

IDEAS INSIGHTS

WELCOME!

We are excited to launch this new newsletter to keep our vibrant community of students, alumni, faculty, and friends connected and informed about the latest happenings in the Integrated Degree in Engineering and Arts and Sciences (IDEAS) program at Lehigh University.

Whether you're a current student navigating your academic journey, an alumnus forging new paths in your career, or a faculty member contributing to groundbreaking research, this newsletter is your opportunity to stay engaged with the innovative work and inspiring stories emerging from the IDEAS community. We hope you enjoy reading about the incredible accomplishments of our students and alumni, discover new opportunities to get involved, and celebrate the spirit of interdisciplinary learning that defines IDEAS.

WHAT'S IN THIS ISSUE:

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- IDEAS Staff Introduction
- IDEAS Student Association
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- Post-Lehigh Life
- IDEAS Calendar



CURRENT STUDENT HIGHLIGHT

AMELIE FRY ~ Spring 2024 IDEAS Grant Recipient

Q: What inspired you to pursue your fieldwork in Sierra Leone?

A: SickLED - My research team is developing a point-of-care test for sickle cell disease, allowing me to apply classroom learning to hands-on lab work and field research. As a bioengineer, I believe effective medical solutions must consider the community's healthcare system, economy, and culture. Working with the Sierra Leone Ministry of Health, local advocates, and medical professionals provided invaluable insight into the country's healthcare challenges and informed the development of a diagnostic device tailored to its needs.



Q: What were some key takeaways or memorable moments from your experience?

A: I came out of fieldwork with many key takeaways, both technical and personal. Fieldwork emphasized the need for our device to be affordable, easy to use, and seamlessly integrated into Sierra Leone's healthcare system. Beyond functionality, it underscored the importance of medical worker training, reducing stigma, and standardizing sickle cell diagnosis and treatment policies.

On a personal level, the experience was transformative. Travel delays and lost luggage tested my resilience before I even arrived. Once there, constant changes and unexpected challenges reinforced my ability to adapt, trust my team, and find confidence in uncertainty.

Q: What impact do you hope your research will have on the field or local communities?

A: Over 300,000 children in Sub-Saharan Africa are born with sickle cell disease each year, with over half dying before age five due to lack of diagnosis and treatment. I hope my team's diagnostic device will be approved for neonatal screening in Sierra Leone, increasing early diagnoses, treatment, and survival rates.

Beyond diagnostics, our work aims to improve policies, healthcare training, and public education in collaboration with the Ministry of Health. Sickle cell disease is not just a medical issue but a cultural and mental health challenge. By expanding awareness and standardizing care, we hope to reduce stigma and improve patient outcomes.

Q: What advice would you give to students interested in conducting international research?

A: International research is an incredible opportunity, and I encourage all students to pursue it! My biggest advice: prepare thoroughly but stay flexible.

Understanding cultural differences and local systems is just as important as research itself. In Sierra Leone, I had to learn not only about healthcare policies but also cultural norms to conduct respectful and effective fieldwork.

While having a structured plan is essential, be ready to adapt. Field experiences often reshape theoretical knowledge, requiring you to rethink and adjust your approach. Stay open to learning and embracing change!

STAFF INTRODUCTION

IDEAS Academic Advisor: Melissa Phelps

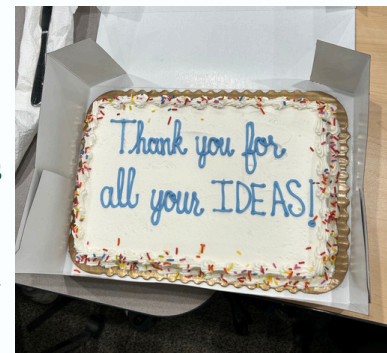
Melissa transitioned to the role of IDEAS Academic Advisor in March 2023 after working in the College of Arts and Sciences Advising Center here at Lehigh University. She is currently pursuing a Master's in Educational Leadership and is set to graduate in Spring 2025. An active member of the Survivors Support Advocate group on campus, Melissa is dedicated to student well-being.

Outside of work, she enjoys spending time with her family, watching movies, listening to music, and baking. She and her husband have two sons—one a senior at Lehigh and the other joining the Lehigh community this fall. A passionate sports fan, she never misses a chance to cheer on her favorite team. Go Birds! 🐦



IDEAS STUDENT ASSOCIATION

The IDEAS Student Association (ISA) at Lehigh University is dedicated to fostering a strong and supportive community within the Integrated Degree in Engineering, Arts, and Sciences (IDEAS) program. Acting as the student leadership body for the program, ISA works to promote student interests, facilitate open communication, and support both academic and professional growth. The association's mission is to create a network of like-minded students who can rely on each other through shared experiences, mutual support, and collective goals. By encouraging cross-cohort interactions, ISA strengthens the bonds between students, ensuring they have the resources and community they need to succeed academically, socially, and personally. Through this collaborative environment, ISA strives to promote lifelong learning and ethical inquiry while uplifting every IDEAS student on their path to success.



STUDENT ASSOCIATION MEMBER INTRODUCTIONS

KAITLYN POWEL ~ Officer of the Archive

Graduation year: 2025

Areas of focus: Industrial and Systems Engineering and Sociology

What has been your favorite experience as a Lehigh student in the IDEAS program?: Being able to develop skills that allow me and my peers to hold discussions that break typical barriers of professional discourse. For example, discussing ethical implications of technology today.



STUDENT ASSOCIATION MEMBER INTRODUCTIONS CONT.



SAM ANDERSON ~ Interim President

Graduation year: 2026

Areas of focus: International Environmental Policy and Practice (Environmental Engineering and Global Studies) and a Minor in French!

What has been your favorite experience as a Lehigh student in the IDEAS program?: Currently, I am studying abroad in Montpellier, France. Being an IDEAS student has allowed me to pursue a program abroad that is aligned with my theme while still fulfilling degree requirements!



NOVA ROBERTSON ~ Treasurer

Graduation year: 2027, 2028G

Areas of focus: Theme of Experiential design, designing and producing entire experiences from the bottom up, including performance and technical design elements

What has been your favorite experience as a Lehigh student in the IDEAS program?: First year ethics seminars taught by Professor Best!



NICK NEUSTADT ~ VP of Student Affairs

Graduation year: 2028

Areas of focus: Civil Engineering and Architecture

What has been your favorite experience as a Lehigh student in the IDEAS program?: My favorite part of IDEAS has truly been the people in it. Each individual is dynamic, fun, and strives to be better everyday. These people inspire me to never be complacent and reach for the stars, since at its heart the whole point of our program. The people make the program, and when you surround yourself with bright people you too get to shine brighter.



ZOE FORD ~ VP Professional Development

Graduation year: 2027

Areas of focus: Computer Science and Philosophy

What has been your favorite experience as a Lehigh student in the IDEAS program?: My favorite experience was when we had one of our first-year seminars on the hill outside of Rauch. That day, we were discussing the Challenger disaster, and being outdoors made the conversation more engaging. It was a powerful experience to reflect on such a significant event in history while being surrounded by nature, and it really helped deepen the connection between the topics we were studying and the world around us.

POST-LEHIGH LIFE



LINKEDIN LINK

(Click the link above to view Benjamin's page!)

BENJAMIN BONNER

A Bit About Yourself: Graduated medical school, currently engaged in a research fellowship, aspiring radiologist. New Orleans native.

Graduation Year: 2017

Current Employment Position: Postdoctoral Research Fellow, Cardiovascular Imaging Research Center, Massachusetts General Hospital

How did Lehigh and the IDEAS program prepare you for your career?: The IDEAS program let me follow a unique mixture of mathematics, engineering, sciences, and humanities that has given me a unique background to carry into medicine.

What do you think makes IDEAS unique?: The people that make up the program and Professor Best.

What drew you to participating in the IDEAS program?: As someone who could never really make up their mind about what to study, IDEAS was perfect in that it let you study anything / everything.

Favorite thing about IDEAS: The diversity of subjects we are able to study

Favorite Lehigh Memory: Post workout buzzsaw from the Goose

POST-LEHIGH LIFE



TIM KRENTZ

A Bit About Yourself: I enjoy choral and brass music, reading for fun, and recreational weight lifting. In my academics and career, I have synthesized micro-scale lens arrays, harvested brain cells from live fetal chickens (and shot them with lasers), formulated composites with surface engineered nanofillers and destroyed them with high voltages, and worked with metallurgy and nuclear material to study plastic deformation and fracture mechanics. One thing I've learned from that and talking to others is that just about any topic can be interesting if you dig into it with enough effort and rigor. The IDEAS program is a great opportunity to pursue whatever bizarre topic you think is cool, and do it so well you manage to convince everyone else of the same.

Graduation Year: 2011

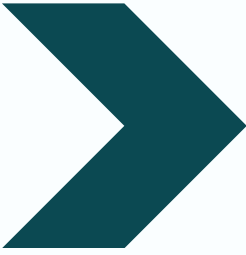
Current Employment Position: I am a federal program manager for the Dynamic Materials Properties program at the NNSA, a semi-autonomous agency within the U.S. Department of Energy. After graduating from Lehigh I went to Rensselaer Polytechnic Institute where I got my PhD in materials science and engineering, studying polymer composites for high voltage applications. From there, I moved to the Savannah River National Laboratory (SRNL), a federally funded research and development center operated by the U.S. Department of Energy, where I completed a postdoc and converted to research staff. After working at SRNL for 8 years, I moved to Washington D.C. to take my current job in October of 2024.

More about Tim on the next page!




POST-LEHIGH LIFE

TIM KRENTZ cont.




How did Lehigh and the IDEAS program prepare you for your career?: Lehigh and the IDEAS program prepared me for the career I have with an exceptional technical foundation from Lehigh's Materials Science department, as well as a broad perspective from different disciplines through the IDEAS program. Particularly, practice seeing topics through a lens of different viewpoints and communicating with folks from other fields helped with the collaborative aspects of work after academia.



What do you think makes IDEAS unique?: The IDEAS program enables students to have a hand in guiding their own academic pursuits across a range of fields that otherwise might not be accessible or readily combined.

What drew you to participating in the IDEAS program?: The customizability and interdisciplinary nature of the program attracted me to it.



Favorite thing about IDEAS: Being in the first year of IDEAS, the program offered a large amount of freedom in designing my own course of study, something I think is still a core value of the program.

Favorite Lehigh Memory: My favorite Lehigh memories are of the time I spent with friends in the Lehigh Choir and Orchestra.

Thank you to the alumni who participated and made this section of our newsletter possible! We appreciate your help and look forward to highlighting the lives of other IDEAS alumni who are interested in sharing their input!

INTERESTED IN CONTRIBUTING?

Preparing students to think across disciplines is crucial for tackling complex challenges. Please consider making a gift to IDEAS to ensure we can continue to create technologically adept and diverse thinkers who are ready to take on the challenges of tomorrow. If interested in supporting the IDEAS Program, please click [here](#) or scan the QR code!



Thank you,
IDEAS Leadership Team

Have an idea for future newsletter content? Feel free to reach out to IDEAS Advisor, Melissa Phelps (mjp618@lehigh.edu) or a member of the IDEAS Student Association!



Upcoming IDEAS Events

- **3/6: Pizza Night!**
 - Williams Hall, Global Commons
 - 4:30-6
- **4/28: End of the Semester Student Showcase**
 - Business Innovation Building, Lobby
 - 4:30-6pm
- **TBD: Professional Development Workshops**
 - Writing a cover letter
 - Building a LinkedIn profile
 - Navigating Lehigh's resources (LTS to Handshake)

FOR MORE INFORMATION ON THE IDEAS PROGRAM VISIT:

ideas.lehigh.edu

