### **WITH BETHANY McGOWAN & MATTHEW HANNAH**

Bethany McGowan is an associate professor in Libraries and School of Information Studies, specializing in health literacy education, and Matthew Hannah is an associate professor in Libraries and School of Information Studies, focusing on digital humanities and media studies. Recently, Professors McGowan and Hannah collaborated on a Diplomacy Lab course in which students helped to develop strategies for identifying misinformation and disinformation.



Bethany McGowan



Matthew Hannah

### How did this project on misinformation and your partnership on the project come to be?

In fall 2021, the Purdue Policy Research Institute called for Diplomacy Lab bids and a menu of possible projects. Diplomacy Lab projects enable the U.S. Department of State to "course-source" foreign policy research by harnessing the efforts of students and faculty at U.S. universities. Purdue is a Diplomacy Lab partner. The Strategies for Identifying Mis/Disinformation project called for assistance in developing tools and strategies to help diplomats quickly and accurately differentiate between real breaking news and disinformation. Professor McGowan's expertise in designing tools and processes that help people assess the quality of health information was an excellent fit for the project. Professor Hannah's expertise in conspiracy theories and the information dark age was also very relevant. Together, we drafted a project proposal bid. The State Department accepted it, and we launched the project for spring 2022 and fall 2022.

### What advice do you have for undergraduates looking ahead to a career in academia?

It is a long journey from being an undergraduate to being in front of a college classroom. Keep your friends and family close to remind you who you are and why you are striving for that career in academia. Each stage in the journey will challenge you in ways that you did not expect, and you will grow in ways you did not expect. You also need to recognize that there are several different opportunities in academia—research-focused, teaching-focused, engagement-focused, or a blend of any of these. Follow your passions, interests, and heart to find the career that will bring fulfillment to your life while benefiting your community.

## What role did the State Department play in the project and how were students able to interact with them?

Diplomacy Lab projects focus on engaging students in diplomacy work and broadening the department's research base. Students participating in Diplomacy Lab projects explore real-world challenges the State Department faces and work with government officials to contribute to policymaking. For our project, students had live Zoom meetings with diplomats from State's Operations Center several times throughout the semester. The project deliverables were reviewed by State Department officials who provided detailed feedback to students.

# What changes do you hope your work influences within the State Department and beyond?

The tools from the project have been integrated into training for watch officers—specially trained diplomats whose job duties include reporting timely and accurate news and information to the secretary of state and other senior officials. Our tools will make it faster for diplomats to identify mis/dis/malinformation without losing accuracy. Due to the collaborative nature of government agencies, the tools we developed may be adapted by other agencies, such as USAID and the Department of Defense. We also plan to repurpose or retrain the tools to be used in specific contexts, for example, retraining the social listening dashboard with health data so it can be used to identify health mis/dis/malinformation campaigns.

### How did the undergraduate students contribute to this project?

The State Department emphasizes that Diplomacy Lab projects are student-led and guided by faculty experts. This project was offered as an undergraduate course in spring 2022 and fall 2022. While Professors McGowan and Hannah requested project deliverables to align with their project proposal bid—for example, a policy report and a social listening dashboard—students were given autonomy to define what those deliverables looked like. Ultimately, students created a policy report, literacy modules, a social listening dashboard, a flowchart, and recommended news sources. Students also helped design a website for their work: https://diplomacy-lab.lib .purdue.edu.

### What is included in the "toolkit" that the project created?

The toolkit was designed entirely by undergraduates over the course of two semesters. In the first iteration, students collaborated on several ideas for an online toolkit, which they workshopped with officials from the State Department. During the second semester, a new group of students took those nascent ideas and began to prototype them, creating workable solutions as an online platform. The resultant toolkit includes resources for State Department officials to understand the challenges of mis/dis/malinformation within a global context, a substantial policy report written by the students on the various international efforts to leverage mis/dis/malinformation, a set of video tutorials and interactive quizzes to understand essential terminology, an interactive decision tree that provides an aid in assessing mis/dis/ malinformation, and a tool to assess the veracity of a tweet or social media post using machine learning. Each of these resources was ideated, designed, prototyped, and built entirely by the students.

#### What is the Diplomacy Lab at Purdue, and what kind of research opportunities does it offer undergraduate students? How can students get involved?

The Diplomacy Lab is an initiative by the Purdue Policy Research Institute, which solicits bids from Purdue faculty to participate in open State Department projects. Each semester, Purdue selects six winning bids from faculty to design and teach a course that will respond to the needs of partners at the State Department. Students interested in participating in such a project should check with PPRI to see which bids are accepted each year and determine if there are courses available to work on that project. Both of us have had multiple students reach out about the possibility for individual research projects on information, and we have been both surprised and delighted by the interest in information challenges across Purdue.

# For Professor McGowan: How did your specialization in nursing and nutrition contribute to the lab, and specifically this project?

I specialize in health literacy education—helping people find, understand, and use health information—and my work focuses on teaching and supporting Purdue students and faculty in nursing and nutrition. In November 2020, I was invited to participate in the World Health Organization Infodemic Management training, joining a multinational community of practitioners focused on improving health information management during public health crises. Designing tools and strategies that combat the spread of health mis/dis/malinformation in communities across the globe has been a major part of my work since completing the training. The Diplomacy Lab project was an extension of that work, allowing me to broadly apply the tools and processes I typically use for public health settings.

#### For Professor Hannah: How did your specialization in digital humanities contribute to the lab, and specifically this project?

Digital humanities is a rigorously multidisciplinary field that combines deep study of humanistic questions about ethics, identity, and culture with computational methods derived from computer and data science. Such a combination was particularly effective in working on the social media dashboard. I was able to collaborate with some of Purdue's most talented undergraduates working with computer and data science tools while also encouraging them to think about the ethical and social implications of those tools. My work in digital humanities prepared me to bridge the gaps between what C. P. Snow has called the "two cultures," and I am delighted to say that several of those CS students have gone on to be interested in some of the thorny humanistic questions about technology and information as a result of that project.

### For you both: How did you come to work at Purdue?

*Professor McGowan:* I came to Purdue in 2015, the year Purdue Libraries won the Association of College

and Research Libraries (ACRL) Excellence in Libraries Award. My previous positions included a postgraduate fellowship at the Library of Congress Congressional Research Service and an entry-level medical librarian position at Howard University. I wanted a position that would allow me to develop expertise in various elements of librarianship, and Purdue's recognition as a leader in redefining the role of libraries to meet changing information needs and expectations was a major draw in my coming to work here.

Professor Hannah: In my academic career, I was heavily involved in building academic programs in digital humanities, first at my alma mater, the University of Oregon, and then as a postdoctoral fellow at the University of Iowa's Obermann Center for Advanced Studies. These experiences crystallized my sense that I wanted an academic position where I could develop a program with meaningful curricula and research agendas. The position at Purdue promised just such a rich challenge: to develop a brand-new curriculum and certificate offerings in digital humanities. As we have become the School of Information Studies, I've become especially interested in applying my training in digital humanities to understand online information ecosystems, mis/disinformation, and conspiracy theories, which I see as fundamental humanistic problems.

#### What are the next steps from this project for each of you and your undergraduate researchers?

We have been delighted by the success of our Diplomacy Lab project, and we have both continued working with undergraduate researchers pursuing research on information challenges. We plan to continue developing innovative research offerings for students who are interested in this area.

Professor Hannah offered a course in spring 2023 in American Studies called "American Conspiracy Theories," which provides a capacious overview of online "conspiracism" in the United States. This year, Professor Hannah won a small grant from the John Martinson Honors College's PATTeRN program to work with a group of honors students in fall 2023 on a "de-radicalization toolkit" to collect and publish resources in an online toolkit that will help individuals, or their friends and family, escape conspiracy movements.

Professor McGowan worked with two undergraduate Diplomacy Lab alumnae as 2022–23 OUR Scholars on research that was an extension of their course work. Their successes included presentations at Purdue's 2023 Spring Undergraduate Research Conference, and one presented a talk at the 2023 Pi Sigma Alpha National Student Research Conference in Washington, DC. Professor McGowan won a Fulbright Scholar Award and will spend the 2023–2024 academic year in Finland, where she will teach a course on strategies for combating health mis/disinformation at Tampere University and lead research that examines how the spread of mis/dis/malinformation is influenced by democratic processes and human rights.

#### What advice would you give undergraduate students looking for research opportunities within Purdue Libraries and the School of Information Studies?

There are many exciting opportunities in the Purdue Libraries and School of Information Studies, and Purdue students may not always be aware of some of the great possibilities for research possibilities in the school. Faculty offer for-credit courses—look for the ILS designation. These include courses on digital humanities, mis/dis/malinformation, systematic review and evidence synthesis, research data, data science and ethics, and so much more, but scholars also conduct important research projects with students. Professor Hannah is currently mentoring several undergraduate and graduate students on related projects, and he finds the School of Information Studies to be a hub for truly inter- and multidisciplinary research. Professor McGowan also mentors undergraduate and graduate researchers, including OUR Scholars—a research scholarship program from Purdue's Office of Undergraduate Research. McGowan and Hannah are both mentors for the Tech Justice Lab, a cross-college collaboration based in the Honors College that helps develop justice-oriented undergraduate technology researchers and practitioners. There are also research opportunities through the Institute for Information Literacy at Purdue. Get to know our faculty and you will find a vibrant and exciting home for your research interests.

#### Interviewer



**CATIE GILHOOLY** is a senior who graduated from the John Martinson Honors College at Purdue. She earned her degree in Professional Writing and English Literature with minors in Management and Women,

Gender, and Sexuality Studies, and a certificate in Entrepreneurship & Innovation. Gilhooly worked as the coordinator for this volume and volume 12 of the *Journal of Purdue Undergraduate Research* and served on the Student Editorial Board for volume 11. She worked with the College of Liberal Arts at Purdue as a recruitment intern and Dean's Ambassador and served the Purdue Bands and Orchestras department as a brother of Kappa Kappa Psi, a national honorary band fraternity. She is also a member of Sigma Tau Delta English honor society and Phi Beta Kappa and Phi Kappa Phi academic honor societies. Next, she will attend the University of Exeter in the United Kingdom to pursue a master of arts in Publishing.