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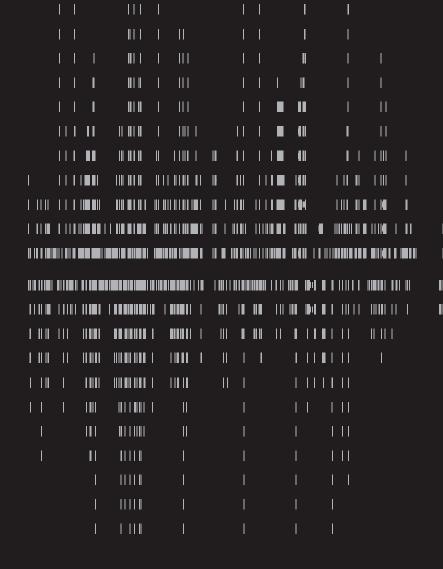
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About the cover

The cover art depicts the beauty of the human genome visualized and mapped using the Integrated Genomics Browser. This is just one example of data and tools that Libraries makes available to the Purdue community.

At Libraries, we're passionate about data and the future of data science. We are the proud home of the Purdue University Research Repository, ePubs, and e-Archives where Purdue research is preserved, held, and shared with scholars around the globe. We also know that data take on new possibilities and perspectives in research and learning when visualized in novel ways. Libraries spaces like the Data Visualization Experience Lab of Purdue (D-VELoP) in the Thomas S. and Harvey D. Wilmeth Active Learning Center and the Learn Lab and Digital Projects Lab in the Roland G. Parrish Library of Management and Economics provide vital places for Purdue students, faculty, and staff to engage with, demystify, and play with data, along with expert help from Libraries' personnel, courses, and certificate programs.

DEAN'S WELCOME

Welcome to LIB2022, a showcase of the best of Purdue University Libraries and School of Information Studies from the past year. Here, we invite you to discover what makes Purdue Libraries so essential today, and learn about the exciting new challenges that will power our next giant leaps. As we share what forward-thinking, student-focused academic research librarianship means to us, I think you will agree that we are so much *more than books*.

Libraries faculty and staff teach courses in information and data literacy that make a positive impact on the success of Purdue students from all disciplines, schools, and colleges. With Archives and Special Collections, the Office of Undergraduate Research, the Purdue University Press, and the University Copyright Office, we enrich the student experience with spaces, technology, expertise, and opportunities in research and publishing not offered anywhere else on campus.

Creating the academic research library system of the future means leading by example. We are committed to sustainable scholarship and to providing the resources our campus needs while looking past traditional, costly subscription models. We proudly contribute to a more diverse, inclusive campus culture. We like to say that everyone belongs in Libraries, and as one of the most interdisciplinary and broad-reaching organizations on campus, we mean it.

I hope you enjoy LIB2022.

Beth Mcneil

Beth McNeil, PhD

Dean of Libraries and School of Information Studies Esther Ellis Norton Professor of Library Science



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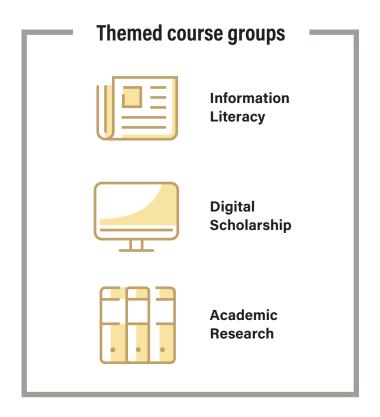
TRANSFORMING information and data education

Leaders in Innovative Learning

The Libraries and School of Information Studies curriculum teaches Boilermakers how to be smart consumers of data and information. Through courses designed to advance students' information and data literacy skills and address challenges like misinformation, our students become better researchers, writers, data stewards, and critical thinkers for life.

With our partners in the Center for Instructional Excellence and Purdue Online, we are leaders in Innovative Learning at Purdue, a campus-wide initiative to improve teaching and course modules across the University. Libraries faculty involved in the IMPACT program have helped transform 445 peer courses, representing all schools and colleges. Through the Office of Undergraduate Research's "Creating Course-based Undergraduate Research Experiences at Purdue (CURE-Purdue)" program, faculty instructors learn how to integrate meaningful undergraduate research experiences right into their course plans.





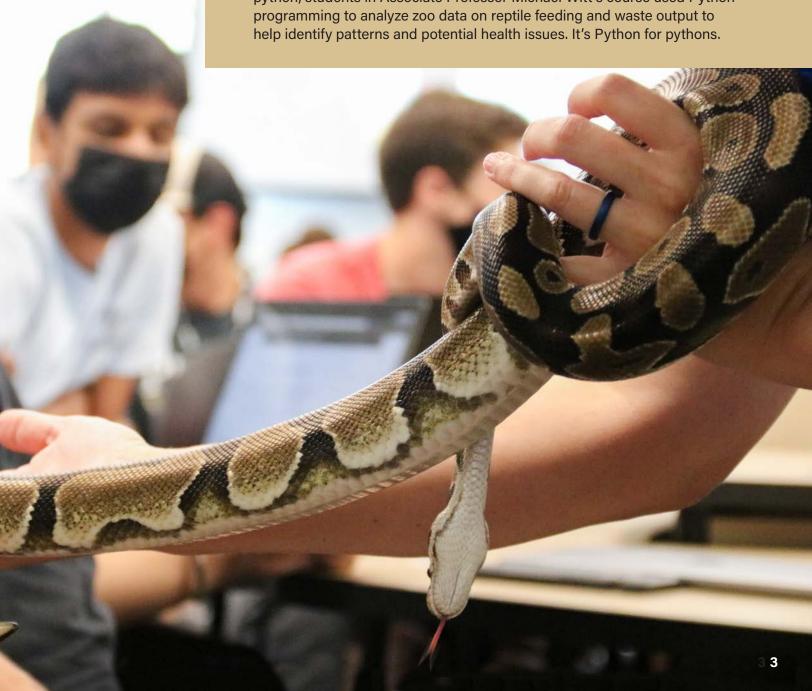
Cross-disciplinary courses with real world results

In ILS 490 Diplomacy Lab: Strategies for Identifying Mis/Disinformation, students work with Libraries faculty and diplomats from the U.S. Department of State's Operations Center to create digital tools and processes that help verify information claims and identify sources of false or misleading information. Libraries Associate Professor Bethany McGowan and Assistant Professor Matthew Hannah launched the course in spring 2022 with a grant from the Joanne J. Troutner Innovative Educators Program Fund. Diplomacy Lab projects are immersive, service-learning experiences, and students regularly meet outside of class on self-led teams. "We recently presented the final course deliverables to our collaborators at the State Department and received enthusiastic feedback," said Hannah. "We'll be continuing the collaboration in fall 2022."

for all Purdue students

Great snakes!

Wild things happen when students take a Libraries and School of Information Studies course. Active learning takes on a new dimension when Courtney Nave from the Columbian Park Zoo enters the ILS 103 Introduction to Data Lifecycle Management classroom. After meeting Kalani, the ball python, students in Associate Professor Michael Witt's course used Python programming to analyze zoo data on reptile feeding and waste output to help identify patterns and potential health issues. It's Python for pythons.



ADDING VALUE

to a Purdue University degree

What is digital humanities?

Digital humanities is an academic field that focuses on applying modern computational tools and methods to traditional humanities disciplines such as literature, history, and philosophy.

Why Purdue Digital Humanities?

Purdue students now have the opportunity to complete a certificate that covers important aspects of digital humanities (DH), such as computational text analysis, digital archives, geospatial analysis, and data management. Offered through the Libraries and School of Information Studies in collaboration with the College of Liberal Arts, this graduate certificate program will allow students to design, implement, and launch an original DH project of their

own. Undergraduates have their own certificate program focusing on four tracks: culture and society, digital literacy, programming, and visualization. These topics provide a well-rounded set of technical skills and a critical apparatus with which to think about technology from a humanistic perspective.

For many graduate students, an official accreditation can provide important recognition on their CVs and résumés, especially if they pursue careers outside academia. For undergraduate students, a DH program offers the opportunity to combine their interests in the humanities or social sciences with interests in technology, data science, or computation. DH may provide a pathway to meaningful careers after graduation in tech startups, non-profits, cultural organizations, or industry, all of which value a combination of liberal arts training and technical literacy.



with certificate programs

What is GIS?

One acronym, two connected definitions.

GIS stands for Geographic Information Systems—computer and software tools for gathering and analyzing data connected to geographic locations.

GIS also stands for Geospatial Information Science—the field of study and program for those learning, working, and conducting research using geographic information systems.

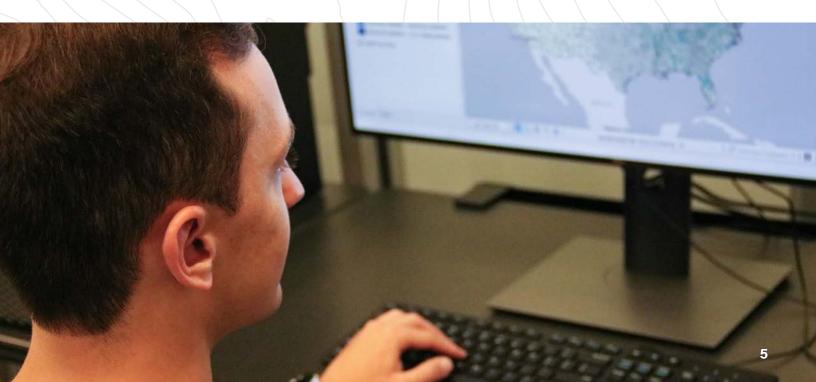
Why Purdue GIS?

Geospatial information plays an increasingly important role in many cutting-edge industries. The U.S. Department of Labor has defined geospatial technologies as one of the major areas of job growth in the coming decade. A recent URISA GIS Salary Survey shows that graduates with GIS certification earn up to \$10,000 more than their uncertified peers.

Meet Qing, GIS Certificate Student

Graduate student Qing Su was first drawn to GIS when she took an application course in the Agricultural Systems Management department. Upon discovering that GIS could be combined with her passion for coding, Qing decided to enroll in Libraries' GIS certificate program, where she thrived and found job-relevant skills that would become essential to her future career path and job security.

"The GIS experience on my résumé has already attracted some employers' interests," Qing said, "and I think it is one of the accomplishments I am most proud of now. The GIS experience at Purdue helped me in software practice, which is unique. Usually, course teaching modes tend to be paper-based and offer no real-world project experience. So, I especially liked working with the official ArcGIS software on assignments!"



FOSTERING LEARNING beyond the classroom



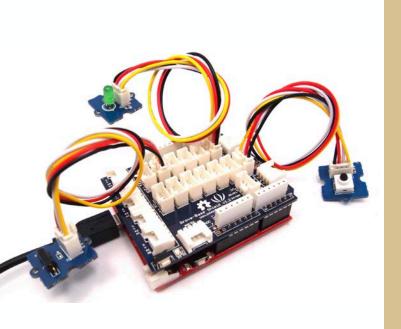
Early Modern English paleography workshop

After faculty and students in the History and English departments expressed interest in expanding their understanding of Early Modern English Paleography, Assistant Professor Kristin Leaman partnered with Archivist Adriana Harmeyer of Archives and Special Collections (ASC) to create a series of workshops for Purdue faculty and students to develop Early Modern English Paleography proficiency in order to conduct their own research. Participants learned how to navigate both Early Modern English digital manuscripts from the Folger Shakespeare Library and physical rare books and manuscripts held by ASC.

Leaman and Harmeyer then demonstrated how to write with a hand-cut goose feather and ink, and invited the participants to practice writing the Early Modern English alphabet. This active learning activity taught them how letters are written and why it matters, a mandatory skill in paleography. They also learned how to do a quasi-facsimile transcription, another critical skill for conducting research with Early Modern English manuscripts. Participants each received a helpful spiral bound workbook that will allow them to continue learning Early Modern English Paleography on their own. These workshops were made possible through a grant from the Joanne J. Troutner Innovative Educators Fund. Archives and Special Collections instruction archivists partner with course instructors like Leaman throughout the year to encourage students to engage with archival materials and research.

Making financial literacy fun

Through a generous gift from Purdue Federal Credit Union (PFCU), Libraries and Boiler Financial Track encouraged Purdue students to save their lunch money during national Money Smart Week, April 11–15, 2022. Libraries provided lunch to students who attended a daily financial literacy workshop on important topics like budgeting, investing, and dealing with debt. Experts from Libraries like Assistant Professor Zoeanna Mayhook (pictured right), Boiler Financial Track, and PFCU provided tips to help students plan their financial futures with confidence.



Celebrating suffrage

In April 2022, Archives and Special Collections invited students to experience the "Not Given But Earned: Women's Fight for the Vote" exhibition before enjoying a special open house hosted by Libraries. There, students enjoyed snacks and relaxed with suffrage-themed art activities. Said one senior as she proudly held her artwork, "I didn't know there was so much cool stuff in Archives. I hope to come back someday." The "Not Given But Earned: Women's Fight for the Vote" exhibition, which showcased primary sources and rare books from the suffrage movement, was open through April 29, 2022.

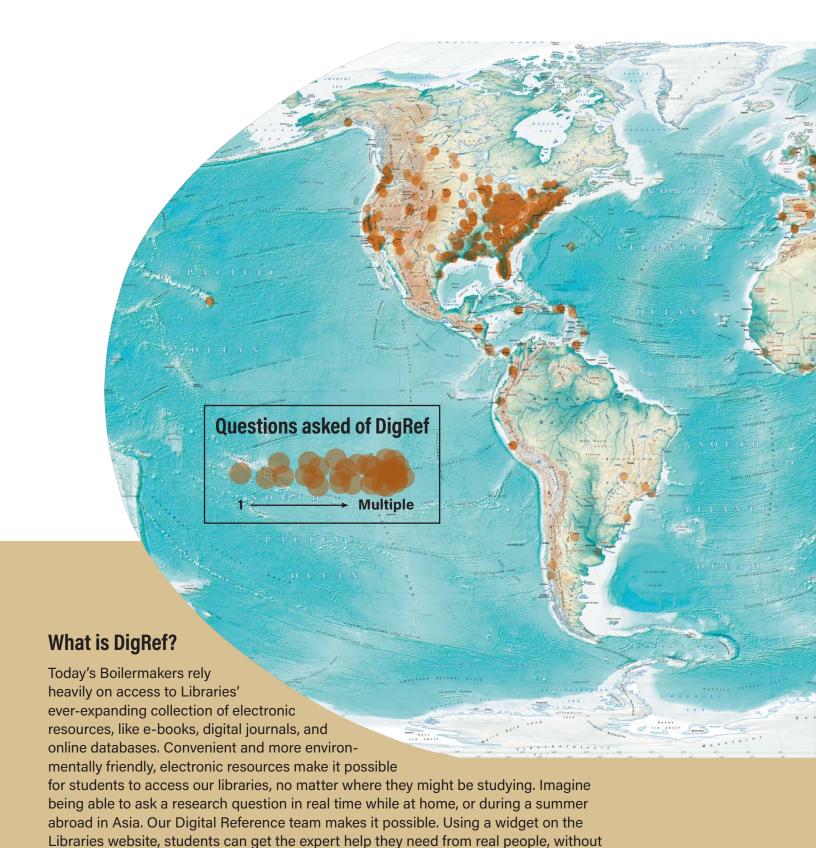


Learning off the grid

Libraries offers a variety of maker tools, audio visual equipment, and other technology for students to check out and explore learning and creativity untethered. Students in the Purdue Forestry and Natural Resources course "Ecological Sensors & Data" met in spring 2020 until the COVID-19 lockdown forced students to return home mid-semester. To continue their work, the students assembled and deployed a network of air quality sensors using tools like Libraries' Raspberry Pi kits in their own homes. Now, their research data is part of Purdue University Research Repository.

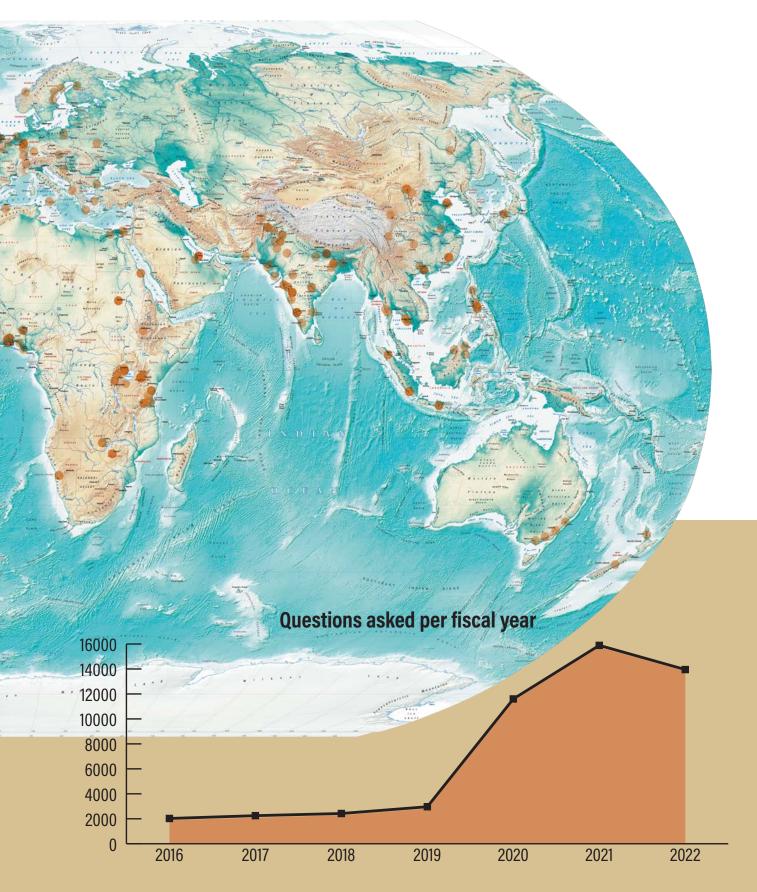


SERVING PEOPLE



ever leaving their front door.

around the world



EXPANDING OUR IMPACT through campus enrichment

Purdue University Press

Dedicated to the dissemination of scholarly and professional information, Purdue University Press (PUP) selects, develops, and distributes quality resources in several key subject areas for which Purdue University is famous, including business, technology, health, veterinary medicine, space and flight, and other selected disciplines in the humanities and

sciences. As the scholarly publishing arm of Purdue University and a unit within Libraries, PUP is also a partner for university faculty and staff, centers, and departments wishing to disseminate the results of their research.



University Copyright Office

From research to journal articles to coursework to photos on a cell phone, everyone owns a copyright, whether they are aware of it or not. The University Copyright Office (UCO) aims to help the Purdue community understand and manage their copyrights, and to become smart users of copyrighted materials. UCO's director, Donna Ferullo, leads workshops and guest lectures for courses, depart-

ments, and campus groups on copyright basics. Through these programs, one-on-one appointments, and an interactive website, UCO makes understanding copyright more accessible to campus.



Office of Undergraduate Research

The Purdue Office of Undergraduate Research (OUR) joined Libraries in 2018 and serves as a central resource to promote and expand experiential learning for undergraduate students through research experiences with skilled mentors. The OUR works with everyone connected with undergraduate research, from prospective and current undergraduate researchers and their research mentors, to program administrators and the University. In addition to connecting stakeholders with undergraduate research experience activities, the OUR conducts

formal and informal training, helping students enhance their research experience, deepen their understanding of disciplinary material, and increase their value to graduate programs and future employers.





Undergraduates gain publishing experience with JPUR

The Journal of Purdue Undergraduate Research (JPUR) annually publishes outstanding research papers written by Purdue undergraduates from all disciplines who have completed faculty-mentored research projects. JPUR is run by students, but facilitated through a special partnership between Purdue University Press and Libraries. JPUR is an Open Access journal, which means that it does not charge readers or their institutions for access. Readers may freely read, download, copy, distribute, print, or link to the full texts of articles, which helps people around the world discover the unique research conducted by our talented undergraduate researchers at Purdue. Participation in JPUR provides a unique opportunity for students to earn a publishing credit early in their academic careers, which will help them stand out from their peers on graduate school applications. JPUR participants also learn how the academic publishing process works firsthand, and can better prepare themselves for future careers in a wide variety of research-related fields.

Meet Marjorie, OUR Scholar

OUR centrally supports student engagement in research and creative endeavors by partnering with faculty, program administrators, staff, and students. Animal lover Marjorie Leblanc ['22], pictured here with her dog Maple, recently graduated after two years working in the Organization for Human-Animal Interaction Research and Education (OHAIRE) Lab with Dr. Maggie O'Haire. As an OUR Scholar, Marjorie was provided an academic scholarship and won the top interdisciplinary virtual poster presentation chosen by the Purdue University Libraries and School of Information Studies at the Spring Undergraduate Research Conference. Without the OUR Scholarship, she says that "I likely wouldn't have pushed myself outside of my comfort zone to participate in these opportunities, and thus wouldn't have learned all the invaluable skills they offered." As a future Purdue College of Veterinary Medicine student, Marjorie says that her experiences "will follow me for the rest of my educational and professional careers. From learning new skills, taking on challenging tasks, gaining confidence, presenting to peers and superiors, and being a mentor to others, I am truly grateful for my experiences!"



INSPIRING BOILERMAKERS through creativity and innovation



Making gets messy

Making brings the worlds of art, science, and technology together to inspire and excite students through hands-on learning that leads to innovation. Partnering with Krista Johnson, teaching lab coordinator for Botany and Plant Biology, Libraries hosted a special student mobile making event to celebrate spring. Using the Libraries' Carvey machine, students were able to design their own wood block stamps to make wall hangings and postcards. Libraries also provided a variety of plants, beakers, 3D printed holders, soil, and pots for students to build their own unique potted plant creations to take home.

Making at Libraries

Libraries believes that inspiration, problem-solving, and our students' next giant leaps begin with small steps full of surprise and self-discovery. We are the proud home of Mobile Making at Purdue, which challenges students across campus to think creatively and find limitless possibilities for innovation and expression when art, science, and technology are used in harmony to solve problems, inspire discovery, and change the world. At mobile making events throughout the year, students engage with STEM concepts through artistic mediums while familiarizing themselves with Libraries technology like 3D wood carving machines, 3D printers, computerized cutting machines, and 3D object scanners. Libraries maker tools are regularly used by faculty and students across campus to create projects like the "Piano Hand" by Purdue's Autonomous Robotics Club, or 3D horse throat models for Purdue's VetMed faculty.

Making the future

Innovation happens when students are given the tools to let their creativity and problem-solving skills shine. The Library of Engineering and Science is home to the Libraries' 3D-printing lab, where students, faculty, and staff can bring their imaginations, early prototypes, and concepts to life. From robot chassis to puzzle boxes to initial designs for a new piece of cockpit equipment, innovation is taking shape in Libraries, one line of filament at a time.





Meet Bridget, 21st century storyteller

Meet Bridget Arnold, the winner of Libraries' MakeYourStory narrative student podcast contest. She's blazing her own trail at Purdue, with majors in Anthropology and Organizational Leadership and minors in Spanish and Design & Innovation. The journey to this unique program of study was not without its stumbles, surprises, or sidetracks, but it led Bridget to channel her many passions and regain her sense of purpose after the COVID-19 pandemic upended her first-year college plans. Taking what she learned from listening to MakeYour-Story and applying it to her own life experiences, Bridget's story of self-discovery won her accolades in her podcast episode, "How Tiny Homes Help Me Explain My Majors."

The student podcast contest is part of the MakeYourStory podcast series created by Libraries and the Brian Lamb School of Communication. Following the success of 2020–21's Diversity and Making podcast and video series, a collaboration between Libraries and the Asian American and Asian Resource and Cultural Center, the MakeYour-Story series aims to introduce Purdue students to

the beauty of oral storytelling, the craft of writing a compelling narrative, and the tools needed to effectively deliver that narrative through the popular medium of podcasting. Scan the QR code to listen to Bridget's podcast.



DEVELOPING FACULTY on-campus



Bethany McGowan: Making giant leaps in healthcare equity

Associate Professor Bethany McGowan is a trailblazer in the field of health information literacy. In 2020, when pandemic healthcare protocols and scientific understanding of the virus changed almost daily, McGowan developed a COVID-19 information toolkit for frontline healthcare workers to help provide safer, more-informed, and faster patient care. Using this toolkit, healthcare workers were able to quickly identify reliable, up-to-date information from credible sources without wasting precious time with their patients. McGowan's commitment to accurate, timely information sharing was further recognized when she was named a World Health Organization (WHO) infodemic manager, and again when she received the T. Mark Hodges International Service Award by the Medical Library Association.

McGowan teaches in-demand courses for Purdue's future nurses and healthcare workers on how to successfully use information and data in their professions. She also provides information literacy, data management, scholarly communication, and collaborative research services as the Libraries' liaison to students, faculty, and staff in the health and life sciences departments.



Chao Cai: Creating undergraduate research experiences for underrepresented students

Dr. Chao Cai is an assistant professor and Libraries' Plant Sciences Information Specialist. He is also the principal investigator for "REU Site: Purdue Undergraduate Research Experiences for Plant Biology and Data Science (PURE-PD)", recently awarded a National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Site grant totaling \$402,971. One of the first programs of its kind led by an academic research library, Cai created PURE-PD in conjunction with Co-PI Dr. Natalia Dudareva from the College of Agriculture. This award will support plant biology, data science, and research training for ten undergraduate students from underrepresented backgrounds during the summers of 2022–2024.

When discussing the program, Cai says "Data skills are crucial for 21st century researchers. Information literacy, data literacy, and scholarly communications form the foundation for efficient research practices, and this is where Purdue Libraries excels. With my experiences working with big biological datasets and teaching research data management courses, I proposed a data science-focused theme for the REU site."

LEADERSHIP and around the world





Modern society faces significant information challenges, from misinformation campaigns designed to confuse and disempower, to a lack of access to credible information. This can have life-altering, disproportionate effects on different communities. Information literacy researchers can make a positive difference in addressing these unwieldy challenges. The Institute for Information Literacy at Purdue, the brainchild of Dr. Clarence Maybee, Professor and W. Wayne Booker Chair in Information Literacy, will bring together researchers, educators, and other stakeholders to investigate these information literacy models that enable people to successfully navigate today's information environment.

With generous funding from Bob and Judy Brady, the Institute for Information Literacy at Purdue has developed a pilot program to fund research projects that examine complex information challenges in different contexts. Moving forward, the Institute will create a community by funding additional research, providing research awards, hosting an annual symposium and art exhibit, and developing an undergraduate research lab focused on exploring the role of information literacy in addressing information challenges.



Matthew Hannah: Exploring the future of digital humanities in North Africa

Morocco is a land that has long captivated artists and writers, and now, digital humanists. Assistant Professor Matthew Hannah recently returned from a Fulbright Specialist trip three years in the making that included week-long digital humanities boot camps at two universities. Dr. Hannah's first week of workshops was hosted by Al Akhawayn University in Ifrane, one of the few places in Morocco where it snows. Attended by librarians and faculty interested in digital humanities, participants learned about challenges in applying computational tools to the humanities and social sciences. Hannah then traveled to Abdelmalek Essaâdi University in Tétouan to conduct a week of hands-on workshops for graduate students in the English department.

Since returning, Hannah has agreed to serve as an affiliate of a new educational module in digital humanities at Abdelmalek Essaâdi University, and he is working with faculty and librarians at Al Akhawayn University as they develop their own suite of workshops. Hannah says, "I look forward to watching the seeds we've planted with this Fulbright experience blossom into a new digital humanities effort in Northern Africa."

PRESERVING A HOME

for Purdue history

The COVID Stories Project

Led by Archives and Special Collections, the Purdue COVID Stories Project is an ongoing effort to collect the personal experiences of the Purdue community during the global pandemic and to preserve those stories for posterity, future research, and reflection in the University Archives. To help capture this moment in living history, Libraries hosted a Purdue COVID Stories video storytelling tent in 2021 during Boiler Gold Rush, Purdue's orientation week. Using a set of oral history questions developed by Archives, Libraries staff interviewed students about their pandemic experiences, capturing over 160 video stories of lost loved ones, high school plans interrupted, and the unique challenges and uncertainties of applying to college during a pan-

demic. Some were humorous, others poignant, but all shared a tremendous amount of Boilermaker pride, perseverance, and optimism for the future. Explore the COVID Stories Project (or contribute your own) by scanning the QR code.



Growing e-Archives

e-Archives is the home of digital collections within the Purdue University Archives and Special Collections. The e-Archives collections include digitized surrogates of physical items or accessible versions of digital-born materials. e-Archives supports the Libraries' mission to provide high quality information resources for our global Boilermaker community by enabling worldwide access to these collections regardless of location, background, or research interest. Over 90 collections and counting are currently accessible through e-Archives.

Main collecting areas



The Barron Hilton Flight and Space Exploration Archives

Preserves the history of flight and space exploration.



The Betsy Gordon Psychoactive Substances Research Collection

Documents the history of psychedelic medicine, research, and public impact.



The Susan Bulkeley Butler Women's Archives

Captures the historically overlooked and underrepresented stories of women and their communities in Indiana.



University Archives

Preserves the histories of university administration, colleges, departments, units, student organizations, and other affiliated groups.



EXPLORING OUR NEXT GIANT LEAP

toward the future of academic research libraries

What makes a great library today?

While much has changed since the advent of the Internet, libraries continue to serve three fundamental and distinct roles on university campuses: a place for research and study, access to a collection of scholarly materials, and as a source of human expertise (Carlson, S. (2022). The Library of the Future. The Chronicle of Higher Education.). Today, most of the scholarly materials or collections we provide for Purdue are electronic, available 24/7 to Purdue students, researchers, faculty, and staff wherever they are located. With digital access so prevalent and enrollment continuing to grow, library spaces at Purdue can be transformed to meet student needs by providing more space devoted for study with nearby expertise.



Libraries Master Plan

To support Purdue's world-class educational environment and the Purdue Moves Transformative Education Initiative, the Libraries and School of Information Studies embarked on a master plan in fall 2021 to align physical and technological inventories with current and future pedagogies to meet the University's needs over the next decade.



Listening sessions and workshops were held with faculty, staff, students, PurdueTHINK student consultants, campus leaders, Purdue for Life leadership, student government leaders, University Libraries Committee, as well as Libraries' Dean's Advisory Council members. By spring 2022 it had become clear that secure, temperature controlled, off-site storage for current collections is needed to make room for more student space in several libraries. Archives and Special Collections needs additional space for researchers, Purdue University Archives and Special Collections, teaching, and larger and more prominently located exhibition space.

The Libraries Master Plan final report and proposal will go to campus leadership and the Board of Trustees fall 2022.



Which library do you most frequently use?



HSSE (Stewart)

Humanities: Social Science, and Education

We asked students at high traffic locations around campus (Stewart Center, Cordova Co-Rec Center, Lilly Hall, and the Thomas S. and Harvey D. Wilmeth Active Learning Center [WALC]) about the factors that influence how they use campus Libraries.

The data show that most students visit one of our libraries 4 to 5 times per week with the libraries inside WALC and Stewart Center being the most popular. Proximity is a main driver for choice of library. And given a choice of where to locate new libraries, students recommend two additional locations—south of State Street and adjacent to the residence halls.

As we go through the master planning process, it's our students' needs that always come first as we take our next giant leap in Libraries.



