

Beloit & Beyond Conference, November 7, 2023

Additional events

Monday, November 6, Drop in 5:00-7:00 PM, **Local to Global Networking Fair**, Powerhouse
Tuesday, November 7

- 11:00-1:00 **LinkedIn Headshots**, Second floor bridge, Science Center. First come, first served. Dress professionally (at least from the shoulders up). Allow 5-10 minutes depending on line length.
- 11:30-12:00 Strengthening the College Career Pathway, Room 150, Sanger Science Center
Information session for the School of Health Sciences (SHS) and for the School of Business, Economics and Entrepreneurship (BEE)
- 12:00-1:00 **Launch Party** for the School of Health Sciences (SHS) and the School of Business, Economics and Entrepreneurship (BEE), Sanger Science Center Atrium. Pizza, cookies and drinks will be provided. Please register [here](#) by 4 pm Monday to reserve your place for lunch.

Greenhouse, Science Center

Drop in
12:30-2:00
Nora Gwen
Leifheit,
Cassandra
Kowalski,
Benjamin
O'Connor,
Louis Benard

Beloit College Greenhouse Open House

Poster Session: Second floor bridge, Science Center

Drop in [Kelsey Engelke](#), The Fossil Collection at Beloit College: Initial Curation
11:00-12:00 [Maya Bowker](#)

Richardson Auditorium, Morse-Ingersoll Hall

Roundtable: Coe Wilderness Field Station

Moderator: Emily Sager, Career Works

8:40-8:45	Emily Sager	Opening remarks
8:45-10:00	Lyndsey Ann Turner, Abisha Bhatta, Ella Diers, Grayson Thobe	Coe College Wilderness Field Station Panel

Impact Beloit Community Fellows

Moderator: Tim Leslie, Career and Professional Development

10:10-10:15	Tim Leslie	Opening remarks
10:15-10:40	Nicolas Doret	My Impact on the Beloit International Film Festival
10:40-11:05	Shakira Wilson	My Experience at Merrill Community Center
11:05-11:30	Matt O'Leary	My Experience with the Beloit Sky Carp and Impact Beloit

Community Connections Courses

Moderator: Suzanne Goebel, Career Works

1:00-1:05	Suzanne Goebel	Opening remarks
1:05-1:30	Veeka Marie Malanchuk, Grace Hartwig, Anna Williams	Practicing a Liberal Arts Education in Beloit's Spanish-speaking Community
1:30-1:55	Karen Soto, Alek Taylor	Outside the "Beloit Bubble": Sociology Capstone Joins Community Action FreshStart Students to Prepare for the Future
1:55-2:20	Abigail Champeny-Johns, Julie Bach, Sandhya Pise	Impact Beloit Community Connections

A Volunteer, Fellow, and Intern in Beloit and Beyond

Moderator: Helen Werner, Biology

2:30-2:35	Helen Werner	Opening remarks
2:35-3:00	Kidist Zewde Demisse	Is This Right for Me? How to Step into the Professional World with an Ever-Changing Mind
3:00-3:25	Briana Arteaga	My Fellowship Abroad in Genova, Italy
3:25-3:50	Parnian Alavi	Walkie Talkie to Health Interns

Room 150, Sanger Science Center

Global Experience Seminar: Beloit, Berlin & Krakow

Moderator: Josh Moore, Global and Immersive Learning

8:40-8:45 Josh Moore Opening remarks

8:45-10:00 Sydney Moses, Kaitlyn Hudetz, Marcus Studinski, Isabella Acosta, Ela Heywood, Camille Ledoux
At Memory's Edge: Special Projects from Berlin and Krakow

Attaining Goals through Study Abroad

Moderator: Josh Moore, Global and Immersive Learning

10:10-10:15 Josh Moore Opening remarks

10:15-11:30 Farah Tolu-Honary, Ariana Tolu-Honary, Marianna Carus, Ella Diers, Macie Janes, Maij Sprenger-Otto
Your Major Abroad: Fulfilling Your Academic and Professional Goals through Study Abroad Exchange Programs

Indigenous History, Persian, and Family Archives

Moderator: Ellen Joyce, History

1:00-1:05 Ellen Joyce Opening remarks

1:05-1:30 Emrys Draper
Confronting Wisconsin's Indigenous History: Representing Ho-Chunk Resilience at the Historic Indian Agency House

1:30-1:55 Ariana Tolu-Honary
Linguistic Proficiency in the Creation of a Graphic Novel

1:55-2:20 Flora Milford
Jewish in Germany: Retracing My Families History

Study Abroad in Senegal, Jordan/Turkey and Morocco/Tunisia

Moderator: Joseph Derosier, Modern Languages and Literatures

2:30-2:25 Joseph Derosier Opening remarks

2:35-3:00 Saumyaa Gupta
Exploring Middle East Politics: A Student's Journey through Study Abroad and Internship

3:00-3:25 Farah Tolu-Honary
Studying Abroad in the Maghreb: Comparative Perspectives from Morocco and Tunisia

3:25-3:50 Farah Tolu-Honary
On est ensemble: Protests and Pan-Africanism in Dakar, Senegal

Room 249, Sanger Science Center

Global Experience Seminar: Rome (I)

Moderator: Jessica Fox-Wilson, Career Works

8:40-8:45	Jessica Fox-Wilson	Opening remarks
8:45-9:10	Paloma Petilos	The Fishes Invasion and Other Modern Roman Street Art
9:10-9:35	Grayson Jensen	Rome Through the Ages: An Artist's Perspective
9:35-10:00	Emeline Russell	Navigating Rome and Its Toilets

Global Experience Seminar: Rome (II)

Moderator: Jessica Fox-Wilson, Career Works

10:10-10:15	Jessica Fox-Wilson	Opening remarks
10:15-10:40	Jaelin Hensley	Assimilating To Rome: Linguistics and Architecture
11:05-11:30	Owen Eichfeld	Mentality and Reflections from Rome

Transformative Trips

Moderator: Emily Sager, Career Works

1:00-1:05	Emily Sager	Opening remarks
1:05-1:30	Aaditya Joshi, Sristi Halder	Nurturing Connections and Cultures: A Glimpse into the Asia Pacific Student Association's Networking and Cultural Immersion Trip to New York
1:30-1:55	Camille Ledoux	Traveling into My Life Plan
1:55-2:20	Ella Diers	Diers Bros: The Long-Forgotten General Store that Changed My Life

STEM Research Projects

Moderator: Kristina Blanke, Biology

2:30-2:35	Kristina Blanke	Opening remarks
2:35-3:00	Vincent Vu Anh Le, Cassidy Felix, Franccesca Graciela Mamani	Cognitive Science and Psychology Student Research Experiences at Beloit and Beyond
3:00-3:25	Caymen Hoffman	Aquatic Environments and Tree Bark contain Antibiotic-Producing Bacterial Isolates across Various Media Types
3:25-3:50	Isabella Callery	Characterizing Antibiotic Producing Bacteria and Their Secondary Metabolites

Room 349, Sanger Science Center

Medical Tourism, Venture Capital, and the Economic Impact

Moderator: Kevin Smith, Economics & Business

8:40-8:45	Kevin Smith	Opening remarks
8:45-9:10	Jasmin Bowers	Examining the Global Influence of America's Healthcare System on the Medical Tourism Pipeline
9:10-9:35	Abhey Singh Guram	Dynamics of Private Equity and Venture Capital: A Comprehensive Exploration
9:35-10:00	Katie Arnold, Aaditya Joshi, AJ Fitzpatrick	The Economic Impact Report of Beloit College

Public Service and Public Policy

Moderator: Beth Dougherty, Political Science

10:10-10:15	Beth Dougherty	Opening remarks
10:15-10:40	Louise Claussen	Preparing For a Career in Public Service: My Undergraduate Public Policy Fellowship
10:40-11:05	Martu Kollie	Public Policy and International Development: A Summer of Transformation in the PPIA Junior Summer Institute at the University of Washington, Seattle.
11:05-11:30	Rebeca Galindo, Kitana Gulotta	Summer Internship Experience at the Wisconsin State Capitol

The Duffy Community Partnerships

Moderator: Charles Westerberg, Sociology

1:00-1:05	Charles Westerberg	Opening remarks
1:05-1:30	Brigid Parker, Helena Harrison	Navigating Non-Profit Work Through Community-Based Learning
1:30-1:55	Allan Hernandez Padron	What Can I Do? Career Assessments as a Tool for Finding Successful Careers
1:55-2:20	Darcel Lanadja Royster	Advocacy: Behind the Scenes with the Beloit Community Health Systems
2:20-2:45	My Le	Duffy Partnerships Program: A Look at Disparities in the 2022 DEFY Program

Interning in Beloit and Washington, DC

Moderator: Suzanne Goebel, Career Works

2:55-3:00	Suzanne Goebel	Opening remarks
3:00-3:25	Ezekiel Kingsbury	The Coveted DC Internship
3:25-3:50	Mason Hoffman, Faiq Ahmad	Interning with Nature at the Confluence: Diverse Opportunities at a Small Nonprofit

Room 402, Sanger Science Center

How to Navigate Job, Research, and Internship Opportunities

Moderator: Diep Phan, Economics and Business

8:40-8:45	Diep Phan	Opening remarks
8:45-9:10	Takeshi Matsuda, Thanh Nguyen	Navigating Entry-Level Marketing: A Comprehensive Analysis of Job Trends and Skill Profiles
9:10-9:35	Satirtha Saha Protya	Navigating Research Opportunities: A Comprehensive Guide for Beloiters
9:35-10:00	Abhishek Shekhar	Unlocking Opportunities: My Internship as a Network Services Professional with the Educational Communication Board

Studying Puerto Rico and South Asian Immigration

Moderator: Michael Dango, English

10:10-10:15	Michael Dango	Opening remarks
10:15-10:40	Lio KammueLLer, Kelly O'Brien	Puerto Rico: Studying Empire from the Margins
10:40-11:05	Diego Boyd Lassalle	Puerto Rican Perseverance in the Face of Indifference
11:05-11:30	Mushfique Tanzim Ahmed	A Study of South Asian and Bengali Immigration in the United States

Contributing to the College through Campus Jobs

Moderator: Chuck Lewis, English & Writing Program

1:00-1:05	Chuck Lewis	Opening remarks
1:05-1:30	Sydney Felhofer, Micah Wilk	The Beloit College Ambassador Program: Connecting Students, Sharing Stories, and Shaping Futures
1:30-1:55	Jane Price, Samantha Irwin, Graham Olen, Casey Barasch	The Writing Center: A Working Place for Everyone
1:55-2:20	Kasandra Duran-Vazquez, Israel Zewdie, Abril Lopez	Student Excellence and Leadership's (SEL's) Peer Mentoring Program
2:20-2:45	Allan Hernandez Padron	SEL Tutoring Program

Study Abroad in New Zealand and Ecuador

Moderator: Daniel Youd, Modern Languages and Literatures

2:55-3:00	Daniel Youd	Opening remarks
3:00-3:25	Cory Harrison	My Experiences Studying Abroad: Life in New Zealand
3:25-3:50	Blue Yeck	Studying Abroad in Ecuador as a Senior: It's Never Too

Late!

Weeks Lounge, Pearsons Hall

Natural and Cultural Heritage and Sustainability in Japan

Moderator: Susan Furukawa & Jim Rougvie, Modern Languages and Literatures; Geology

8:40-8:45	Susan Furukawa & Jim Rougvie	Opening remarks
8:40-10:00	Matthew Mueller, Daisy Kleinhoffer, Aleah Roesler, Hikari Yokoe, Tomoki Amano, Haruka Imanaga, Tzu-Ting Lin	Geoheritage and Rural Sustainability in Japan

STEM & Computer Science Opportunities

Moderator: Katherine Harris, Mathematics & Computer Science

10:10-10:15	Katherine Harris	Opening remarks
10:15-10:40	Ethan Wang	A Survey about Bayesian Inference Power in Math and Machine Learning Perspectives
10:40-11:05	Vu-Anh Le	Life Cycle Assessment of Biodegradable Plastic Packaging Subject to Comprehensive Organic Sorting
11:05-11:30	Abhishek Shekhar	Image Captioning System: Model Development and Deployment

STEM and Computer Science Research

Moderator: George Lisensky, Chemistry

1:00-1:05	George Lisensky	Opening remarks
1:05-1:30	Takeshi Matsuda, Ethan Wang	Probabilistic and Decentralized Machine Learning Approach on ICU Admission Prediction for Enhanced Patient Care Using COVID-19 Data
1:30-1:55	Vu-Anh Le	Monitoring Subsidence Trends in Vietnamese Underground Water Exploitation Zones Using InSAR Analysis
1:55-2:20	Parveen Narula	My Summer Doing Research at Fermilab: Testing Algorithms for the Large Hadron Collider

Experiences in Engineering and Corporate America

Moderator: Eyad Haj Said, Math and Computer Science

2:30-2:35	Eyad Haj Said	Opening remarks
2:35-3:00	Fatumata L. Kaba	From Novice to Data Science and Engineering Intern: Internship Experience in Programmable Logic Controllers (PLCs)
3:00-3:25	Maritza Silva	On-site Insights: My Experience as a Construction Intern
3:25-3:50	Ojaswi Dhakal	Summer Internship Experience at Corporate America

Wood Room, Second Floor, Mayer Hall

Archaeology, Art/AI, and Attorneys

Moderator: Kate Linnenberg, Sociology

8:40-8:45 Kate Linnenberg Opening remarks

8:45-9:10 [Grace Maidment](#) Archaeological Investigations in Southern California

9:10-9:35 [Jaida Wesley](#),
[Diep Bui](#) AI vs Art: The Battle of Ethics

9:35-10:00 [Joya Saxena](#) Wisconsin Public Defender's Office & Sociology

Summer STEM Opportunities

Moderator: Robin Zebrowski, Cognitive Science

10:10-10:15 Robin Zebrowski Opening remarks

10:15-10:40 [Supratim Saha](#) Unexpected Internship: My Unique Journey

10:40-11:05 [Evan Zenger](#) Embracing the Future of Healthcare: My Journey to CNA Certification

11:05-11:30 [Satirtha Saha](#)
[Protya](#) A Computational Approach to Finding Differences Between CCS Values of All L vs D Amino Acid containing Peptides and Calculating Peak Resolvin

Engaging with the Natural World

Moderator: Tawnya Cary, Biology

1:00-1:05 Tawnya Cary Opening remarks

1:05-1:30 [Benjamin](#)
[O'Connor](#) Research and Self-Transformation at the Coe College Wilderness Field Station

1:30-1:55 [Charlie Shriver](#) Pushing Your Boundaries in the Boundary Waters

1:55-2:20 [Rowan Mermel](#) Natural Resource Management and Scientific Curiosity with the Natural Land Institute

2:20-2:45 [Isabella Verdi](#) What Songs the Plants Know

Abstracts

Sponsor: Michael Dango

Room 402, Sanger Science Center, 11:05-11:30

Mushfique Tanzim Ahmed '23

Dhaka, Bangladesh

Major: English: Creative Writing

A Study of South Asian and Bengali Immigration in the United States

For this semester, I have been working on a special project as part of my honors term semester. My project will delve into the historical journey of Bangladeshi immigrants and South Asian immigrants in the United States. It primarily draws from Vivek Bald's book, "Bengali Harlem and the Lost Histories of South Asian America," which examines the emergence of the Bengali community in the 1920s Harlem and the history of early South Asian immigration in the United States. Additionally, the project explores the history of the early immigration, and looks into how Bengali and South Asian immigrants' cultural identities evolved as they assimilated into diverse American ethnic groups, such as the African American community.

In my presentation, I plan to go over what it was like working on an independent research project for the first time as a college student. I intend on presenting some of my research findings, focusing on a brief history of immigration. I will also present topics based on my topic of interest, studying the presence of culture and identity amongst the two communities by presenting two cases.

Sponsors: Jessica Fox-Wilson and Rachel Bergstrom

Richardson Auditorium, Morse-Ingersoll Hall, 3:25-3:50

Parnian Alavi '25

Shiraz, Iran

Majors: Biology; Health & Society

Walkie Talkie to Health Interns

Have you ever carried your walkie talkie in case of an emergency but then you actually got called? I had this exact experience as a health intern at Phantom Lake YMCA, being on call, even while I was reading a book by the lake. I engaged in an immersive experience working with kids and alongside a volunteer nurse in order to make camp a safer space.

During my internship, I learned that campers with different backgrounds and familiarities came to camp. It was crucial to take it into consideration that some campers might get anxious because of a new environment, people and friends. Throughout my internship, I faced campers who were challenged by homesickness and anxiety. My goals were to comfort them at first and then encourage them to try the new activities in camp programs. This was a great practice in learning how to use other alternatives to medication to enhance the well-being of campers.

This experience opened a door to another field in healthcare, specifically pediatrics. Working with younger children was challenging at first. I had to learn how to talk to anxious children who might be overwhelmed by the weather, new experiences, and different food. It was unique to learn how to facilitate reasoning with them so they feel supported and heard by their health intern.

In my presentation, I will talk about how this experience was an interprofessional practice and enlightening for my future career goals in healthcare. I learned about how to work in a healthcare setting while being in a non-strict environment and I will use the highlights of my experience to show how this position encouraged me to continue pursuing a career in healthcare.

Katie Arnold '25

Clinton, Wisconsin

Major: Business Economics

Aaditya Joshi '25

Mumbai, India

Majors: Quantitative Economics; Biochemistry

Minor: Finance

AJ Fitzpatrick '25

Chicago, Illinois

Major: Business Economics

Minors: Chinese; Media studies

The Economic Impact Report of Beloit College

The economic impact study attempts to measure the incremental effect of an organization on some geographic area. The economic impact study discussed in this presentation was completed in the summer of 2023 and attempts to measure the impact of Beloit College in the City of Beloit. The data presented here represents Beloit College activity for the academic year 2022-23 and including the summer 2023. The scope of the study includes the direct effect of Beloit College on the Beloit community, measured by added employment, resulting expenditures by faculty and staff who live in Beloit, added expenditures by students and guests of the College, and estimated figures for food, overnight accommodation, and gas. The report also includes the added amenities to Beloit, including sporting events, dance, music, theater performances, and lectures, including lectures by the Beloit College Residencies. The former two categories are quantitative figures measured in dollars; the amenities, as they are described in part 4, are qualitative. As another example, the residency program brings in leading thinkers in various fields. When figures are quantified in dollars, a multiplier of 1.5 is applied. A multiplier "shows what impact a change in autonomous spending will have on total spending and aggregate demand in the economy". Overall, we find that the total economic impact of Beloit College on the City is \$12.4 million annually. The largest contribution comes from employment (\$8.4 mil). Student spending contributes \$2.5 mil per year. The detailed calculations are available upon request.

Sponsor: Rachel Bergstrom

Richardson Auditorium, Morse-Ingersoll Hall, 3:00-3:25

Briana Arteaga '24

Covina, California

Majors: Biology; Psychology

My Fellowship Abroad in Genova, Italy

This summer I spent three weeks interning in Genova, Italy at the Galleria Hospital, where I followed and observed a series of medical professionals throughout the week. I was able to observe different doctors and nurses in various departments like Pathology, Neonatal, Radiotherapy, the Intensive Care Unit, and so many more. I also had the opportunity to sit in on a handful of surgeries where I witnessed a cesarean section (C-Section), hysterectomy, ovarian cystectomy, tracheostomy, and a colectomy.

Being able to shadow a variety of healthcare professionals not only allowed me to see what their everyday lives looked like but also allowed me to compare the Italian and American healthcare systems. One thing I really liked about the Italian health care system was that mostly everyone receives free healthcare, they can visit the doctor whenever they need to, and if they are willing to be put on a waiting list for a surgery, they won't have to pay. Not only was I able to learn a lot about the Italian health care system but I was also able to fully immerse myself in the Italian culture and visit many beautiful places. My roommate and fellow intern, Anna Bisonett, and I were able to travel to Cinque Terre (Manarola and Riomaggiore), Milan, Santa Margarita-Portofino, Camogli, Rome, and various parts of Genova. I feel very fortunate to have received this opportunity and look forward to encouraging more students to participate in abroad internships.

Sponsor: Kevin Smith

Room 349, Sanger Science Center, 8:45-9:10

Jasmin Bowers '25

Richmond, Texas

Majors: Business Economics; International Relations

Minor: Chinese

Examining the Global Influence of America's Healthcare System on the Medical Tourism Pipeline

It is common knowledge that the United States healthcare system is not only expensive but inaccessible to marginalized communities. To solve this healthcare crisis, we must ensure equitable access to healthcare and lower costs for all marginalized groups. The African American community has been heavily impacted by the healthcare system, due to institutionalized racism, unethical research experiments, and overall oppression in healthcare spaces. On top of rising healthcare costs and cost of living, people of color also have to cope with being discriminated against based on race.

The distrust and hesitancy in the African American community to use healthcare services have led them to search out different ways to receive medical treatment. One way to get more equitable healthcare is through medical tourism, which involves traveling internally or overseas for the specific purpose of receiving medical care. The medical tourism industry has skyrocketed in the last ten years and has contributed considerably to the global economy. The reasons people travel for healthcare are numerous; it could be that there is a lack of availability of certain medications in their home country, or there are long wait times to get access to specific procedures.

Through this research opportunity, I aimed to answer two questions. One is the effect of medical tourism on internal and external patterns of seeking health care by African Americans and whether those countries see an impact on their economic and healthcare systems. Using statistical models and collecting interviews, I analyzed data on internal and external use of medical tourism.

Sponsor: Michael Dango

Room 402, Sanger Science Center, 10:40-11:05

Diego Boyd Lassalle '25

Ann Arbor, Michigan

Majors: History; Studio Art

Minor: Spanish

Puerto Rican Perseverance in the Face of Indifference

My presentation will go over my experience taking part in the study abroad program in Puerto Rico this summer. During my two-week stay on the island, I had the privilege to meet with local activists across the spectrum, from college professors, artists, and even members of the island's Independence Party. In these meetings we discussed how the injustices committed against Puerto Rico in the past still affect its population today, as well as how it's current government ignores the plight of its people during successive crises. However, I was very much inspired by how the people of Puerto Rico fought against this injustice and held strong via their shared cultural heritage.

During my time in Puerto Rico, I became much more confident in my Spanish speaking, and in myself. I wish to explore in my presentation what it was like speaking in another language. I also wish to explore the tension in taking classes educating ourselves on the destructive nature of tourism while still technically being tourists in between them.

Isabella Callery '23

Northfield, Minnesota

Majors: Biochemistry; Sociology

Characterizing Antibiotic Producing Bacteria and Their Secondary Metabolites

Bacteria are developing intrinsic resistance to antibiotics at a rate faster than new antibiotics are being produced. This summer I worked with Kristin Labby through the Pakula Biomedical Fellowship. Within this research, I had the opportunity to work with Tiny Earth, an organization that student-sources antibiotic research for the potential discovery of novel antibiotics. I analyzed and characterized two promising antibiotic producing isolates. This was done through methods such as PCR, gram staining, and testing for intrinsic antibiotic resistance. Additionally, chemistry techniques were applied to create a crude extract through liquid-liquid extraction and separate secondary metabolites in order to determine which ones were producing the antibiotic. Isolates and information were submitted to the Tiny Earth Database for further analysis and research.

In this presentation I will talk about both the research I conducted and my experience gaining new skills as a scientist through this program.

Sponsor: Suzanne Goebel

Richardson Auditorium, Morse-Ingersoll Hall, 1:55-2:20

Abigail Champeny-Johns '24

Beloit, Wisconsin

Major: Data Science

Minor: Studio Art

Julie Bach '26

Vietnam

Major: Quantitative Economics

Sandhya Pise '26

Pune, India

Major: Quantitative Economics

Impact Beloit Community Connections

Abigail

This semester, I am enrolled in Suzanne Goebel's Impact Beloit Community Connections course. Through this course, students are expected to partake in volunteer/internships with a matched company for 90 hours a semester. I was able to be matched with a local food pantry called Caritas. Throughout my presentation, I will discuss my experience with the interview process, the match, my time at the placement, and what I have learned thus far from this experience.

Julie

As a part of my Community Connections course this semester, I am interning at Nature at The Confluence, an urban environmental learning center located along Turtle Creek. Working directly with the Executive Director, I make an annual report, set up programs and events, support volunteers and attendees, and perform operational tasks.

During this experience, I acquired better data processing, data visualization, organization, and planning skills that could help me succeed in my future career. Moreover, the more time I have spent as an intern at Nature at the Confluence, the better insight I have gained into how a non-profit organization operates to leave an effective impact on the community and maintain the financial budget for future educational programs.

Sandhya

My internship for my Community Connections course is with Family Promise of Greater Beloit, which works for people who are facing homelessness. We work towards providing shelter, food, clothing and life skills to the families in need (guests). A normal day at work is interacting with people over calls, understanding their situation and assisting them with the resources that are available to them. Additionally, I also assist new families with check-ins and explain the legal contract for transparency. I also work with data cleaning and identifying inaccurate records and reporting it to the Executive Director.

Sponsor: Beth Dougherty

Room 349, Sanger Science Center, 10:15-10:40

Louise Claussen '24

Rockford, Illinois

Majors: Political Science; Economics

Preparing For a Career in Public Service: My Undergraduate Public Policy Fellowship

In summer 2023 I participated in the Public Policy and International Affairs Junior Summer Institute at the University of Minnesota Hubert Humphrey School. This graduate-level academic program is designed to prepare fellows for careers in public service, and the program I participated in specialized in public policy design and analysis. I took courses on policy formulation and analysis, economics, statistics, and research design. We focused on challenging issues including climate change, racial justice, and global inequality. While there, I participated in a collaborative research project on public health, and wrote a policy memorandum titled "Combatting Disparate Suicide Rates Among Youth in American Indian and Alaskan Native Communities," which was later presented at a poster session sponsored by the Hubert Humphrey School.

Sponsor: Jessica Fox-Wilson

Richardson Auditorium, Morse-Ingersoll Hall, 2:35-3:00

Kidist Zewde Demisse '25

Lusaka, Zambia

Major: Biochemistry

Minor: (Intended) French

Is This Right for Me? How to Step into the Professional World with an Ever-Changing Mind

Feeling unsure about how to step into a specific field of work? Don't have much on your resume for your intended future career? Not very confident if the career path you have chosen is for you? Try volunteering to get your foot in the door and see how you feel about it after!

My volunteering experience over the summer helped shape and solidify my future career goals, connecting me with a nearby healthcare facility, and allowing me to build a new network for myself that I plan on exploring further in the future. In this presentation, I will share what prompted me to volunteer, what I did while I volunteered, and how I strengthened a number of Integrated Learning Outcome skills I have already acquired at Beloit College, as well as how this benefited me.

My time as a volunteer allowed me to get a glimpse into how hospitals are structured, as well as gain a deeper appreciation for the staff, who work tirelessly to provide care to everyone that comes through the door. Being a volunteer also allowed me to build a meaningful relationship with some of the staff members at Beloit Health Systems, which gave me the confidence I needed to feel comfortable reaching out to talk about other areas of interest I had, like job shadowing (...hint, hint).

In addition to all this, my volunteering experience allowed me more time to think about what specific profession I wanted to go into with regards to the medical field. Having the chance to speak to a few

medical professionals gave me deeper insight into what skills would be helpful for me to develop now to make my transition into the working world a little smoother. All in all, this summer was a very helpful experience, and I hope this presentation helps anyone who is interested in having a volunteering experience.

Sponsor: Jessica Fox-Wilson

Weeks Lounge, Pearsons Hall, 3:25-3:50

Ojaswi Dhakal '25

Kathmandu, Nepal

Major: Quantitative Economics

Summer Internship Experience at Corporate America

This summer, I worked as a project management intern at the Marketing Department for a financial service firm, Baird, headquartered in Milwaukee. In my presentation, I will discuss my journey to Baird, my internship duties, and my takeaways.

My journey to Baird was unique, because I was first accepted into the Brandlab internship program. Brandlab is a non-profit discovery program that connects local Gen Z talent to marketing and advertising opportunities around Milwaukee. Baird was one of their most popular partners, due to its robust internship program. Candidates had speed interviews with 8-10 companies all across Milwaukee. The Brandlab coordinators considered the feedback from the different companies and matched me with Baird.

Baird has five different business units and I worked primarily in Private Wealth Management (PWM). I was part of the Project Service Team, where I worked closely with Marketing Consultants on marketing strategies for the financial advisors. Additionally, I worked on several photoshoot projects. Through these projects, I built key relationships with clients.

As an intern, I participated in several events, such as the Innovation Challenge Project where my team created a corporate wellness program, and the "Light the Hoan Bridge Challenge" where we designed light shows for the Milwaukee Hoan Bridge. Through these events, I networked with associates and interns, across the company.

Throughout the summer, I attended several spotlight series events where I engaged with leaders from all across the company, including the CEO. These informational sessions helped me explore my many interests. I connected with different managers, talked to interns from other departments, and learnt how every department had their own unique qualities and traditions. This experience made me more self-assured and demonstrated the impact of networking. "It's more who you know, than what you know." This has never resonated more.

Sponsor: Joe Bookman

Room 249, Sanger Science Center, 1:55-2:20

Ella Diers '24

Concord, New Hampshire

Major: Media Studies

Minor: Journalism

Diers Bros: The Long-Forgotten General Store that Changed My Life

Rooted in childhood memories of visiting my grandparents in Arizona, I have felt I need to reconnect with the American West. This feeling was more than nostalgia of my childhood; it was a feeling of deep belonging to the place my dad's family (his parents, his grandparents, his great-grandparents) made their home.

This summer, I embarked on a journey, a journey that spanned nine states and thousands of miles, through which I bridged the present with the past. Beginning in Minnesota, I went through the Badlands of

South Dakota (where I cried from the beauty), I journeyed to the small town of Sheridan, Wyoming to reconnect with family and learn about people who, though I have never met them, have greatly influenced who I am. I went through Moab, Utah and the Arches (where I cried from the beauty) and through southern Colorado and northern New Mexico (where again, I cried from the beauty). I went through Nebraska and Iowa, and ended back in Wisconsin. I learned independence, self-sufficiency, to submit to the will of nature, and what not to do when encountering a deer on a trail.

In my presentation, I will detail my trip and talk about all I discovered about myself and my family.

Sponsor: Sylvia Lopez
Greg Gerard (Beloit International Film Festival)

Richardson Auditorium, Morse-Ingersoll Hall, 10:15-10:40

Nicolas Doret '24

Libertyville, Illinois

Major: Media Studies
Minor: Spanish

My Impact on the Beloit International Film Festival

In this session, I will discuss the dual impact of this year's Impact Beloit Fellowship Program. I will highlight how this internship has provided me the resources and experiences necessary to develop my career-readiness, while simultaneously creating positive change in the local Beloit community.

The Fellowship is a year-long internship that draws from the College's most qualified juniors and seniors and places them with our closest community partners. I will explain how these students are selected and matched with partners that compliment their unique interests and fields of study.

As the fellow working with the Beloit International Film Festival (BIFF), I will provide an overview of BIFF, explain how its operations help sustain both the college and Beloit community, and discuss the projects on which I have worked thus far, breaking them down to show how each one is critical to the wellbeing of BIFF and of Beloit.

Audience members will also learn how this internship has allowed me to practice skills that I gained at Beloit College, such as communication etiquette and project management (for which I have a Google Certificate, thanks to Impact Beloit's Coursera program). This internship has also taught me a great deal about liaising and collaboration, as well as helped prepare me for the transition from the classroom to the workplace. The audience will learn how I am making an impact on the City of Beloit and it on me.

Sponsor: Robert LaFleur

Room 150, Sanger Science Center, 1:05-1:30

Emrys Draper '24

DeKalb, Illinois

Major: History

Confronting Wisconsin's Indigenous History: Representing Ho-Chunk Resilience at the Historic Indian Agency House

I spent this summer interning at the Historic Indian Agency House in Portage, Wisconsin. This historic site and museum seeks to tell the story of the Ho-Chunk nation, one of only two tribes that can trace themselves back to Wisconsin in their oral tradition. Beyond informing the public of the history of one of the state's most significant tribes, the Agency House's mission also works to portray the strength and resilience of the Ho-Chunk in the face of governmental encroachment and mistreatment. Despite being subjected to seizures of ancestral land and eventual forced removal, the Ho-Chunk are still present in Wisconsin today, and the site tells the story of how these events transpired and the endurance of the Ho-Chunk as a people.

The summer's experience provided me invaluable insights into a crucial aspect of American history that is too often neglected in history curriculums. A visit to the Agency House presents viewers with a compelling narrative of Ho-Chunk history and artifacts and visuals integral to Ho-Chunk culture. Additionally, a clear link can be made to back to Beloit, as one of the Ho-Chunk's largest villages was located here at Turtle Creek.

This presentation is designed to provide information on a tribe that is integral to understanding both Wisconsin and American indigenous history, as well as an understanding of Beloit's own significance in this history. I will cover aspects of Ho-Chunk history, their interactions with European settlers and the U.S. government, and their links to different regions of Wisconsin, Beloit prominently among them.

Sponsor: Daryl Saladar

Room 402, Sanger Science Center, 1:55-2:20

Kasandra Duran-Vazquez '24

Beloit, Wisconsin

Majors: Education and Youth Studies; Spanish Language and Culture

Israel Zewdie '26

Las Vegas, Nevada

Majors: Computer Science; Psychology

Abril Lopez '24

Gurnee, Illinois

Major: Biochemistry

Minor: HEAL

Student Excellence and Leadership's (SEL's) Peer Mentoring Program

Do you recall your first day here at Beloit College? Were you excited, nervous, or even scared? College is such a transition, particularly for students who are first-generation, low-income, and/or have a documented disability. The Peer Mentor Program for SEL (Student Excellence & Leadership) helps first-year students navigate those in's and out's of Beloit - from moving in and finding The Wall to understanding professors' expectations and office hours.

In order to help these freshmen, Peer Mentors must apply, have recommendations, and interview before being accepted. Once that happens, they undergo 2 separate trainings, ranging from student safety to helping freshmen navigate resources on campus. All of which goes into action during SEL's Summer Institute, which takes place even before New Student Days. It does not end there. Peer Mentors continue meeting with their mentees biweekly and monthly with SEL staff. From listening about their struggles and giving them advice, to helping them prepare their schedules for the next year. This is on top of the mentors' own rigorous schedule and involvement with sports, jobs, and/or organizations. It is certainly a demanding yet rewarding experience. We will elaborate on the training, Summer Institute, how we support first-years, and what we have learned throughout the process.

Sponsor: Jessica Fox-Wilson

Room 249, Sanger Science Center, 11:05-11:30

Owen Eichfeld '25

Winnetka, Illinois

Major: History

Mentality and Reflections from Rome

Last summer, I had the opportunity to study abroad in Rome, through the Ghosts of Rome Global Experience Seminar. This trip included studying on-site (places and things ancient Romans experienced and enjoyed in daily life). To take full advantage of this opportunity, I needed to understand why I love history so I would know specifically where I wanted to go and what I could enjoy and reflect on at the site. I plan to start my presentation by sharing how I went through this reflection process.

Whenever I went to a historical site or museum, I reflected on what it meant to me to be there. There were important differences between visiting a museum and visiting historical remains. For example, the differences between an art museum versus the remains of the Forum. I plan to present how my previous reflections guided my on-site reflections and how they differed based on the place.

I also had a free day that I had planned, and I chose what sites to visit. I learned some of my likes and dislikes from the previous sites I visited, and that helped me decide where I wanted to go on my free day. I plan to end my presentation by discussing what I saw in my research for my free day that made me want to visit those places.

Sponsor: James Zambito

Poster Session: Second floor bridge, Science Center, Drop in 11:00-12:00

Kelsey Engelke '25

Roscoe, Illinois

Majors: Anthropology; Geology

Maya Bowker '26

Madison, Wisconsin

Major: Undeclared

The Fossil Collection at Beloit College: Initial Curation

The Beloit College department of geology has an extensive natural history collection containing fossils, rocks, and sediments of various geologic ages from around the world. Although the collection includes materials that were probably collected early in the College's history and donations from various collectors and institutions, it has never been sufficiently curated to be searchable and usable for research.

The fossils in the collection, the focus of our work, include specimens from the B.H. Beane Crinoid Collection and the largest collection of La Brea Tar Pit fossils east of the Rocky Mountains among a variety of other specimens. Originally estimated to contain 2,000 fossil specimens, we have found that the collection has well over 2,500. Ideally, a well-managed collection would have specimens in uniform boxes all with an identification card that includes the accession number, genus, species, collector, locality, and geological formation among other categories. Unfortunately, the Beloit natural history collection is deficient in many of these features as curation has been undertaken by many different people through the years and it has been housed within at least four buildings throughout its existence.

Though the fossil collection at Beloit College has undergone some curatorial efforts over the years, there is still much work to be done. Many specimens do not have accession numbers, have old and brittle boxes, are categorized within the incorrect phylum, class, or order, and some even permanently altered and destroyed from improper collections etiquette. The goal of our project is to organize the collections in a way that will allow the fossil specimens to be more accessible for use in relevant courses and for research. Since spring 2023, we have been working on entering all available information on each specimen into a spreadsheet and identifying specimens with limited to no scientific value for deaccession. In the future, this spreadsheet will be transferred to a collections management database. This spreadsheet and future database will greatly improve access to the fossil specimens for teaching and research.

Sponsor: Mary Stelter

Room 402, Sanger Science Center, 1:05-1:30

Sydney Felhofer '24

Sturgeon Bay, Wisconsin

Majors: Anthropology; Political Science

Micah Wilk '25

Martinez, California

Major: Music

Minors: Philosophy; Anthropology

The Beloit College Ambassador Program: Connecting Students, Sharing Stories, and Shaping Futures

Beloit College Ambassadors are more than just tour guides. Their duty goes beyond just sharing information. They are storytellers, responsible for sharing their personal Beloit experiences and showcasing the College in a positive light to prospective students and families. Tour guides continuously improve their knowledge of Beloit College to leave a lasting impression on visitors.

Ambassadors play a vital role in promoting Beloit. They represent and exemplify what makes Beloit unique. Beloit's history, career prospects, and vibrant community are brought to life in every tour.

In essence, Beloit College Ambassadors weave the Beloit narrative. They offer a glimpse of the transformative journey that awaits students and future alumni. They embody the college's legacy, demonstrating that Beloit is more than an institution; it is a path to academic excellence, community, and limitless opportunities.

Sponsor: Beth Dougherty

Room 349, Sanger Science Center, 11:05-11:30

Rebeca Galindo '25

South Beloit, Illinois

Majors: Political Science; Critical Identity Studies

Kitana Gulotta '25

Beloit, Wisconsin

Majors: International Relations; Psychology

Minor: Spanish

Summer Internship Experience at the Wisconsin State Capitol

This summer, we interned with the Office of Senator Mark Spreitzer'09 at the Wisconsin State Capitol in Madison. Through this experience, we learned about the inner workings of the Wisconsin state government and how active communication with constituents in the 15th Senate District contributes to enacting change within communities.

In this presentation, we share how campus resources, such as Beloit College's Career Works, aided us in earning a position in the 2023 Summer Internship Program, how our work within Senator Spreitzer's Office gave us insight into the processes needed to effectively help address issues within the district, and how this experience offered us a better understanding of political work for our future endeavors.

Sponsor: Beth Dougherty

Room 150, Sanger Science Center, 2:35-3:00

Saumyaa Gupta '24

Ahmedabad, Gujarat, India

Majors: Political Science; Psychology

Exploring Middle East Politics: A Student's Journey through Study Abroad and Internship

In Spring 2023, I participated in a transformative study abroad experience in Jordan and Turkey. Through classes and guest lectures, I gained insights into the region's complex political dynamics. While in Jordan, I conducted extensive fieldwork to investigate the factors influencing regime stability. Outside the classroom, I immersed myself in learning more about the local culture and language. I lived with a Palestinian host family, joined dabke (Arab folk dance) classes, and attempted to find the best baklava and falafel in Jordan with my Syrian, Lebanese, and Jordanian friends. My interactions with Palestinians and Gazans in Jordan also revealed the impact of Israel's occupation on the daily lives of the people.

Upon my return, I participated in the Massachusetts Institute of Technology Summer Research Program. This program promotes the value of graduate education and offers talented undergraduates the opportunity to conduct research and gain methodological training. As a research intern, I collaborated with mentors in MIT's political science department to enhance my quantitative and qualitative research skills, improve my proficiency in Arabic, and gain deeper insights into Jordanian politics and the Syrian refugee crisis.

This presentation aims to provide insights to students about navigating study abroad, applying for internships and summer research opportunities, and undertaking experiences that will help students make the most out of their undergraduate experience.

Sponsor: Kevin Smith

Room 349, Sanger Science Center, 9:10-9:35

Abhey Singh Guram '24

Punjab, India

Majors: Quantitative Economics; Political Science
Minor: Environmental Science

Dynamics of Private Equity and Venture Capital: A Comprehensive Exploration

In this presentation, I will dive into my extensive research project on private equity and venture capital. I will discuss the fundamentals, differences, and the critical role these sectors play in innovation and economic growth. I will also delve into the intricacies of handling investor funds, the valuation process, and the life cycles of funds.

Sponsor: Joseph Derosier

Room 402, Sanger Science Center, 3:00-3:25

Cory Harrison '24

Trout Lake, Washington

Majors: Anthropology; French

My Experiences Studying Abroad: Life in New Zealand

During the spring semester of 2023, I studied abroad in New Zealand. This turned out to be a remarkable experience but not without difficulties. By living in New Zealand for six months, I was able to learn more about the concepts I discussed in the classroom, specifically anthropological concepts such as animism and communitas. Additionally, I got to take part in opportunities that I would not have had had I not gone to New Zealand, including visiting a Maori Marae. Getting to study abroad proved very fruitful for my personal development, and I am looking forward to sharing my experiences with you!

Jaelin Hensley '26

Grants Pass, Oregon

Majors: 3-2 Engineering; GLAM
Minor: Physics

Assimilating To Rome: Linguistics and Architecture

I participated in a two week Global Experience Seminar this past summer called Ghosts of Rome. The class included one intensive week on campus in preparation and two weeks overseas in Rome, Italy. Before going, I had a predetermined depiction of Rome from history books and movies. I now refer to this as my surface level pre-understanding. During the time I spent abroad, I was challenged mentally, emotionally, culturally, and academically, as I began to navigate a brand new environment. Rome was nothing like I anticipated.

While abroad I did not have a phone to rely on like I do here; therefore no maps, no calls, no Google. Fortunately, I am a quick learner and learned how to navigate Rome in a few days' time. While in Italy, learning the language became a necessity. I practiced the language necessary to ask for directions, order food, and make small talk. To help myself navigate the city, I began using fountains as checkpoints to guide myself from one section of the city to the next.

Even after I became comfortable with the city, my understanding continued to grow. As an engineering student, I was interested in this opportunity to view and study another country's architecture, but was blessed with so much more. The grand architecture has an abundance of intricate pieces. One noteworthy location that I researched is known as "Palazzo Di Giustizia" (translates to "Palace of Justice"). This is an older building in Rome, but it is still a crucial part of citizens lives and hasn't become a tourist attraction like numerous other locations of its type and stature. In my presentation, I will share my unique experiences and understanding of Rome's culture, language, and architecture. Finally, I will share the personal growth I gained from this immersive experience abroad.

Allan Hernandez Padron '24

Vista, California

Majors: Business Economics; Sociology

What Can I Do? Career Assessments as a Tool for Finding Successful Careers

Career assessments are a common tool used by employment resource centers around the country. According to the Organization of Economic Co-operation and Development, career guidance is becoming more essential as the working world becomes increasingly complex. Assessment tools need to be valid and reliable for them to be credible (Sullivan 2011). However, studying test administrators and users taking the assessments is important because test administrators design and implement the tests, while the users' experiences and responses provide essential data for evaluating and improving the assessment quality. This collaboration helps ensure the assessments are accurate and effective. To progress beyond the traditional analysis centering on the test itself, students of the efficacy of career assessments need to pay attention to the effect of people on career assessments. Particular attention should be given to the explanation of assessment procedures and the interpretation of assessment results for users of different backgrounds.

In my internship at the Rock County Job Center in the spring and summer of 2023, I had the opportunity to both administer and provide counseling around career assessments. As part of the academic component of my internship, I conducted interviews with case managers to discuss the strengths and weaknesses of career assessments in helping clients find jobs and meaningful careers. I found that the way case managers explained and administered the assessments was important for how clients took the assessments and interpreted their results. In addition, the individual personalities and backgrounds of

both the case managers and clients were significant in how the career assessments were used. I conclude that paying attention to sociological variables such as the structure of the administration of the assessments and the approach of the case managers in the interpretation of results is important for making career assessments better tools for helping people find successful and meaningful careers.

Sponsor: Daryl Saladar

Room 402, Sanger Science Center, 2:20-2:45

Allan Hernandez Padron '24

Vista, California

Majors: Business Economics; Sociology

SEL Tutoring Program

Beloit College's SEL (Student Excellence & Leadership) program continually finds ways for marginalized students to navigate their skills and assets into positions of success. Its Peer Mentor and Tutor Program uses the idea of SEL students supporting other SEL students to cultivate both success and a support network. To tutor, students must first demonstrate proficiency in a subject or class before undergoing training. Tutees must also meet with staff to understand expectations. Once they meet, tutors devise strategies to best support tutees on their road to academic success. People often mistakenly believe tutoring is for the struggling student. Sometimes, a tutor is needed to review concepts and terms or just to see a problem in a different light. In other cases, a student needs a concept to be explained to them with different words or language that is easier for them to understand. Simply put, tutoring helps each student to learn and succeed in a manner and pace that is most comfortable for them. This has made the process such a rewarding experience for me as I help SEL students. Considering how others in the past have helped me achieve my goals, I recognize that tutors may have also struggled when they were in the same shoes as the tutees. This puts tutors in the position to support their SEL peers and best navigate them to understand class material. I will elaborate on my training, my experiences, and what I have learned throughout the process.

Sponsor: Jessica Fox-Wilson

Room 349, Sanger Science Center, 3:25-3:50

Mason Hoffman '23

Deforest, Wisconsin

Majors: Biochemistry; Sociology

Faiq Ahmad '25

Lahore, Pakistan

Majors: Computer Science; Engineering Physics

Interning with Nature at the Confluence: Diverse Opportunities at a Small Nonprofit

Our internship at Nature at the Confluence this summer had plenty to offer the both of us, despite our wildly different majors and career interests. We worked as land managers, nature educators, creek cleaner-uppers, and whatever else was needed. Working at a micro nonprofit allowed us to apply our different skill sets to projects that can make lasting impacts even in the short timeframe that an internship allows. We each took on projects that aimed to enrich the long-term quality of the center. We also helmed many individual events, including citizen science initiatives, children's reading and activity days, creek walks, and community fires. Collaboration and resource sharing was vital, and our experiences helped us make connections with professionals and organizations all over Rock and Winnebago counties. Having an internship based here in Beloit gave us an off-campus opportunity without having to worry about transport being a limiting factor. It also provided valuable insight into the struggles and trends of the Beloit community. Our internships left us both with a lasting impression of the value that nonprofits confer to their communities and the importance of accessible natural spaces to any community.

Caymen Hoffman '24

Coral Springs, Florida

Major: Biology

Aquatic Environments and Tree Bark contain Antibiotic-Producing Bacterial Isolates across Various Media Types

Microbes produce antibiotics to protect themselves from bacteria in the surrounding environment. Antibiotic production is advantageous for microbes when competing with bacteria for spaces to colonize. Most known antibiotics are produced by bacteria found in soil; however, the presence of antibiotic-producing bacteria in other environments is generally unknown.

My research had two aims: searching for novel antibiotic-producing bacteria in aquatic environments and tree bark, and comparing the effects of media type on antibiotic production for tree bark isolates. Water samples were collected from five locations (Avon Bottoms Wildlife Area, Big Hill Park, Rock River tributary, Turtle Creek Greenway, Wisconsin River) and grown on five media types (LBA, 50% NA, NA, PDA, 50% TSA). Bark samples were collected from two locations (Avon Bottoms Wildlife Area, Fischer Creek Park) and grown on three media types (ESA, LBA, 20% TSA). All samples were screened against nine tester bacteria that represent various pathogens, including safe-ESKAPE relatives. Isolates that showed antibiotic production were characterized with biochemical tests and 16S DNA sequencing. There were seventeen antibiotic-producing isolates found in aquatic environments and fourteen antibiotic-producing isolates found in tree bark samples across all media types. Bacterial diversity in aquatic environments and tree bark was confirmed through the identification of various bacterial genera and a range of biochemical characteristics. The results indicate that antibiotic-producing isolates live in aquatic environments and tree bark. In regards to media, ESA and 20% TSA are nutrient rich and supported the most antibiotic-producing tree bark isolates. In conclusion, antibiotic-producing isolates were found in environments other than soil, and media did affect the production of antibiotics from tree bark isolates. This research will continue by collecting bark samples from different tree species and culturing the bacteria on ESA, LBA, and 20% TSA to compare antibiotic production across media.

Grayson Jensen '25

Minneapolis, Minnesota

Majors: Creative Writing; Ancient Mediterranean Studies
Minor: Medieval Studies**Rome Through the Ages: An Artist's Perspective**

For two weeks this summer, I had the opportunity to travel to Rome with several classmates through the Ghosts of Rome Global Experience Seminar and explore how the ancient world influences and interacts with the modern city. I went into the seminar planning to research Rome in the Middle Ages when it was under Norman, Islamic, and primarily Byzantine influence but discovered that scholarship on medieval Rome is scarce (except when it comes to the papacy). However, after our first museum visit of the trip, I was instantly enchanted by the intricate hairstyles of the female busts displayed at the Palazzo Massimo.

I've seen plenty of busts in photographs, but being able to see them in person and experience them in a 3-dimensional manner sparked my curiosity as an artist. When drawing historical figures, I often have a difficult time with the hairstyles because they are nearly impossible to visualize, but since seeing the Roman busts in person and taking my own pictures, I've found it immensely easier to reconstruct them in my sketchbook.

Participating in this summer seminar was a perfect opportunity for me to both dive into my preexisting passion for medieval history as well as discover a new source of inspiration in the form of Roman hairstyles. Since I am a fiction writer and artist, I have produced numerous short stories, sketches, and

digital works that synthesize my academic, extracurricular, and now experiential learning with my artistic strengths. My presentation will demonstrate how Rome fueled my creativity and how my first-hand experiences provided a new window into Roman life across the ages.

Sponsor: Suzanne Goebel

Room 249, Sanger Science Center, 1:05-1:30

Aaditya Joshi '25

Mumbai, India

Majors: Quantitative Economics; Biochemistry
Minor: Finance

Sristi Halder '26

Dhaka, Bangladesh

Majors: Quantitative Economics; Data Science
Minor: Music

Nurturing Connections and Cultures: A Glimpse into the Asia Pacific Student Association's Networking and Cultural Immersion Trip to New York

Explore the Asia Pacific Student Association's (APSA's) transformative journey during our fall break networking and cultural immersion trip to New York. As the former co-president, Aadi will detail our experience connecting with Beloit College alumni and esteemed guests. This unique opportunity facilitated engaging conversations, offering profound insights into diverse career paths.

Our New York venture was more than a trip; it was a transformative experience bridging classroom knowledge with real-world applications. Through interactions with alumni, we honed vital skills: effective communication, collaborative problem-solving, and global perspectives. This immersive exposure nurtured our intellectual agility, preparing us to thrive beyond Beloit.

Join APSA at the Beloit and Beyond Conference to discover how this trip epitomizes experiential learning, shaping us into adaptable, empathetic leaders. This presentation underscores the importance of such experiences in fostering capable, culturally aware graduates, ready to navigate an interconnected world.

Sponsors: Jessica Fox-Wilson and Britt Scharringhausen

Weeks Lounge, Pearsons Hall, 2:35-3:00

Fatumata L. Kaba '24

Monrovia, Liberia

Majors: Physics; Data Science

From Novice to Data Science and Engineering Intern: Internship Experience in Programmable Logic Controllers (PLCs)

Over the summer, I had the opportunity to intern at Liveline Technologies, a company that originated as an in-house innovation project at Cooper Standard Automotive, a global automotive supplier. Liveline Technologies provides a software-based solution that harnesses the power of advanced artificial intelligence and enables existing equipment to function as an autonomous system. In other words, Liveline uses machine learning and AI to automate machines to produce products such as reactive extrusion, rubber extrusion, and thermoplastic extrusions for motor vehicles.

During my internship, I assisted the data science team in testing, training, and validating machine learning models using a Python environment and PyCharm interpreter to improve the performance of automated machines. Additionally, I connected a Programmable Logic Controller (PLC) to Windows and used Python to read input and output data from the manufacturing plant. For example, I worked with the engineering team to create a programmable device simulation program for monitoring the efficiency of the input data from one of Liveline's automated plants.

A key advantage of these projects is that they contribute to the understanding of how data science can be used to predict and modify machine performance from a non-humanistic data source such as sensor data from machines, which can be used by engineers to manipulate machine settings in real-time to improve accuracy, reduce waste, and reduce energy consumption of products.

In my presentation, I will share my experience on the project I worked on as well as provide information regarding how PLCs have shaped the automation industry. I will also elaborate on what skills I gained from my Data Science and Physics majors that were the most helpful during my internship so that other students can build on these as they move forward in their careers.

Sponsors: Julianne Angeli and Michael Dango

Room 402, Sanger Science Center, 10:15-10:40

Lio KammueLLer '26

St. Paul, Minnesota

Majors: Education; Spanish

Minor: English

Kelly O'Brien '25

Chicago, Illinois

Majors: Psychology; Cognitive Science

Puerto Rico: Studying Empire from the Margins

Our presentation will cover our Global Experience Seminar and summer course, ENGL 263 U.S. Empire from the Margins. This course was on the topic of learning about the colonization history of America and how its reign had greatly affected many individuals from different parts of the world such as Hawai'i, the Philippines, Puerto Rico and many more. Since our study abroad experience in Puerto Rico was a huge part of the course, we will mainly focus on our experience of learning about Puerto Rico's history, culture, and literature through the lens of writers and activists who have experienced the downsides and shortcomings of Puerto Rico's status as a U.S. commonwealth.

We will cover topics such as what it was like living in Puerto Rico and what it was like to be immersed in a different culture. We will also cover the various activists and non-profit organizations who so kindly taught us about their first hand experiences in various crises such as dealing with hurricane Maria, protesting against the 2019 Governor Ricardo Rosselló, the everyday fight against domestic violence, and the constant push for harm reduction within communities of need. We even got to speak with a past gubernatorial candidate for the Puerto Rican Independence Party who covered various topics of voter turnout, voter preference (either for independence or statehood), and a run down of the state of politics at the time of his candidacy.

Sponsor: Emily Sager

Room 349, Sanger Science Center, 3:00-3:25

Ezekiel Kingsbury '25

Aurora, Colorado

Major: Political Science, Psychology

The Coveted DC Internship

Last summer as part of The Fund for American Studies program, I interned in Washington, DC for Michael B. Moore, a candidate for South Carolina's First Congressional District.

In this presentation, I will delve into how my academic knowledge translated into real-world responsibilities. Additionally, I will discuss the strategies I employed to secure this internship, which stemmed from my prior role at Wisconsin Progress. Throughout the summer, I expanded my network by actively participating in lectures and events hosted by various organizations, including engagements with notable figures such as JP Morgan Chase CEO Jamie Dimon and Kentucky Senator Rand Paul. I will also

offer insights into how aspiring political consulting interns can navigate a similar path and provide a glimpse into the expectations one might have, based on my experiences in this field. Importantly, this internship has significantly informed my post-Beloit goals, clarifying that political consulting is not one of them.

Sponsor: Beth Dougherty

Room 349, Sanger Science Center, 10:40-11:05

Martu Kollie '24

Monrovia, Liberia

Majors: International Relations; Environmental Studies

Minor: Spanish

Public Policy and International Development: A Summer of Transformation in the PPIA Junior Summer Institute at the University of Washington, Seattle.

This session delves into a comprehensive narrative and analytical reflection of my experiences as an international relations student in the Public Policy and International Affairs Junior Summer Institute (PPIA JSI) at the University of Washington, Seattle. The PPIA JSI program, renowned for its rigorous academic structure, immersive policy analysis, and cultivation of leadership skills, significantly broadened my understanding of global dynamics and policy-making processes.

My presentation begins with an overview of the preparatory facets of the program, highlighting the competitive application process and initial expectations. It progresses to elaborate on the intensive curriculum, encompassing modules on economics, quantitative methods, policy analysis, and contemporary global issues, emphasizing their interplay in the practical field of international relations. It underscores the transformational learning experiences garnered from interactive sessions with policymakers, lawyers, diplomats, and global affairs professionals, which expanded my horizons and offered a pragmatic view of the complexities involved in international policy formulation and diplomacy.

My presentation concludes with an assessment of how my summer experience has profoundly influenced my academic direction, career goals, and personal growth. It serves as a testament to the PPIA JSI's instrumental role in shaping future leaders and reinforces the program's significance for students aspiring to leave a mark in the international relations and public policy field.

Sponsor: Mehmet Dik
Christine Ortiz, Ph.D. (Massachusetts Institute of Technology)

Weeks Lounge, Pearsons Hall, 10:40-11:05

Vu-Anh Le '25

Ha Noi, Viet Nam

Major: Biochemistry

Minor: Mathematics

Life Cycle Assessment of Biodegradable Plastic Packaging Subject to Comprehensive Organic Sorting

Organic waste decomposition in landfills is a major contributor to approximately 14% of methane emissions in the United States. Meanwhile, a significant portion of the world's energy is consumed in the production of plastic packaging. A comprehensive solution that addresses both issues by reducing energy-intensive packaging and reusing organic waste could yield substantial environmental benefits. A potential remedy is "The Big Green Loop" (BGL).

In the BGL approach, high-performance organic packaging is created from organic waste diverted away from landfills. This value chain is made possible through recent advancements in organic waste valorization and cutting-edge packaging technology developed in collaboration with an industry partner, Corumat, Inc. This innovative packaging technology allows the creation of high-performance packaging using as little as one-third of the materials required by competing technologies. Prototypes have already

been successfully produced using organic waste sourced from landfill diversion.

In this presentation, I will discuss a systematic analysis of each step within the BGL process value chain, offering calculations of environmental impacts across various scenarios and scopes. Calculations that my co-researchers and I made estimate that sourcing organic waste diverted from landfills, replacing conventional packaging with reduced environmentally friendly materials, and facilitating the diversion of additional organic materials through improved value chain economics can lead to a reduction in greenhouse gas emissions and potentially yield other positive environmental effects.

Sponsor: Mehmet Dik
Quoc-Hung Le (Vietnam's Ministry of Natural Resources)

Weeks Lounge, Pearsons Hall, 1:30-1:55

Vu-Anh Le '25

Ha Noi, Viet Nam

Major: Biochemistry
Minor: Mathematics

Monitoring Subsidence Trends in Vietnamese Underground Water Exploitation Zones Using InSAR Analysis

Based on research done in Vietnam with my mentor Quoc-Hung Le, I will discuss how land subsidence is an escalating concern in Vietnam, particularly in urban centers like Ho Chi Minh City, Hanoi, and the Mekong Delta region. A 2019 report by the Copernicus Emergency Management System program highlights trends in ground subsidence, using InSAR technology. Subsidence rates vary spatially and in intensity, with hotspots in certain areas. Techniques like deep boreholes and traditional methods are employed to monitor subsidence in the Mekong Delta region.

I will also share how this project aimed to delineate, assess, and monitor subsidence using InSAR technology in key regions. Results indicate diverse subsidence patterns from 2007 to 2010, with varying levels across different provinces. Notably, certain regions experience higher subsidence funnel centers. However, while the SBAS-INSAR technique ensures accurate monitoring, natural and human-induced factors must be considered during data acquisition, affecting actual subsidence rates. Despite challenges, this technique offers reliable insights into the complex phenomenon.

Sponsor: Sylvia Lopez

Room 349, Sanger Science Center, 2:20-2:45

My Le '25

Dong Nai, Vietnam

Major: Quantitative Economics

Duffy Partnerships Program: A Look at Disparities in the 2022 DEFY Program

As a data analyst intern at DEFY Domestic Abuse in Beloit, I was asked to break down and analyze a dataset from three assessments. The goal was to identify the disparities in program outcomes among different races and ethnicities, and enhance future programming activities to help more people with different backgrounds. Despite working remotely, I had the invaluable opportunity to gain insights into the inner workings of the shelter, engage in meaningful conversations with the dedicated staff handling emergency calls, and cultivate a strong rapport with my supervisor.

As a Duffy intern, I connected what I learned in the classroom to my observations of and reflections on the Beloit community. Through this experience, I learned about the community that I am living in and what my role in it is. I hold in high regard the connections that I forged, the lessons learned, and the support received throughout this transformative journey.

Vincent Vu Anh Le '23

Ha Noi, Viet Nam

Majors: Biochemistry; EVNS
Minor: COGS

Cassidy Felix '25

Bellflower, California

Majors: Cognitive Science; Biology

Franccesca Graciela Mamani '24

Chicago, Illinois

Majors: Psychology; Studio Art

Cognitive Science and Psychology Student Research Experiences at Beloit and Beyond

In this panel discussion, three students from PSY/COGS backgrounds will share their summer research experiences at Beloit and outside universities.

Vincent

As part of a sustainability project at the Massachusetts Institute of Technology, I studied the carbon emission impacts of biodegradable materials derived from landfill waste. I am eager to share how a COGS background helped me make the most out of this summer 2023 REU. I will also share tips for searching and finding summer research opportunities.

Cassidy

Menstrual cycle research has been historically ignored as a result of societal stigma. Notably, the effects the menstrual cycle can have beyond just the biological such as mood, energy, and cognition are understudied. Sexist ideals have led researchers to focus their attention on the psychological symptoms of the menstrual cycle over the physical symptoms. Considering this, there is still an inexact understanding of the biological basis of the menstrual cycle.

What is known is that the literature concerning the menstrual cycle and cognition has yet to find a general consensus on the role of the menstrual cycle on cognition. My research aims to add to this body of literature as well as understanding menstruators' experiences with the menstrual cycle. My research investigates the questions: Do cognitive ability and mood fluctuate throughout the menstrual cycle? Do hormone levels and mood jointly affect cognitive performance? How can this study support the importance of specific hormonal testing in future menstrual cycle research?

Through this presentation, I will also share what my experience was like conducting research through the McNair Scholars program, the things I learned about myself, and how this research affects my future plans.

Franccesca

This past summer, I had the opportunity to participate in the University of Nebraska-Lincoln Summer Research Program (SRP): Health Equity REU. During the ten weeks there, I developed an exploratory study under the guidance of Dr. Lorey Wheeler titled Perceptions of Economic Hardship & Aspirations for Higher Education of Rural Latino Adolescents. This presentation stems from a previously established Narrative Mapping project. As part of my presentation, I will highlight the associations among the psychological constructs I examined such as mental health, coping with stress, work status, and economic hardship in a sample of Latino youth, as related to their confidence in aspiring towards higher education.

Apart from this study, I attended professional development workshops, cohort-specific meetings, and assisted in quantitative and qualitative research tasks for ongoing projects my mentor has. I gained

valuable insight on navigating research in a university setting which will prepare me for my education path after Beloit. In addition to completing the SRP, I am currently working on a manuscript with Dr. Wheeler on the Narrative Mapping project.

Sponsor: Matthew Tedesco

Room 249, Sanger Science Center, 1:30-1:55

Camille Ledoux '25

Saint-Hyacinthe, Québec, Canada

Majors: Political Science; Environmental Studies

Minor: Law & Justice

Traveling into My Life Plan

How can travels change your whole perspective on what to do with your life? This is what I am trying to learn as I am going through my studies at Beloit College. In 2019, my young 17-year-old self discovered the greatness of the United Nations in Switzerland and decided to study international law to mediate conflict. How did I go from there to wanting to study environmental law to protect our planet? That is exactly what I will discuss in this presentation, starting with my background as a paralegal in the province of Québec, my home.

As a paralegal I learned about the real life of a lawyer and what legal organizations can do. I will then share what I learned through my application to Beloit College, which opened up opportunities to excellent law schools around the world and the opportunity to learn differently, and during my trip to Germany and Poland, where I studied the commemoration of atrocities like the Holocaust. Finally, I will discuss my internship in a Canadian law office, where I learned so much information that changed my whole plan. I am now ready to apply to law school.

Sponsor: Deborah Lynch

Greenhouse, Science Center, Drop in 12:30-2:00

Nora Gwen Leifheit '25

St. Paul, Minnesota

Major: Biology

Minor: Computer Science

Cassandra Kowalski '26

Waukesha, Wisconsin

Major: Anthropology

Minors: Museum Studies; Ancient Mediterranean Studies

Benjamin O'Connor '26

Berwyn, Illinois

Major: Environmental Biology

Louis Benard '26

Chicago, Illinois

Major: Biology

Beloit College Greenhouse Open House

The Beloit College greenhouse offers student workers the opportunity for hands-on learning through the caretaking of over seventy plants belonging to thirty-five families and species. Each member of the greenhouse team brings their own set of skills and expertise. The greenhouse offers students more than a place to learn; it also provides a calming atmosphere on a busy campus. We strive to create an inviting and peaceful space for all students and faculty who wish to stop by.

The nearly 1,600 square-foot greenhouse is split into several rooms including the tropical room, the succulent/cacti room, a small lab room, the head house room, and a central plant room. Some plants featured in the five greenhouse rooms are over 50 years old. For example, the Staghorn Fern was added to the greenhouse in 1964. Other plants, including the Oakleaf fig, night-blooming cereus, and Euphorbia

splendens, are more than thirty years old.

During the Beloit and Beyond Conference, the greenhouse will be open for tours to help get the word out and encourage more students and staff to use the space as a resource in their lives.

Sponsor: Shannon Fie
Beth and Chris Padon (Discovery Works, Inc.)

Wood Room, Second Floor, Mayer Hall, 8:45-9:10

Grace Maidment '24

Woodstock, Illinois

Majors: Anthropology; Education and Youth Studies

Archaeological Investigations in Southern California

My research-based internship with Discovery Works, Inc. took place between the summer of my junior and senior year at Beloit College. Over the course of two months, I conducted individual research and collaborated with Beloit alumni, Beth and Chris Padon, to produce an archaeological investigative report for their client in Irvine, California. The research includes artifact analyses of daub, lithic material, shell fragments, bone, modern items, and soil samples, as well as an interpretation of these objects within a specific pre-contact context.

In this presentation, I discuss the methods I used, my daily life in Southern California, and how this opportunity enhanced my perspective on private and public archaeology. I pay special attention to the ways in which Beloit College prepared me for this opportunity personally, academically, and financially.

Sponsor: Sylvia Lopez

Richardson Auditorium, Morse-Ingersoll Hall, 1:05-1:30

Veeka Marie Malanchuk '24

Rome, Georgia

Majors: Russian; Spanish; Education

Grace Hartwig '25

St. Louis, Missouri

Majors: Biology; International Relations
Minor: Spanish

Anna Williams '24

St. Louis, Missouri

Major: Biochemistry
Minor: Spanish

Practicing a Liberal Arts Education in Beloit's Spanish-speaking Community

This semester, we are taking Spanish 270 - Introduction to Latinx Studies, a course that was recently restructured to include community-based learning and which allows students to make connections between the curriculum and the real world. This presentation will focus on what we have learned from working with the greater Beloit community and how our experiences tie into learning the Spanish language.

Veeka Malanchuk

Community-based learning, vital to a liberal arts education as it builds on academic content through real-world experience, has been a prevalent part of my college career as a former Duffy Partnerships student, a current education major with classroom observation and teaching requirements, and as a current student in Introduction to Latinx Studies, one of Beloit College's new Community Connection courses. In this presentation, I will discuss how community-based learning has impacted my time at Beloit.

Grace Hartwig

As a part of the Spanish 270 curriculum, I have learned a lot about the importance of bilingualism and the barriers to being fluent in two languages. In the United States today, being fluent in Spanish and English is increasingly important, but it is a concept few understand. In this presentation, I will discuss how learning Spanish and English is essential and address common misconceptions about bilingual learning in addition to discussing my experiences with the Stateline Literacy Council.

Anna Williams

In an increasingly diverse and interconnected world, the importance of community connections cannot be overlooked. This presentation explores the enriching journey of working as an ESL (English as a Second Language) tutor with the Spanish-speaking Beloit community at the Stateline Literacy Council. Through real-life stories, insights, and strategies, I will examine how fostering community connections through language learning is transforming my life and my tutee's.

Sponsor: Diep Phan

Room 402, Sanger Science Center, 8:45-9:10

Takeshi Matsuda '23

Hanoi, Vietnam; Akita, Japan

Majors: Quantitative Economics; Data Science; Chemistry

Thanh Nguyen '24

Hanoi, Vietnam

Majors: Computer Science; Quantitative Economics

Navigating Entry-Level Marketing: A Comprehensive Analysis of Job Trends and Skill Profiles

In today's dynamic job market, securing entry-level marketing positions requires a strategic approach. This research project offers vital insights for job seekers, educators, mentors, and industry experts. Our comprehensive analysis combines data mining of job postings, qualitative interviews with marketing professionals, and an industry overview to unveil key trends. Notably, it emphasizes the critical role of a versatile skill set, encompassing soft skills like communication and strategic thinking, alongside the surging demand for hard skills such as quantitative analytics and technology proficiency. We also uncover geographical variations in the U.S. entry-level marketing job market, with California, New York, and Texas emerging as prominent hubs. Additionally, our research provides valuable salary insights to empower informed career decisions.

Sponsor: Mehmet Dik

Weeks Lounge, Pearsons Hall, 1:05-1:30

Takeshi Matsuda '23

Hanoi, Vietnam; Akita, Japan

Majors: Quantitative Economics; Data Science; Chemistry

Ethan Wang '24

China

Major: Computer Science
Minor: Mathematics

Probabilistic and Decentralized Machine Learning Approach on ICU Admission Prediction for Enhanced Patient Care Using COVID-19 Data

The Intensive Care Unit (ICU) represents a constrained healthcare resource, involving invasive procedures and high costs, with significant psychological effects on both patients and their families. The traditional approach to ICU admissions relies on observable behavioral indicators like breathing patterns and consciousness levels, which may lead to delayed critical care due to deteriorating conditions. Therefore, in the ever-evolving landscape of healthcare, predicting whether patients will require admission

to the ICU plays a pivotal role in optimizing resource allocation, improving patient outcomes, and reducing healthcare costs. Essentially, in the context of the post Covid-19 pandemic, aside from many other diseases, this prediction not only forecasts the likelihood of ICU admission but also identifies patients at an earlier stage, allowing for timely interventions that can potentially mitigate the need for ICU care, thereby improving overall patient outcomes and healthcare resource utilization. However, this task usually requires a lot of diverse data from different healthcare institutions for a good predictive model, leading to concerns regarding sensitive data privacy.

In this presentation, audience members will learn about models that predict the probability that a patient will need to be placed in an ICU. These predictive models using deep learning techniques while maintaining data privacy among different institutions to address challenges, as well as probabilistic models that reduce false alarm rates for better resource allocation and diagnosis decision-making.

Sponsor: Tawnya Cary

Wood Room, Second Floor, Mayer Hall, 1:55-2:20

Rowan Mermel '26

Roscoe, Illinois

Major: Biology

Natural Resource Management and Scientific Curiosity with the Natural Land Institute

This summer, I had the privilege of interning with the Natural Land Institute through the AmeriCorps program at Severson Dells Nature Center. I worked under a field biologist to improve the biodiversity of fifteen protected natural areas in Northern Illinois, promote biodiversity by controlling invasive species, and collect seeds from native plants for later restoration. I removed invasive species using various methods, including herbicide, hand pulling, and mowing with a tractor. In this presentation, I will discuss the importance of ecosystem restoration and how invasive species restoration and native seeds contribute to restoring biodiversity. I will also discuss the importance of doing field work in the study of biology, how working in the field creates curiosity (the basis of scientific inquiry), and how field work helps to connect technical concepts from the classroom to the complex systems that exist in the world.

Sponsor: Ellen Joyce
Scott Denham (Davidson College)

Room 150, Sanger Science Center, 1:55-2:20

Flora Milford '24

Brooklyn, New York

Major: Creative Writing

Jewish in Germany: Retracing My Families History

In this presentation, I will discuss the internship I had during summer 2022 with Davidson College and the Milford/Mendel Archives. I traveled with five other students to cities in Germany, France, and Austria to trace the migration of my German-Jewish family and create an archive of our history. This archive was made possible only because my great-grandmother, Toni Muhlfelder, kept a large amount of family documents when she and my grandfather, Ken Muhlfelder, immigrated to the United States from Germany in 1937. Because so many Jewish documents were destroyed during the Holocaust, my family has one of the largest surviving archives of German-Jewish history.

I will share findings from the archive and discuss my experience working in it, especially as the only person in the group who had a familial connection to it, and the only Jewish person.

This archive brought much of my family – which had been displaced throughout the world and estranged from each other due to the Holocaust – back together. The internship concluded with a final symposium in Berlin, where family members of mine from South Africa, the United Kingdom, the Netherlands, Argentina, and the United States met in person for the first time. At this symposium, I shared

a creative piece I wrote for my grandfather. I will share some of this piece, and explain the significance of it to the broader archive.

My presentation will be framed by two questions – How do beauty and pain coexist? and, How can we honor the lives of those who perished due to the Holocaust while still recognizing the horrors of their death?

This internship was made possible through the funding of the Weissberg Human Rights Grant and Hartigan Grant, as well as the help of Beloit College Career Works.

Sponsor: Joshua Moore

Room 150, Sanger Science Center, 8:45-10:00

Sydney Moses '25

Los Angeles, California

Majors: Anthropology; Creative Writing

Kaitlyn Hudetz '25

Plainfield, Illinois

Major: Business Economics

Marcus Studinski '26

Stevens Point, Wisconsin

Majors: International Relations; Spanish
Minor: Ancient Mediterranean Studies

Isabella Acosta '25

Sacramento, California

Majors: Political Science; Psychology
Minor: Law and Justice

Ela Heywood '26

Providence, Rhode Island

Majors: International Relations; Critical Identity Studies
Minor: Biology

Camille Ledoux '25

Saint-Hyacinthe, Québec, Canada

Majors: Political Science; Environmental Studies
Minor: Law & Justice

At Memory's Edge: Special Projects from Berlin and Krakow

This experience was very sentimental. Our group created key relationships that have sustained us on campus and fostered growth. We got to know the president of our college incredibly well. We learned about history and its consequences on the present. Along with individual research, our experience was augmented by events on the ground. By consistently immersing ourselves in historic spaces, we learned that the past is an ongoing process; how it is handled and remembered directly influences the present, and debates on how to do this are far from over.

Sydney focused her project on the inaccuracies of Holocaust movies and how those contribute to a false narrative about the severity of the event. Drawing from her own experiences growing up Jewish, she assesses how the movies falsely portray history and why dramatizing the Holocaust is an oversight in the film industry.

Isabella, Camille & Kate focused their project on the Topography of Terror. The Topography of Terror challenges museum norms by being built on land that was previously housed by the Nazi regime. It is built, as the name tells it, as a representation of what the Nazi Secret Service did to other humans as an informative museum. As a group, we studied the political/economic/social consequences of a place like this one. Museums and memorials all over the world are given the task of deciphering what they should remember from unfortunate atrocities. Society is given the task of deciding what is punishable and

recoverable. This can be difficult in fear of forgetting important truths when trying to memorialize the past.

Marcus and Ela studied the Reichstag and its impact on national pride and reconciliation with the past. How do living symbols of history change national identity and inform the present?

Sponsors: Susan Furukawa and James Rougvie

Weeks Lounge, Pearsons Hall, 8:40-10:00

Matthew Mueller '25

Janesville, Wisconsin

Major: Japanese

Daisy Kleinhoffer '25

Minooka, Illinois

Major: Environmental Geology

Aleah Roesler '25

Jackson, Wisconsin

Majors: Psychology; Cognitive Science

Minor: Japanese

Hikari Yokoe '26

Japan

Major: undeclared

Tomoki Amano '26

Japan

Major: undeclared

Haruka Imanaga '24

Japan

Major: undeclared

Tzu-Ting Lin '24

Jingzhou, China

Majors: Environmental communications and arts; Music

Minor: Japanese

Geoheritage and Rural Sustainability in Japan

Japan, along with many developed countries, is experiencing the rapid decline and aging of their rural populations. This rapid decline has resulted in the loss of many public services, schools, and local traditions. Oga City, Japan is facing this problem, and is looking for solutions to combat their shrinking community. A possible tool for promoting rural sustainability is the Oga Peninsula-Ogata Geopark; geoparks are a designated location that promote the coexistence of humans with nature through sustainable tourism.

The Oga Peninsula-Ogata Geopark along with the aging and depopulation of Oga City guided our research on what the role of geoheritage and cultural heritage tourism may be a feasible option for sustaining the local community. Over the ten days we stayed in Oga we conducted interviews with stakeholders, including people who are involved in the geopark, cultural heritage, businesses, and tourism. Additionally, we observed geosites within the geopark to understand their geologic and cultural significance to the community. Our findings reveal three roles the geopark plays in the community: education, community pride, and economic benefits.

A geopark would not solve all of the problems that Oga is facing, but by properly employing all of the wonders included in a geopark may provide a successful stepping stone to sustain the aging and depopulating community.

Parveen Narula '24

Bangkok, Thailand

Major: Physics
Minors: Math; Philosophy

My Summer Doing Research at Fermilab: Testing Algorithms for the Large Hadron Collider

This summer I had the opportunity to be a USCMS PURSUE intern at Fermilab. Over the course of the 10 week internship, the last 8 weeks doing one-on-one research with my mentor Cristina Mantilla Suarez. My research involved using simulation data to test how efficiently a machine learning algorithm could identify a type of Higgs Boson decay. I will discuss the importance and future applications of this research. Then I pivoted to testing the efficiency of triggers used in the most recent run of the Large Hadron Collider to see how well they worked with real data as previously they had only been tested using simulation data.

The first two weeks were chock full of talks and hands-on computational training. While I was doing research, we also had around two talks a week. My presentation will go over specific examples of the talks and the computational training I attended. I will highlight how important they were for multiple reasons including how they gave us a broad understanding of many topics while providing resources we could use to further explore those topics on our own. During this time, we also took tours of interesting places including a control room located at Fermilab that controlled the CMS detector of the Large Hadron Collider in Switzerland, the largest particle accelerator in the world.

My presentation will go over the benefits this internship gave me such as networking opportunities and more. Additionally, I will give advice on how students entering this type of internship can get the most out of the opportunity and I will emphasize why it is so important for STEM students who want to attend graduate school to take part in an internship like this as an undergraduate student.

Sponsor: Claire Milsted

Wood Room, Second Floor, Mayer Hall, 1:05-1:30

Benjamin O'Connor '26

Berwyn, Illinois

Major: Environmental Biology

Research and Self-Transformation at the Coe College Wilderness Field Station

During the summer of 2023, I spent four weeks in and around the Boundary Waters Canoe Area of Minnesota and Canada, where I engaged in research on animal behavior, learned how to survive and traverse the wilderness, made lifelong friendships, and bolstered my self-confidence. These activities taught me what field research is like, reinvigorated my love of nature, and challenged me to do more than I thought I could physically, mentally, and emotionally. During this program, which is graciously offered to Beloit College students through Iowa's Coe College, I lived in a dorm without general household amenities, underwent hands-on classwork with a small class size, and did my own research by observing green frogs and carpenter ants. I spent a total of ten days in the wilderness, where I learned to paddle and steer a canoe, portage a canoe or up to two portage packs over distances ranging from 20 to 450 rods, how to set up and take down a tent effectively, and how to interact with nature in a safe and non-intrusive way. I had the opportunity to have meaningful conversations with fellow students, explore the untouched Minnesota/Canadian wilderness, and take beautiful pictures of nature.

I was able to take with me so much from this course, and it has helped me to further understand in what direction I want to take my life. I want to share this life-changing experience with my Beloit College peers, and I hope you will want to attend my presentation, where I will share my field research, personal challenges, and frog pictures.

Sponsor: Matthew Laszlo

Richardson Auditorium, Morse-Ingersoll Hall, 11:05-11:30

Matt O'Leary '23

Clarendon Hills, Illinois

Major: Economics

My Experience with the Beloit Sky Carp and Impact Beloit

As a business intern for the Beloit Sky Carp, I work closely with the President, Zach Brockman, as he assigns me various tasks and projects. So far, I have completed a Pricing Analysis report and a Competitor Analysis report and conducted a survey to gauge the feelings of our ticket purchasers - specifically what factors are preventing them from purchasing and attending more games each season. The pricing analysis looked at 19 other professional minor-league baseball teams within a 200-mile radius. The objective was to unlock insights from other organizational approaches that could be reapplied to the Sky Carp to drive incremental attendance. The survey generated a 10% response rate and provided insights on what individuals either love or unfortunately dislike about their experience at the ballpark.

It has been extremely rewarding to see the behind-the-scenes of a game and everything that goes into creating a wonderful fan experience. These projects have forced me to think in different ways than inside the classroom. I have had to think creatively, solve problems as they arise, and compile data and findings efficiently to exemplify the biggest takeaways. My time with Sky Carp has also taught me what it takes to run a successful small business and how to work as a team. From day one it was apparent that it is an "all hands on deck" mentality and it did not matter what your title was when a problem came up. I have been lucky enough to create meaningful connections with many of my coworkers as they have introduced me to the sports marketing and entertainment industry. I am extremely grateful for this opportunity and excited for the next few months with the Beloit Sky Carp.

Sponsor: Sylvia Lopez

Room 349, Sanger Science Center, 1:05-1:30

Brigid Parker '25

Oak Park, Illinois

Majors: Sociology; Creative writing

Minor: Spanish

Helena Harrison '25

Chapel Hill, North Carolina

Major: Biochemistry

Navigating Non-Profit Work Through Community-Based Learning

In this session, we will discuss our experiences in the Duffy Partnerships program during the 2023 spring semester. The Duffy, a sociology-based course, offered Beloit students the opportunity to experience service learning through an internship with a community partner. Brigid partnered with Community Action's Project Thrive Program in Beloit, and Helena partnered with Gifts Men's Shelter in Janesville. Both organizations served similar populations, consisting of impoverished individuals, many of whom struggled with unemployment and spent time in the criminal justice system. Through firsthand experience working with local non-profit organizations, we learned more about the social issues affecting the larger Beloit community, and the impact that nonprofits have in aiding these issues and the populations that experience them.

Sponsor: Jessica Fox-Wilson

Room 249, Sanger Science Center, 8:45-9:10

Paloma Petilos '24

Los Angeles, California

Major: Anthropology

Minors: GLAM; Music

The Fishes Invasion and Other Modern Roman Street Art

Growing up in Los Angeles, I got to see a wide variety of street art from optical illusions to hyper-realism to something flashy or silly. This kind of ephemeral medium covers a wide range of topics from pop culture to history to social and political issues. They are usually specific to the country or region of the country they are in, and are always things I look for when traveling. I enjoy seeing what local people are passionate about.

During the summer of 2023, I was part of the Ghosts of Rome Global Experience Seminar. While in Rome, I spotted a lot of interesting pieces of street art that illustrate multiple Italian and global perspectives. Yes, that includes giant fishes. The juxtaposition of the ancient buildings and statues with spray paint and colorful mockups provide a paradox that fills the city with ghosts, ancient and modern. My research on street art in this city has brought to light different aspects of these ghosts. In this presentation, I will show a number of posters and murals and talk about their significance.

Sponsor: Charles Lewis

Room 402, Sanger Science Center, 1:30-1:55

Jane Price '26

Denver, Colorado

Major: Biochemistry

Samantha Irwin '25

Eureka, Missouri

Majors: Cognitive Science; Psychology

Graham Olen '23

Menomonee Falls, Wisconsin

Majors: Creative Writing; Sociology

Minor: Music

Casey Barasch '26

Madison, Wisconsin

Majors: Education; Spanish

The Writing Center: A Working Place for Everyone

This panel of four Writing Center tutors addresses a range of topics and perspectives, such as the experience of training to be and working as a tutor, the developmental benefits of engaging in this work, the Writing Center as a campus resource that supports student success (across all academic divisions) in a collaborative community, and various issues related to writing more generally. Tutors will provide an overview of what happens in a tutoring session, explain how it can help students of varying skill levels and fields of study in ways beyond simply “fixing writing,” and discuss the future of the Writing Center as it relates to topics like AI. Panelists will each make a brief presentation, and then the session will be an interactive discussion with the audience. Come join us!

Sponsor: Sylvia Lopez

Room 402, Sanger Science Center, 9:10-9:35

Satirtha Saha Protya '25

Khulna, Bangladesh

Majors: Biochemistry; Cognitive Science

Navigating Research Opportunities: A Comprehensive Guide for Beloiters

Are you wondering what applying for a research position looks like? Then join me. I will share invaluable insights into the world of research applications by drawing from my personal experiences and a successful track record of securing positions in various research programs last summer. I will demystify the process for both domestic and international students.

The talk will meticulously dissect each phase of the research application journey, offering guidance on

how to identify research opportunities aligned with individual interests and strengths. Attendees will gain crucial insights into the essential components required for a successful application, along with effective strategies for approaching prospective researchers.

With a diverse background spanning biology, chemistry, neuroscience, neurochemistry, data science, and computer sciences, I will try to bring a wealth of information to the table. The session will also provide a platform for open discussion, allowing attendees to seek advice and clarity on their own research endeavors.

While talking about research applications and my research experiences, I will also talk about several resources Beloit provides for enhancing student's research journey. One of the most important ones is the Common Grant to support students financially. Being an Alan and Martha Stutz Grant recipient, I will talk about the Common Grant application and how it can change your research journey.

Whether you're a budding scientist or a student intrigued by the world of research, this talk promises to equip you with the tools and knowledge needed to embark on your own research journey. Don't miss this opportunity to tap into a wealth of practical advice and firsthand experiences that will prepare you for a transformative summer of exploration and discovery in 2024.

Sponsor: Robin Zebrowski
Dr. Jonathan V. Sweedler (UIUC)

Wood Room, Second Floor, Mayer Hall, 11:05-11:30

Satirtha Saha Protya '25

Khulna, Bangladesh

Majors: Biochemistry; Cognitive Science

A Computational Approach to Finding Differences Between CCS Values of All L vs D Amino Acid containing Peptides and Calculating Peak Resolvin

In this presentation, I introduce a computational methodology to discern Collision Cross-Section (CCS) value disparities between peptides composed exclusively of L-amino acids and those featuring a combination of L and D-amino acids (DAACPs). Amino acids naturally occur in enantiomeric pairs, influencing peptide structure profoundly. The enzymatic post-translational modification of all-L-amino acid peptides in animals leads to the creation of a unique class of DAACPs, posing a challenge for accurate detection due to their identical mass to their all-L-amino acid counterparts. Leveraging advanced analytical instruments, we explored differences in CCS values between these peptide variants.

My co-researchers and I employed ChimeraX software and the PeptideConstructor Python Library to generate essential Protein Data Bank (PDB) files. PeptideConstructor offers a versatile and efficient solution for creating PDB files for both L and D-amino acid-containing peptides. ChimeraX, an interactive visualization program, provides a comprehensive suite of tools for structure modification and PDB file generation.

Through the manipulation of PDB files, we outlined workflows for creating DAACPs, incorporating Iso-Aspartate residues, implementing C-terminus amidation, and adding hydrogen atoms to the structure. We also emphasized the vital step of converting PDB files to XYZ format using Open Babel. Using the PSA web server, the computational CCS value was calculated. Afterward, we calculated the peak resolving power to identify DAACP peaks in mass spectrometry data.

Moreover, we will conduct a comprehensive analysis of CCS values at varying charge states, enabling a detailed comparison between experimentally derived and computationally calculated CCS values. This comparison will yield insights into the presence of DAACPs in mammalian systems.

Sponsor: Sylvia Lopez

Room 349, Sanger Science Center, 1:55-2:20

Darcel Lanadja Royster '24

Chicago, Illinois

Majors: Biology; Literary Studies

Advocacy: Behind the Scenes with the Beloit Community Health Systems

During the 2023 spring semester, I was a Duffy intern at the Community Health Systems (CHS) in Beloit, WI. Under the supervision of Danica Keeton, the director of development and community relations, I was able to experience what it is like behind the scenes of community event planning and Senate bill passing. I focused a lot on Senate Bill 110, which would extend Medicaid coverage for postpartum women from 30 days to 365 days. In addition, I was given the opportunity to educate staff about the importance of advocacy and becoming a voice for those who are not able to speak up for themselves. Finally, I helped plan for upcoming community outreach events. Through this experience, I was able to work with so many wonderful people in the healthcare field and a fellow Beloit College student, Ama Ameyaw. I learned a lot about public policies and enjoyed being a part of a big cause. I gained a wonderful mentor, resource, and friend.

Sponsor: Jessica Fox-Wilson

Room 249, Sanger Science Center, 9:35-10:00

Emeline Russell '25

Aberdeen, Washington

Majors: Anthropology; Greek, Latin, and Ancient Mediterranean

Minor: Museum Studies

Navigating Rome and Its Toilets

This Summer, I participated in the Ghosts of Rome course through Beloit College's Global Experience Seminars. The experience taught me about international travel, historical footsteps, and Rome's legacy. I connected with Rome through its ruins and historical monuments. In high school, I completed a paper about Roman infrastructure focusing on the toilets and sewer systems of ancient Rome. Archeologists have learned so much about Romans, their class systems, and food habits from the excavation of toilets. We visited many sites, and I found that identifying or searching for the toilets oriented me to the ruins and I felt a lot more connected to the site.

I applied previous knowledge from other classes in Anthropology and Greek, Latin, and Mediterranean Studies to understand and deep dive into the ruins I visited and the stories they told. Through this program, I not only gained the confidence to pursue a semester abroad, but I also felt prepared to tackle other international programs that summer, including Paideia's Living Greek in Greece program.

Sponsor: Emily Eagle

Wood Room, Second Floor, Mayer Hall, 10:15-10:40

Supratim Saha '26

Dhaka, Bangladesh

Majors: Computer Science; Data Science

Minor: Music

Unexpected Internship: My Unique Journey

Over the summer, I worked as a Data Intelligence and Business Strategy Intern at Axiata Group Berhad (ADA), a Malaysian multinational telecommunications conglomerate in Bangladesh. Throughout my internship, I delved into various aspects of data analytics and strategy sessions.

One of the highlights of my journey was becoming proficient in data scraping, SQL, and Pyspark, which I applied to data collection projects. I worked with multiple teams to extract meaningful information and enhance decision-making processes and conducted in-depth research on the most populated states in

Bangladesh, uncovering consumer trends and behaviors related to 5G usage and travel. This research allowed Axiata to identify growth opportunities and improve the overall user experience. Moreover, I actively participated in implementing mobile device tagging to understand user experience insights, a pivotal step in ensuring the successful launch of 5G capabilities in Bangladesh and the effective marketing of various digital products. I worked collaboratively with a team, sharing insights and consulting with FirstTrip, a travel agency, on increasing user registrations and generating bookings and revenue. I look forward to sharing my experiences and the insights I gained during my internship.

Sponsor: Charles Westerberg
Vanessa Korias (koriasv@opd.wi.gov)

Wood Room, Second Floor, Mayer Hall, 9:35-10:00

Joya Saxena '25

San Diego, California

Majors: Political Science; Sociology

Wisconsin Public Defender's Office & Sociology

This semester I am serving as an intern for the Rock County Public Defender's Office. My responsibilities are to interview clients and obtain their social histories as well as their recollections of the allegations against them. In addition, I identify services for clients, such as mental health, housing, substance abuse centers, employment opportunities, and domestic violence centers, all of which are alternatives to jail and incarceration. This work culminates with my writing Action Taken Reports for the attorneys, which are documents that outline the social history, recollection of events, recommendations, and what has already been done for each client. In this presentation, I will focus on how my experiences interning for the Public Defender's Office relate to my Sociology major. My experience working for the Public Defender has been important for expanding my thinking about the goals and consequences of criminal sentencing. Through my work, I have become a proponent of restorative approaches to criminal justice as an alternative to the carceral and punitive methods that currently dominates the American criminal justice system. Please attend this presentation to learn how you can incorporate social justice and restorative practices into your career journey at Beloit and Beyond.

Sponsor: Katherine Harris

Room 402, Sanger Science Center, 9:35-10:00

Abhishek Shekhar '24

Kathmandu, Nepal

Major: Computer Science
Minor: Mathematics

Unlocking Opportunities: My Internship as a Network Services Professional with the Educational Communication Board

In this presentation, I will share my internship journey at the Wisconsin State Educational Communication Board (ECB). As a Network Services Professional, I worked on various projects, gaining insights into network administration, broadcasting technologies, troubleshooting, and practical equipment configuration. I will also discuss the ECB's role in educational communication and the impact of network services on the education sector.

Sponsor: Sohaib Kiani

Weeks Lounge, Pearsons Hall, 11:05-11:30

Abhishek Shekhar '24

Kathmandu, Nepal

Major: Computer Science
Minor: Mathematics

Image Captioning System: Model Development and Deployment

As a special project, I employed deep learning models, including Convolutional Neural Networks (CNN) and Long Short-Term Memory networks (LSTM), to create a system capable of generating descriptive captions for images. The project culminated in the deployment of this image captioning model on a website.

In this presentation, I will talk about the technical aspects of the model's architecture, its practical applications, and the journey of making it accessible to users via a user-friendly website.

Sponsor: Tawnya Cary

Wood Room, Second Floor, Mayer Hall, 1:30-1:55

Charlie Shriver '24

Rockford, Illinois

Majors: Biology; Cognitive Science
Minors: Computer Science; Philosophy

Pushing Your Boundaries in the Boundary Waters

Coe College's Wilderness Field Station sits at the edge of civilization, a half hour drive from the nearest grocery store in Ely, MN, and just a few miles south of official Boundary Waters Canoe Area Wilderness, which is comprised of over one million acres of protected forests and lakes along the border of Minnesota and Canada. During a one-month course (for college credit) students learn not only the required material but also the basics of canoe camping and wilderness survival. Beyond these course objectives, it is impossible for students to finish their time at the station without growing in other ways.

As one of these students in the post COVID-19 summer of 2021, my experience was so profound that I returned to the station as a program assistant for 2023. Due to the remote nature of the field station and the fact that faculty and the director are generally occupied teaching their own courses and performing directorial duties, my fellow assistants and I carried out tasks that were widely varied; essentially, we kept the place running.

Over the course of this presentation, I will reflect on my own experiences and development in conjunction with the personal growth I observed in other students. The wilderness experience is something that is difficult of both mind and body, but going through this challenge forces personal growth in a wide range of areas depending on the person. For me, the wilderness now represents a place where I can challenge myself and where I am eager to return.

Sponsor: Tawnya Cary

Weeks Lounge, Pearsons Hall, 3:00-3:25

Maritza Silva '26

Round Lake Beach, Illinois

Majors: Mathematics; Engineering
Minor: Critical Identity Studies

On-site Insights: My Experience as a Construction Intern

The setting in which we learn significantly impacts all the information we retain. Some topics cannot be learned from a book, but you must be fully immersed in the environment. As a construction intern alongside Angus Young Architects, I have been on-site observing the renovation of Beloit College's very own Morse Library. Additionally, being a current student at the college allows me to give the architects and engineers a better idea of what we need as students. I helped reduce some costs with my input on what we would use as students and what could be omitted. With this experience, I am granted the opportunity to get significant hands-on experience and be in an atmosphere that I have always dreamed of. I have learned an incredible amount so far and have become aware of the amount of work that happens out of the public's view.

This presentation will explore the difficulties of finding comfort in a new space, learning a new vocabulary in the architectural world, creating a schedule to follow, and what that division of work looks like.

Sponsor: Kate Linnenberg

Richardson Auditorium, Morse-Ingersoll Hall, 1:30-1:55

Karen Soto '23

Beloit, Wisconsin

Major: Sociology
Minor: English

Alek Taylor '23

White Cloud, Michigan

Major: Sociology

Outside the “Beloit Bubble”: Sociology Capstone Joins Community Action FreshStart Students to Prepare for the Future

This fall, Dr. Kate Linnenberg and the students in her SOCI 301 Community Practicum course have been collaborating with the FreshStart Students from Community Action, Inc. Fresh Start is a program for at-risk teens and young adults who have dropped out of high school. Over the course of the year, the FreshStart students earn their high school diploma, build a house, and engage in a variety of community service activities.

We will discuss our experience of the collaboration between the Beloit College students and FreshStart students. In addition to working alongside them on a variety of community service projects, we have also given presentations on writing strong resumes and the college application process. We will explore the importance of the collaboration between the campus and community. This experience so far has impacted the Beloit College students greatly, and we hope to encourage others to connect with those outside the “Beloit bubble.”

Sponsor: Beth Dougherty

Room 150, Sanger Science Center, 3:00-3:25

Farah Tolu-Honary '24

Freeport, Illinois

Majors: International Relations; French
Minor: African Studies

Studying Abroad in the Maghreb: Comparative Perspectives from Morocco and Tunisia

During the 2022-2023 academic year, I studied abroad in two North African countries: Morocco and Tunisia. I took courses where I delved into my regional research interests in Middle Eastern and African politics.

In Morocco, I studied how women in North Africa and the Middle East were shaping politics through acts of resistance. Outside of the classroom, I learned how soccer creates spaces for Moroccans to engage in politics and express national and international solidarity, which is not always possible in the Kingdom outside of the stadium. Tunisia, on the other hand, has been heralded as a beacon of democratic success in the aftermath of the Arab Spring, yet has experienced serious democratic erosion since President Kais Saïd assumed power. While there, I conducted fieldwork on judges who go on strike, reflecting how Tunisians have historically used unions to push for democratization. My experiences traveling along the Tunisian-Libyan border revealed how migration discourse is weaponized by elites to justify the president's increasingly autocratic policies.

Overall, I seek to provide a comparative perspective on my experiences in the Maghreb, focusing on the interplay between resistance and democracy.

Sponsor: Joseph Derosier

Room 150, Sanger Science Center, 3:25-3:50

Farah Tolu-Honary '24

Freeport, Illinois

Majors: International Relations; French
Minor: African Studies

On est ensemble: Protests and Pan-Africanism in Dakar, Senegal

This summer, I received Common Grant funding to research pan-Africanism in Senegal. After studying abroad in two North African countries, Morocco and Tunisia, I wondered what pan-Africanism would look like in an African country south of the Sahara. I planned to conduct interviews and visit monuments, museums, and markets to investigate whether or not North African countries were included in pan-African spaces in Senegal. However, as I arrived, a popular opposition leader was arrested, launching the country into a wave of mass protests. The government shut down the internet and used violence to quell demonstrations.

What does it look like to conduct political science fieldwork amidst mass protests in an increasingly authoritarian context? How does democratic backsliding in Senegal fit into larger currents of backsliding around the world?

Sponsor: Sabauon Nasseri

Room 150, Sanger Science Center, 1:30-1:55

Ariana Tolu-Honary '24

Freeport, Illinois

Majors: History; Education

Linguistic Proficiency in the Creation of a Graphic Novel

This presentation connects my intensive summer Persian language study at the University of Wisconsin, Madison with the graphic novel that I created about a young girl in Afghanistan who is forced to leave her rural life for the city after drought hits Helmand Province. Proficiency in Persian has been key for accessing and comprehending primary sources that illuminate the perspectives of Afghans in the drying of the Helmand River, the river that is central to the plot of my novel.

I will start by discussing my experience studying Persian at the University of Wisconsin, Madison, highlighting the challenges of intensive language learning, particularly in a non-Western context. Following that, I will delve into my novel—its plot and themes, what inspired the creation of it, and the challenges that I encountered during the research process. Through my engagement with Persian-language sources, I aim to demonstrate the experiences and struggles of rural Afghans with my graphic novel. Pastoral life is of great importance to a significant portion of Afghanistan's population, as more than 70% of its people live in rural areas. The compulsory migration to urban areas, driven by drought-induced hardships, has resulted in trauma for most. Ultimately, this presentation underscores how linguistic competence has played an essential role in the research process for my novel and significantly enriched my understanding of the many environmental issues facing Afghanistan today.

Farah Tolu-Honary '24

Freeport, Illinois

Majors: International Relations; French
Minor: African Studies

Ariana Tolu-Honary '24

Freeport, Illinois

Majors: History; Education

Marianna Carus '24

Ottawa, Illinois

Majors: Cognitive Science; Psychology
Minor: Philosophy

Ella Diers '24

Concord, New Hampshire

Major: Media Studies
Minor: Journalism

Macie Janes '24

Mineral Point, Wisconsin

Majors: History; Anthropology
Minor: Geology

Maij Sprenger-Otto '24

Minneapolis, Minnesota

Majors: History; Anthropology
Minor: Political Science

Your Major Abroad: Fulfilling Your Academic and Professional Goals through Study Abroad Exchange Programs

Farah

During the 2022 fall semester, I participated in an exchange program at Al Akhawayn University in Ifrane, Morocco. Studying abroad there allowed me to delve into my regional research interests of African and Middle Eastern politics, and make progress toward my French major. The university, modeled after American liberal arts schools like Beloit, facilitated close relationships with professors who advised my research projects on regional politics. Further, university-sponsored events helped me to connect to my interests through off-campus opportunities, including funding my participation in an international politics conference. In the long term, my time at Al Akhawayn has inspired me to seek out professional opportunities where I can continue to conduct research and study abroad after graduation.

Ariana

Despite the misconception that the United Arab Emirates, being a relatively new country, lacks history, my experience as a history major studying in the UAE disproved this notion. I had many opportunities to engage with my major in and outside of the classroom in the UAE. Through courses like Modern Arab History, Modern Palestinian History, Arab and Islamic Culture and Civilization, and Persian, Arab, and Turkish Classical Music, I learned of the rich history of the Gulf and the entire Arab world. The international exchange office at my university organized several field trips to various museums in the UAE where I was able to learn about the rich history of the country while interacting with fellow exchange students. Additionally, I joined the Iranian Cultural Club, where I helped design and set up informative booths at events to share insights into Iranian history and culture. On weekends, I took trips to historically significant sites such as Old Dubai which provided glimpses of the city's past. Furthermore, I had the opportunity to visit India where I visited significant historical landmarks such as the Taj Mahal, Amber Fort, Jal Mahal, and Hawa Mahal.

Mariana

In the spring of 2023, I studied abroad at the University of Malta in Msida, Malta. I will discuss various aspects of my time there, including academics, the culture, and the difficulties of adjusting to a new environment. While abroad, I was able to explore topics that I would not have been able to learn about in Beloit while fulfilling major and minor requirements. By meeting new people and adapting to the new environment, I was also able to improve the soft skills that are emphasized in the ILOs which are crucial for both academic and professional goals. Despite some of the struggles that come with studying abroad, there was so much personal growth and value in my experience.

Ella

This time last year, I was a month into a semester in Budapest, Hungary. I was living with Hungarian roommates and learning how to exist in a place where I did not know the city, the language, the customs, or anything, really. Throughout my semester, I was able to meet incredible people and learn about Hungarian culture. Through a media studies and journalism lens, I was able to reflect on how news and media is affected by politics and borders, and how our understanding of other countries is filtered and distorted. As a part of this panel, I will talk about my experience as a part of an exchange program through Beloit and the value I gained from this form of study abroad.

Macie

In the fall of my junior year, I studied for a semester at the University of York, in York, England. One primary reason I chose York was my strong interest in the history of the city. York is best known for being a Medieval city. It started as a Roman city, it was conquered by the Vikings, and later became a seat of power during the Early Modern period for the Tudor Dynasty.

This experience cultivated a deeper love and interest in medieval history for me. At York, I was immersed in history. I took classes on the Tudor Monarchy and the English Reformation. What I learned in my class, I would actually be able to see in person. The city is full of historic buildings and not much has changed from the Medieval Period. Getting the opportunity to both experience a new culture and a new hands-on way of learning history was incredibly impactful to my academic career.

Maij

Following my study abroad experience at the University of Glasgow, Scotland during spring of 2023, I performed ethnographic and historical research in Latvia. While uniquely different, these experiences taught me how to overcome challenges and build community within new spaces.

At University of Glasgow, I managed logistical challenges, participated in varied groups, and managed a different academic structure. While researching the connection between food, identity, and community in Latvia, I navigated increasingly independent work while approaching a culture I had been exposed to through literature and within the United States. As I reflect upon these experiences, I largely compare them to and identify skills I have developed at Beloit College. Using stories from my experiences abroad, I will explore how I have grown (hint: a lot) as I consider how they contribute to my broader Beloit College experience.

Lyndsey Ann Turner '24

Beloit, Wisconsin

Majors: Creative Writing; Education and Youth Studies

Abisha Bhatta '26

Kathmandu, Nepal

Major: Biology

Minor: Health and Society

Ella Diers '24

Concord, New Hampshire

Major: Media Studies

Minor: Journalism

Grayson Thobe '24

Crystal Lake, Illinois

Majors: Philosophy; Creative Writing

Coe College Wilderness Field Station Panel

This past summer students received a grant through Beloit College's summer funding program, the Common Grant, to take classes and study at the Coe College Wilderness Field Station in Ely, MN. They participated in courses such as "Writing Wilderness" and a class on entomology. Students found these courses both academically and personally challenging and rewarding. This panel will explore what the students participated in while in the Boundary Waters, what they learned about themselves and about what they want to do academically and professionally, and what advice they would have for students who want to participate in the program. Come learn and ask questions!

Abisha

I went to the Coe College Wilderness Field Station to take the Writing Wilderness course this summer. The Boundary Waters Canoe Area is more than 1 million acres of wilderness that is protected, and the Wilderness Field Station is situated outside of that area in Ely, Minnesota. This is a place where people can really feel the wilderness while learning. Each course involves two canoe voyages on the water, the second lasting a total of eight days after the initial three-day trip. I spent the entire session picking blueberries, filleting fish, building fires, swimming, canoeing, and learning about the background and ideas of the environment in addition to trekking paths to get to class.

In Writing Wilderness, my peers and I discovered the rationale for why wilderness areas are now preserved, and we also discovered that an important player in preserving wilderness areas was from Ely, Minnesota! The main cause of our ability to explore the Boundary Waters and the reason they exist at all is Sigurd Olson, an Ely native. We were able to immerse ourselves through canoeing and exploring the outdoors in addition to learning about the ideas and concepts associated with it. Then, we were able to use those insights to write wild! We finished sixteen diary entries, three poems, one five-page essay, and two eight or 10-page essays over the summer semester. Each of these writing projects was a reflection of the texts we had studied and the experiences we had while traveling in the woods. I am extremely appreciative of this opportunity, since it allowed me to exert more mental and physical effort than I had previously imagined possible.

Ella

On my transcript, my month at the Wilderness Field Station will be summed up as "Entomology," but it was so much more than studying bugs. I spent a month learning how to communicate, problem solve, canoe and camp. I learned to open myself up to new people and experiences. As a part of this panel, I will talk about my experience at the Field Station—the challenges, the rewards, the bugs—and share with other students the knowledge and excitement about this opportunity.

Grayson

In July of 2023, I spent four weeks in the Coe College Field Station: a cluster of cabins on the edge of the Boundary Waters in Northern Minnesota. There was limited solar powered electricity and well water. Three classes were run at once by three different professors, whose families accompanied them to the field station. I was in the Writing Wilderness class taught by Chris Fink. As a class, we went on two trips: one 3 day trip into the surrounding lakes, and one 8 day trip to the border of Canada in the Boundary Waters. On trail, we fished and ate what we caught, canoed and carried our boats and everything else we needed on our shoulders through the portage paths. We also wrote both in the field station, and out in the wilderness, which fueled a special sort of free creativity in myself, and in my five classmates. We also did workshop on our three poems and three creative non-fiction essays, so we read each other's work and gave feedback, all while we were in the wilderness. I wrote and annotated my classmates' writing with my feet in Bear Trap Lake, from inside a tent while it rained, and lying in a hammock. I was able to go on this trip because of the common grant, which I applied to in the spring of 2023.

Sponsor: Robin Zebrowski

Wood Room, Second Floor, Mayer Hall, 2:20-2:45

Isabella Verdi '23

Highland, California

Majors: Environmental Communication and Arts; Creative Writing

What Songs the Plants Know

Humans love to categorize. Entire disciplines are built on it, making distinctions between illnesses to find the best way to treat each one, experimenting with different elements, learning all their uses, and doing similar things with the plants and animals that populate the globe. Even though the line between plant and animal is thin and arbitrary. Climate change is endangering many species on the planet, and our focus is split (unevenly) between "animals" that populate an ecosystem, and "plants" that comprise the background environment. Not enough effort is going into preserving and aiding the diverse array of organisms that comprise the foundation of an ecosystem.

This project draws connections between findings about plant intelligence and communication at the intersection of fiction, cognitive science, and ecological justice. Science does not even know the extent of what it does not yet know, but we are beginning to see that plants are smarter than we ever gave them credit for. We are only now developing tools and systems to decipher their language and make their behavior intelligible to us. Collecting conclusions in the literature about this has implications that spiral out into how we create laws about landscapes, how we farm and log fields, and how we recognize sentence.

Sponsor: Mehmet Dik

Weeks Lounge, Pearsons Hall, 10:15-10:40

Ethan Wang '24

China

Major: Computer Science
Minor: Math

A Survey about Bayesian Inference Power in Math and Machine Learning Perspectives

In the realm of machine learning, neural networks have established themselves as reliable function approximators due to their extensive parameterization power. However, the traditional deep neural network leaves a black box for us regarding the inner workings and decision-making mechanisms. To address this issue, the Bayesian Neural Network (BNN), an architecture originated from the mathematical side, has emerged as a robust framework for uncertainty analysis with an interpretable probability for the results.

This presentation will focus on the comparison between traditional machine learning techniques and the

Bayesian Probability Neural network, along with the history of the evolution of BNN through collaborative efforts from interdisciplinary teams, together with an empirical implementation demonstration on a medical dataset to present the difference from a practical aspect.

Sponsor: George Williams

Wood Room, Second Floor, Mayer Hall, 9:10-9:35

Jaida Wesley '24

Fort Worth, Texas

Major: Studio Art

Diep Bui '25

Phuc Yen City, Vietnam

Major: Studio Art

AI vs Art: The Battle of Ethics

As artificial intelligence (AI) continues to evolve, how can the rights of working artists be more protected? With the exponential rise in AI, people are concerned about what changes they will see in their careers. In this presentation, we will focus on the creative industry. While AI generators can be used as a tool alongside working artists, should artists be worried about losing their jobs? What about AI could raise the question of ethics and human liberty? These are the questions we plan to answer with our research.

Sponsor: Kate Linnenberg

Richardson Auditorium, Morse-Ingersoll Hall, 10:40-11:05

Mary Guy

Shakira Wilson '24

Chicago, Illinois

Majors: Dance; Sociology

My Experience at Merrill Community Center

I am part of the first cohort of Impact Beloit Community Fellows. As part of this program, I have a year-long internship at the Merrill Community Center. In addition to working 10 hours a week at Merrill, I meet biweekly with the other fellows and their faculty mentors to discuss what we have each been learning from this experience.

At the Merrill Community Center, I am a Youth Program Teacher, and I have been asked to also be a cheer coach with the 608 Athletics program. As a Youth Program Teacher, I teach two dance classes each week and organize arts and crafts. In both programs, the kids range in age from 4-14 and come from the Merrill and Hackett communities. I have learned a lot about myself and the Beloit community through working at the Merrill Community Center. The experience has influenced my career path in a positive way, and I now know I would like to continue to work with kids. I have learned so many life lessons from working at Merrill Community that I will share throughout the presentation. I will also discuss things I am learning about the city of Beloit while working in the community.

Sponsor: Sylvia Lopez

Room 402, Sanger Science Center, 3:25-3:50

Blue Yeck '24

Rancho Palos Verdes, California

Major: Health & Society

Minors: Spanish; Russian; Biology

Studying Abroad in Ecuador as a Senior: It's Never Too Late!

This presentation will review my time abroad in Quito, Ecuador, during the spring semester of 2023. I studied at Universidad San Francisco de Quito (USFQ), a small liberal arts school located in Cumbayá, the neighboring city to Quito. This is the only liberal arts university in South America, and I took courses for international, Spanish-learning students as well as courses for native Ecuadorians. Not only will I recount

my academic experiences, but I will also compare and contrast social norms, culture, holidays, gastronomy, indigenous peoples, traveling, relationships, and other topics with what I am accustomed to in the U.S. Additionally, I will discuss my daily routine, whether it be my commute to campus or travels over the weekend to various cities and attractions in Ecuador including Montañita, Mindo, Ibarra, Baños, Ambato, Laguna Cuicocha, Mitad del Mundo, Centro Histórico, and the islands of Los Galápagos.

From eating cow intestines to swimming with wild sea lions to partying with my host parents, my experiences in Ecuador were unforgettable, and the reason I recommend studying there to everyone. If you are interested in going abroad (even as a senior!), want to improve your Spanish, are looking for a country with endless hiking opportunities, love to interact with animals, want to visit South America, or anything in between, I invite you to learn more.

Sponsor: Sylvia Lopez

Wood Room, Second Floor, Mayer Hall, 10:40-11:05

Evan Zenger '24

Burr Ridge, Illinois

Majors: Biology; Health and Society

Embracing the Future of Healthcare: My Journey to CNA Certification

Last summer, I embarked on a transformative journey to obtain my Certified Nursing Assistant (CNA) certification. This process was both rigorous and enlightening, demanding a combination of hands-on clinical practice and in-depth theoretical coursework.

The training was intensive, spanning a total of 6 weeks. The curriculum emphasized the importance of patient care fundamentals, such as vital sign monitoring, personal hygiene assistance, and communication techniques tailored to diverse patient needs. In addition, the coursework dove into the ethical aspects of nursing, ensuring that I was well-equipped to handle sensitive situations with empathy and professionalism.

One of the standout experiences was the supervised clinical rotations. Here, I had the opportunity to apply classroom knowledge in real-time, assisting the patients under the watchful eyes of experienced nurses. This experience allowed me to refine my skills, build confidence, and truly understand the impact a CNA can have on a patient's well-being.

Receiving my CNA certification last summer was not just an educational pursuit but it was also a deeply personal growth experience. The rigorous training and practical application of acquiring this certification have taught me so much about the nursing specialty. This experience has equipped me with the skills and knowledge needed for my future in nursing, ensuring I can provide the best possible care to my future patients. If you are interested in nursing or working in healthcare, this presentation is for you!

OUR SINCERE THANKS

Thank you to all those who advanced the work of our students through their time and educational expertise, and by funding through a variety of opportunities designated for research support.



Link to the online program