generative AI: Combining Information Literacy and Adobe Illustrator’s Generative AI Feature with a Laser Cutter and Button Maker	Stephanie Blair, University of Georgia Andrew Johnson, University of Georgia	Stephanie Blair of the University of Georgia will discuss co-creating a workshop to support a university-wide Generative AI Competition. The workshop demonstrates our position as librarians and the role of academic makerspaces to support and assist students to create artifacts that reflect their learning within a non-competitive and non-judgmental environment.
Empowering Nursing Education through Consumer Health Resources: A Mission-Driven Approach	Jamie Quinn, Baylor University	This presentation explores how teaching nursing students to utilize consumer health resources enhances mission-driven outreach. Aligned with the National Library of Medicine’s goals, it focuses on supporting underserved communities. Highlights include nursing volunteer efforts in Dallas, the Texas-Mexico border, and Zambia, emphasizing libraries’ role in delivering tailored, multilingual health information.

Session 6: Posters (Friday, 11/8, 11:30am-12:00pm CST)

Title	Author	Abstract
Consumer Centered Citation: Creating Motivation for Media Citation in Scientific Outreach	Elizabeth C. Bittner, University of Texas at Arlington Rebekah D. Wallace, University	In casual contexts, images often lack appropriate citation, even when used to facilitate scientific discourse. Formal citation standards emphasize plagiarism and copyright concerns, but the sciences might encourage better image citation by focusing on the role citation plays for the consumer.

Title	Author	Abstract
Cultivating Connections: Library Initiatives Supporting Medical Humanities & Environmental Humanities	of Georgia Laura Semrau, Baylor University Heidi Yarger, Baylor University	Two librarians at Baylor University discussed the commonalities they share in serving interdisciplinary departments that span the divide between STEM and the humanities.

Session 7: Students & Users (Friday, 11/8, 2:15-3:45 CST)

Title	Author	Abstract
Fostering Interdisciplinary Collaboration: A University Library’s Role in Enhancing STEM Education Through Partnerships with the College of Education and the College of Agriculture, Food, and Natural Resources	Kimberly Gay, Prairie View A&M University	Exploring innovative collaborations between the University Library, NASA Space Center- Houston, the College of Education, and the College of Agriculture, Food, and Natural Resources to enhance STEM education. This innovation aims to create a comprehensive support system for student teachers and faculty to engage STEM disciplines of Agriculture in their experimental teaching and learning experiences.
STEMMING into Equity: Moving to a Team Model to Even the Workload	Stephanie Blair, University of Georgia Holly McMasters, University of Georgia Megan Palmer, University of Georgia	As a result of an organizational restructure, University of Georgia Research and Instruction librarians moved from a subject liaison model to a teams-based approach. This new approach is aimed at addressing equity in workload balances and protecting against overload. This presentation will discuss how it was implemented, how it went this fall, and next steps.
Cultivating a Graphic Medicine Collection from Zero	Charlotte Vandervoort, University of North Texas Health Science Center Melissa Brand, University of North Texas Health Science Center Lauren Camarillo, University of North Texas Health Science Center Megan Horn, University of North Texas Health Science Center Madi Wright, University of North Texas Health Science Center	Graphic Medicine is an emerging genre that educates students and clinicians about diverse patient and provider experiences. Join us to explore our journey in creating a graphic medicine collection, uncover insights from our development process, and learn about our future plans to expand and promote this valuable resource.