The Next Generation

The SBU Graduate Arts & Sciences Magazine

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Letter from the Editor

Dear Readers,

Welcome to the latest edition of *The SBU Graduate Arts & Sciences Magazine*! Our organization was founded with the mission of bridging academia and research across the Arts and Sciences, and we continue to highlight the breadth of ideas, creativity, and inquiry that define graduate life at Stony Brook. Our goal remains the same: to make complex work accessible, engaging, and meaningful to a broader community.

The theme for this edition, *The Next Generation*, reflects both a moment and a movement. It speaks to the scholars, artists, and innovators who are actively shaping what comes next through research, creative work, and new ways of thinking. Graduate students exist at a unique intersection, building on what has come before while simultaneously redefining the boundaries of their fields. This issue captures that forward momentum.

To be part of the next generation is not only to inherit knowledge, but to question it, expand it, and, at times, challenge it entirely. It is a process defined by curiosity, risk, and the willingness to explore ideas that do not yet have clear answers. Across disciplines, this generation is engaged with pressing global challenges, emerging technologies, reimagined systems, and stories that reflect evolving identities and perspectives.

At the same time, the idea of the next generation is deeply personal. It reflects moments of growth, uncertainty, and transformation that shape the graduate experience — the transition from student to researcher, from learner to contributor, and from individual inquiry to collective impact. Each piece in this issue offers a glimpse into that process, highlighting not only outcomes but the questions, experiments, and reflections that drive them forward.

As in past issues, what stands out most is the diversity of voices and approaches represented here. From scientific research to creative expression, these works demonstrate that innovation does not emerge from a single path, but from a convergence of perspectives, disciplines, and experiences. Together, they form a snapshot of a generation in motion.

The release of this magazine would not have been possible without the support of the Graduate Student Organization, the College of Business, Student Community Development, Staller Center For the Arts, and WUSB.

We invite you to explore this issue and engage with the ideas, stories, and work that define The Next Generation. We hope you enjoy the magazine!

Warm regards,

Ava Nederlander	Rachel Deahl Kostelnik	Narmin Mekawy	Dennis Jourdain
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SBU Grad Mag

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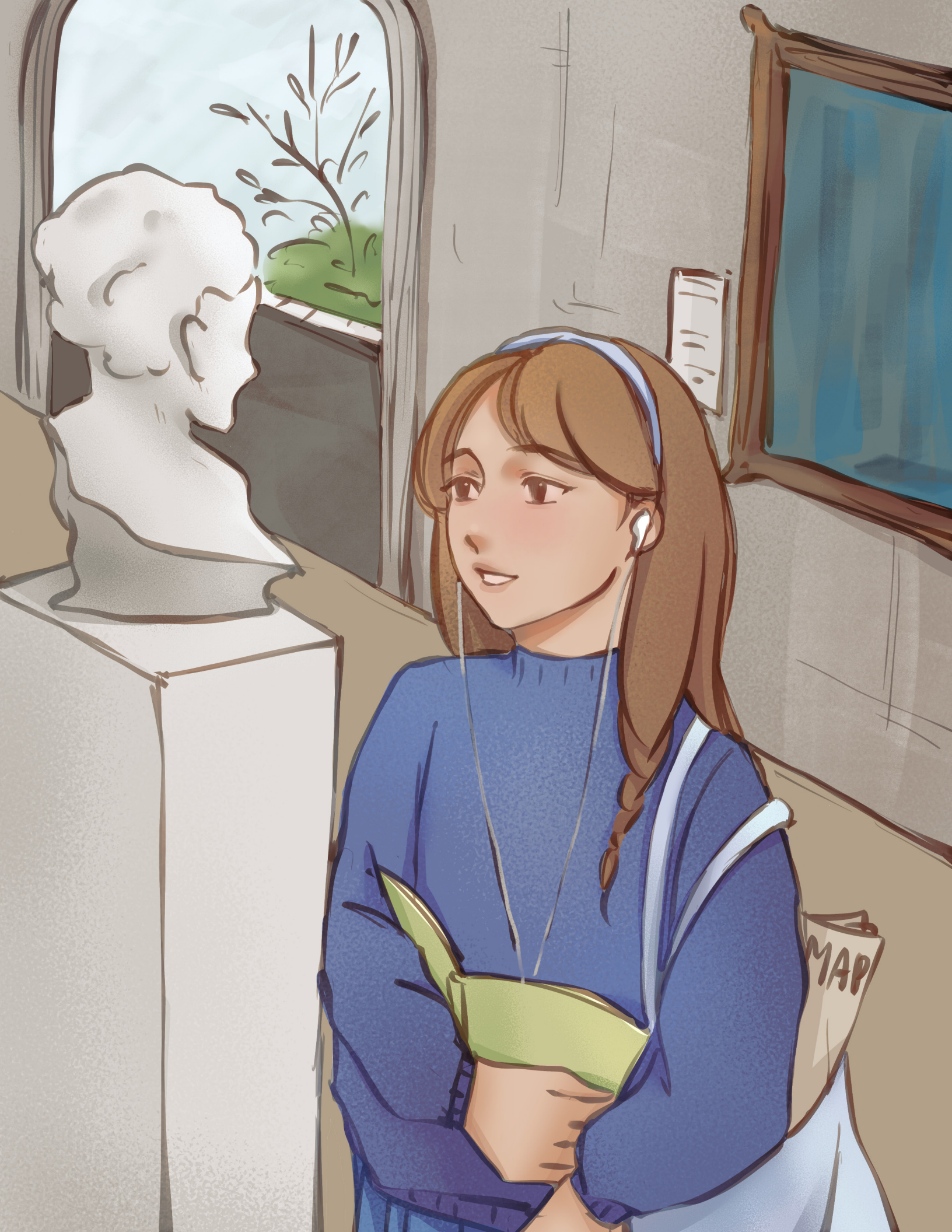

MAP

Periwinkle

Rose Paleologos | MFA Student
Department of Creative Writing, Film and Television

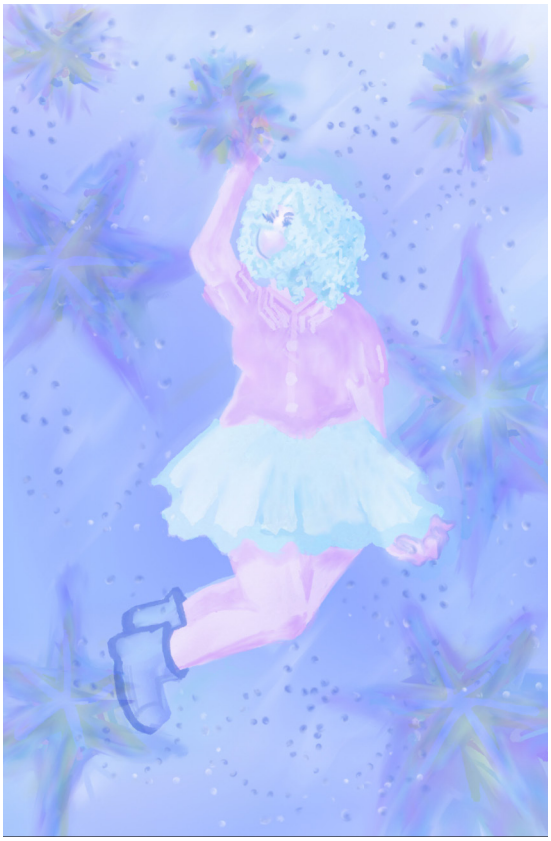


Illustration by Manahil Chaudhry

what will happen next?
she wonders, admiring the twinkle,
embracing fickle bones of fulfillment
fused ligatures of peace
anatomies that, just the other day,
ached
what will happen next?
tomorrow holds in its hands the optimism
of a thousand graduates at the helm,
the brain of tomorrow shoots synapses
of aptitude and courage
flitting, zipping their bold convictions,
tomorrow's blood flows in arteries
indestructible, protecting each molecule,
cultivating its deluge of strength and
making possible all the daydreams of its shy nostalgic organism who
lives and breathes her antiquated,
underestimated momentous moments.
what will happen next?
she wonders, admiring the twinkle
periwinkle

Tell your Story

Dana Golden | PhD Student
Department of Economics

Stories should be written down
Always make sure they are told
Cause one day you won't be aroun'
But they will never grow old
If a story to your grave you take
It's a truly special kind of crime
For now drowned in forever's lake
Are the special remnants of time
And hear me now for now I fear
That save for you they fade to black
That the things no one else did hear
Will not happen again nor come back
So tell your stories far and wide
Go on and tell them while you can
For time's pushing the teller aside
Is not something you can plan

Illustration by Kejia Xie

Tech & Friends:
GradMag Launches a New Voice on WUSB 90.1 FM

The GradMag Editorial Team

On February 20, 2026, *the SBU Graduate Arts & Sciences Magazine* (GradMag) expanded its mission of interdisciplinary dialogue beyond the printed page and into the airwaves with the premiere of *Tech & Friends*, a new radio program on WUSB 90.1 FM. Produced by GradMag and sponsored by the Graduate Student Organization, the show offers a platform for conversations about research, creativity, technology, and graduate student life at Stony Brook University.

The first broadcast aired the day after the Second Annual B.R.I.D.G.E.S Conference and featured a recap of the event. The episode reflected on the research presentations, artistic performances, and interdisciplinary conversations that filled the Student Activities Center during the conference. By beginning with a discussion of B.R.I.D.G.E.S, the premiere episode captured the spirit of the conference itself. Just as the conference brings together scholars and creators from across disciplines, the radio show aims to create a space where graduate students can share ideas and experiences with a broader audience.

Tech & Friends is designed to highlight the voices of graduate students and the diverse work being done across the university. Each episode features conversations with students, researchers, artists, and faculty members who are exploring new ideas in fields ranging from engineering and science to the humanities and the arts. The show offers listeners an opportunity to hear directly from the people behind the research, creative projects, and initiatives shaping the graduate community.

Graduate Coordinator of Student Media Community Development, Manasa Kumari, and GradMag President Ava Nederlander, at the WUSB radio broadcasting studio.

Broadcasting from WUSB, Stony Brook's long-running campus radio station, the program connects graduate scholarship with a wider public audience. WUSB has served the university and the surrounding Long Island community for decades, providing a platform for music, discussion, and public affairs programming. Through *Tech & Friends*, GradMag contributes to that tradition while bringing graduate student perspectives into the conversation.

The show airs every other Friday from 1:00 p.m. to 2:00 p.m., offering listeners a regular opportunity to hear interviews, discussions, and updates from across the graduate community. Episodes often include interviews with students presenting new research, artists discussing their work, or organizers describing events that bring different disciplines together. The program also highlights campus initiatives that support

Graduate Dean and Vice Provost for Graduate Education, Celia Marshik, on air with Esther Nosazeogie, radio production assistant for *Tech & Friends*, and Ava Nederlander, President from GradMag.

collaboration and innovation among graduate students. One of the goals of the show is to make academic work more accessible. Graduate research often takes place in specialized environments that can feel distant from everyday conversations. *Tech & Friends* helps bridge that gap by giving researchers an opportunity to discusstheir work in a relaxed, conversational setting. By sharing these stories over the radio, the show invites listeners to learn about discoveries and creative projects happening at the university in real time.

The program reflects GradMag's broader mission of encouraging interdisciplinary exchange. Just as the magazine publishes work from a wide range of fields, the radio show creates space for conversations that move across disciplines. An episode might feature a scientist discussing a new experiment, followed by an artist describing the inspiration behind a recent project, ending with a discussion about the role of technology in shaping research and communication.

Producing the show has also created new opportunities for graduate students to develop skills beyond their academic research. Students involved with the program gain experience in broadcasting, interviewing, audio production, and science communication. These skills complement the work already being done through the magazine, expanding GradMag's role as a platform for graduate student storytelling and collaboration.

The premiere episode's focus on the B.R.I.D.G.E.S conference illustrated how the show can capture the energy of graduate events and extend those conversations beyond the walls of the university. Interviews from the conference, reflections on research presentations, and discussions about interdisciplinary collaboration allowed listeners to experience the event even if they were not able to attend in person.

As the show continues, future episodes will explore new research projects, creative initiatives, and conversations with members of the graduate community. The goal is to build a space where ideas can be shared openly and where listeners can hear directly from the people shaping the future of research and innovation at Stony Brook.

Tech & Friends airs every other Friday from 1:00 to 2:00 p.m. on WUSB 90.1 FM. The full broadcast schedule, upcoming episode information, as well as previous episodes in podcast form, can be found on the GradMag website.

Through this new program, GradMag continues to expand the ways graduate students share their work and connect with one another. Whether through print, conferences, or now radio, the organization remains committed to creating spaces where ideas from different disciplines can meet and inspire new conversations.

Tech & Friends radio production assistant, Esther Nosazeogie, interviews Neuroscience PhD student, Stephanie Laderwager, at the B.R.I.D.G.E.S conference.

B.R.I.D.G.E.S 2026: A Day of Interdisciplinary Research, Art, and Collaboration

The GradMag Editorial Team

The team at GradMag celebrates the 2nd annual B.R.I.D.G.E.S conference.

On February 19, 2026, the Student Activities Center at Stony Brook University filled with the energy of graduate students presenting research, exhibiting artwork, screening films, and performing music during the Second Annual B.R.I.D.G.E.S. Conference. Hosted by the SBU Graduate Arts and Sciences Magazine, the conference brought together scholars and creators from across the university in a setting designed to encourage dialogue between disciplines that do not often intersect in everyday academic life. Throughout the day, students from more than thirty five academic departments shared nearly one hundred research posters alongside a student art exhibition, graduate film screenings, and live musical performances. The event highlighted the extraordinary range of work being produced by graduate students at Stony Brook and demonstrated how scholarship and creativity can flourish when ideas move across traditional academic boundaries.

The day began early in SAC Ballroom B as graduate students arrived to assemble posters and prepare their materials. Artists carefully arranged their work for the afternoon gallery exhibition while musicians tuned instruments for the midday concert. Faculty judges and visitors circulated through the room, stopping to introduce themselves and begin conversations with presenters. The atmosphere reflected a sense of curiosity and anticipation as participants prepared to share their research and creative projects with audiences drawn from across the university.

At 9:30 a.m., the conference officially opened with welcoming remarks from the leadership of the Graduate Arts and Sciences Magazine and university staff who helped support the event. Speakers emphasized that B.R.I.D.G.E.S was created to give graduate students a space to present their work in an environment that encourages interdisciplinary exchange. The conference

Assistant Director Alfreda S. James PhD, speaks at the Career Center Workshop.

was designed not only as a venue for sharing research but also as an opportunity to discover unexpected connections between fields that might otherwise remain separate.

The morning program began with a seminar from the Alan Alda Center for Communicating Science led by Nancee Moes, MFA. Her session focused on the challenge of explaining complex research to audiences who may not share the same technical background. Professor Moes encouraged graduate students to think carefully about how they frame their work when speaking to people outside their field, emphasizing that communication is central to collaboration and impact. She explained that research becomes meaningful when scholars invite others into the conversation and make their ideas accessible to a broader audience. "Research does not exist in isolation," Moes told the audience. "If you want people to care about what you are doing, you need to invite them into the conversation and help them understand why it matters." Her seminar highlighted the importance of clarity, empathy, and storytelling as tools that allow researchers to connect with people from different disciplines and perspectives.

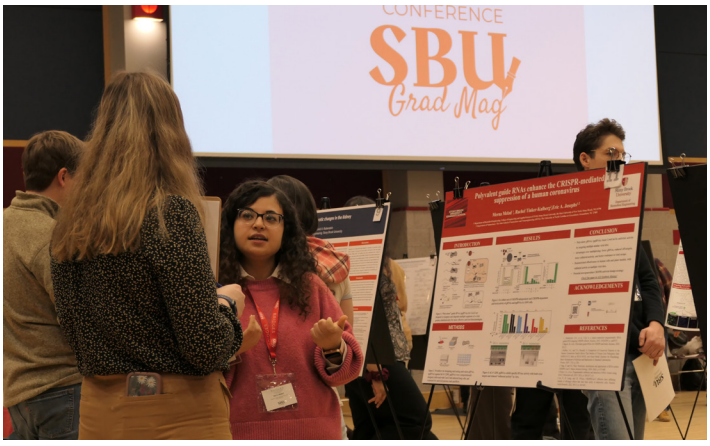
Following the seminar, Dr. Alfreda S. James from the Stony Brook Career Center led a workshop focused on networking and professional development. Her presentation encouraged graduate students to view networking not simply as a transactional activity but as a way of building meaningful relationships with others in their professional communities. She reminded students that the relationships they develop during graduate school can shape future opportunities and collaborations. "The reason you came to Stony Brook was to have more opportunities, and you get more by networking," she explained. James emphasized that events like the B.R.I.D.G.E.S conference allow students to practice communicating their work and presenting themselves confidently to diverse audiences. By explaining their research to people outside their immediate field, students develop skills that will serve them throughout their careers.

The conference moved to the SAC Auditorium for the keynote address delivered by Dr. Peter Stokes, Managing Director at Huron Consulting Group. Speaking to a full audience of graduate students and faculty, Stokes reflected on the ways interdisciplinary thinking shapes innovation in both academic and professional environments. He encouraged students to look beyond the boundaries of their own disciplines and to remain open to collaborations that might reshape their understanding of complex problems. Stokes explained that many of the most pressing challenges facing society today cannot be addressed from a single disciplinary perspective. "Many of the problems we face today do not belong to one discipline," he said. "They require people who can look at an issue from different perspectives and work together to find solutions." He noted that conferences like B.R.I.D.G.E.S create the conditions where those conversations can begin, allowing scholars to encounter ideas that may inspire new directions in their research.

At midday, the conference transitioned from lectures to performance with a graduate student music concert held in SAC Ballroom B. Musicians from across the university performed a range of classical and contemporary works that reflected the artistic diversity of the graduate community. The concert included chamber music by composers such as César Franck, Camille Saint Saëns, and Claude Debussy as well as modern vocal performances inspired by contemporary artists. The performance provided a moment of reflection within the conference schedule and demonstrated that artistic practice plays an important role in the intellectual life

of the graduate community.

In the afternoon the conference reached its most dynamic moment during the research poster session held in SAC Ballroom A. Ninety three graduate students presented projects spanning fields such as biomedical engineering, artificial intelligence, climate science, sociology, philosophy, and public health. Visitors moved from poster to poster while faculty judges spoke with students about their work and evaluated presentations based on clarity, originality, and accessibility to interdisciplinary audiences. For many presenters, the experience of explaining their research to people outside their discipline encouraged them to think more deeply about the broader implications of their work. One student described the challenge of presenting specialized research to a diverse audience but also noted the value of seeing how others responded to the ideas being shared. Explaining complex work to people unfamiliar with the technical details required careful thought and often revealed new ways of understanding the research itself.



Merna Melad, PhD Student, Department of Biomedical Engineering, presents her poster at the B.R.I.D.G.E.S conference.

Running alongside the poster session was the B.R.I.D.G.E.S art gallery, which featured work by graduate student artists from across the university. The exhibition included paintings, digital drawings, photography, glass sculpture, and lithography. Several pieces drew inspiration from scientific themes, illustrating the ways creative practice can intersect with research and discovery. Other works explored personal narratives, cultural identity, and questions about the human experience. Visitors moved through the gallery while discussing the ideas behind the artwork, creating a space where visual expression became part of the larger intellectual conversation taking place throughout the conference.

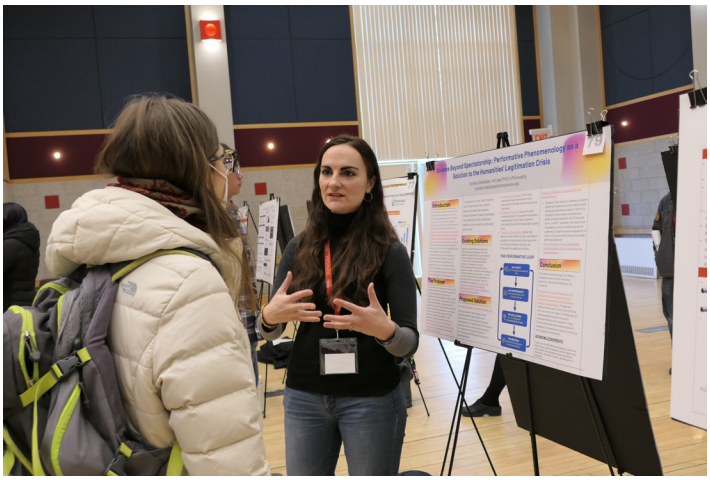
Guilherme Batalha, DMA student in Department of Music, performs on the clarinet.

Nearby, the Graduate Departments Fair provided attendees with an opportunity to learn about academic programs, student organizations, and resources available across the university. Representatives from departments and campus groups spoke with students about opportunities for collaboration and involvement in the broader graduate community. The fair reflected the conference's larger goal of strengthening connections across departments and encouraging students to engage more deeply with the university as a whole.

Later in the afternoon attendees gathered again in the SAC Auditorium for a series of graduate student film

Peter Stokes PhD, Managing Director at Huron Consulting Group, gives the keynote address.

screenings. The program featured short films created by students in the Film and Television program and explored a range of genres including comedy, drama, and narrative storytelling. One filmmaker described the experience of participating in the conference as an opportunity to see the work being done in fields far removed from his own creative practice. Walking through the poster session earlier in the day, he found himself fascinated by the discoveries and experiments described in the research displays. Seeing these projects inspired him to think about how scientific ideas might influence future storytelling. He explained that each poster introduced a completely new world of ideas, and that discovering these perspectives encouraged him to imagine new ways of incorporating scientific concepts into film.



Sondra Charbadze, a PhD Student from Department of Philosophy, speaks with an attendee at the poster session.

The conference concluded with final remarks and the B.R.I.D.G.E.S Awards Ceremony. Provost Carl W. Lejuez, who spoke at last year's B.R.I.D.G.E.S keynote, returned this year to address the audience and reflect on the significance of the event for the university community. He described the conference as one of the most meaningful gatherings hosted on campus, emphasizing that it reflects the creativity and initiative of the graduate students themselves. "This may be the best event we do at the university all year," he said. "Part of that is because it is done by our students and for our students. It is very nurturing intellectually, but it also keeps an eye on career opportunities." He noted that while awards recognize individual accomplishments, the most important outcome of the conference is the network of connections that forms when people come together to share ideas.

Dean Celia Marshik echoed this sentiment as she reflected on the work displayed throughout the day. Walking through the poster session and art exhibition, she said she was struck by the breadth of talent represented within the graduate community. She described the conference as a powerful example of what graduate students can achieve when they create opportunities for collaboration and dialogue. "I am such a big fan of this conference," she said. "The fact that it is graduate student organized and run is really a testament to what graduate students are doing for themselves. The poster session is incredible. The art exhibits are incredible. It is a reminder of the amazing talent and intellect of the graduate students at Stony Brook."

Awards were then presented recognizing outstanding graduate student work across several categories, including poster presentations, art, and film. The prizes were made possible through the support of the Graduate School and the continued sponsorship of Dean Celia Marshik. As the ceremony concluded, participants remained gathered in the auditorium and hallways, continuing conversations that had begun earlier in the day.

The team at GradMag stands with the winners of B.R.I.D.G.E.S conference after final remarks.

Temperament, Psychopathology, and Interpersonal Functioning as Factors of Late Adolescent Social Media Use

Lauren Rothburd | MS Student
Department of Psychology

Adolescent social media use, including frequency and motivations for use, is associated with elevated internalizing symptoms (Nesi et al., 2015; 2017) and symptom-related traits (e.g., negative emotionality, rumination; Winstone et al., 2021; Shannon et al., 2022) and poorer interpersonal functioning (Crumly-Goodwin et al., 2025; Ohannessian et al., 2021). The valence of social media experiences also predicts fluctuations in adolescents' self-esteem (Valkenburg et al., 2021). However, existing literature often examines correlates in isolation, leaving it unclear which variables within related domains (e.g., temperament, psychopathological symptoms and related traits, interpersonal functioning) are uniquely associated with social comparison and feedback-seeking and negative social media experiences. My present study aims to identify unique correlates of (1) engaging in social media use for social comparison and feedback-seeking and (2) both negative and positive social media experiences on social media.

B.R.I.D.G.E.S
1st Place Poster Winner

Using data from a community sample of 18-year-olds (The Stony Brook Temperament Study; Klein & Finsaas, 2017), we examined associations between adolescent temperament, psychopathological symptoms and related traits, and interpersonal functioning and motivations for SMU and experiences on social media. Adolescents completed the Motivations for Electronic Interaction Scale: Social Comparison and Feedback-Seeking (Nesi et al., 2015) and the Positive and Negative Social Media Experiences Scales (Nesi et al., 2022), as well as a host of measures of personality, symptoms, and social functioning. The aforementioned correlates of interest at age 18 were entered in domain-based linear regression models (e.g., personality, symptoms, symptom-related traits, interpersonal functioning), with sex as a covariate, to identify unique correlates of social comparison and feedback-seeking and negative and positive social media experiences.

Greater social comparison and feedback-seeking were predicted by higher negative emotionality ($\beta = .17$, $p = .02$), disinhibition ($\beta = .26$, $p \leq .001$), depressive ($\beta = .25$, $p \leq .001$) and anxiety symptoms ($\beta = .21$, $p \leq .001$), appetite gain ($\beta = .35$, $p \leq .001$), excessive

Lauren Rothburd, First Place Poster Winner, stands next to her research poster.

reassurance-seeking ($\beta = .42$, $p \leq .001$), irritability ($\beta = .18$, $p \leq .001$), loneliness ($\beta = .15$, $p = .006$), and relational discord ($\beta = .18$, $p = .002$). More negative social media experiences were predicted by higher negative emotionality ($\beta = .25$, $p \leq .001$), disinhibition ($\beta = .20$, $p \leq .001$), depressive ($\beta = .44$, $p \leq .001$) and anxiety symptoms ($\beta = .43$, $p \leq .001$), appetite gain ($\beta = .21$, $p \leq .001$), excessive reassurance-seeking ($\beta = .31$, $p \leq .001$), irritability ($\beta = .30$, $p \leq .001$), loneliness ($\beta = .29$, $p \leq .001$), and relational discord ($\beta = .27$, $p \leq .001$). Results for positive social media experiences were primarily significant in the opposite direction.

Adolescents' social comparison and feedback-seeking and their negative social media experiences were uniquely associated with affective and behavioral vulnerabilities, internalizing symptoms, and interpersonal difficulties, highlighting the multifaceted nature of risk in social media use.

The second portion of this study, which is in progress, involves examining the same variables and how they are similar or different three years later, at age 21. Specifically, we are interested in how variables at age 18 predict social media use and experiences at age 21, while also controlling for age 18 social media use. Stay tuned!

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Uncovering *P. aeruginosa* NosP's Role in Biofilm Dispersal *via* Pyocyanin Profiling of Functional Residues

Lily Cam | PhD Student
Department of Chemistry

B.R.I.D.G.E.S
2nd Place Poster Winner

Multidrug-resistant pathogens have become a major global health threat. One of the most dangerous groups of these pathogens is captured in the ESKAPE acronym, which includes *Pseudomonas aeruginosa (PA14)*, a bacterium known for causing difficult-to-treat infections. During infection, P. aeruginosa forms biofilms—structured communities of bacteria that adhere to surfaces and to each other through secreted polymeric substances. These biofilms create a protective matrix composed of molecules ranging from small sugars to large macromolecules such as extracellular DNA and proteins, allowing bacteria to evade immune defenses and resist multiple antibiotics.

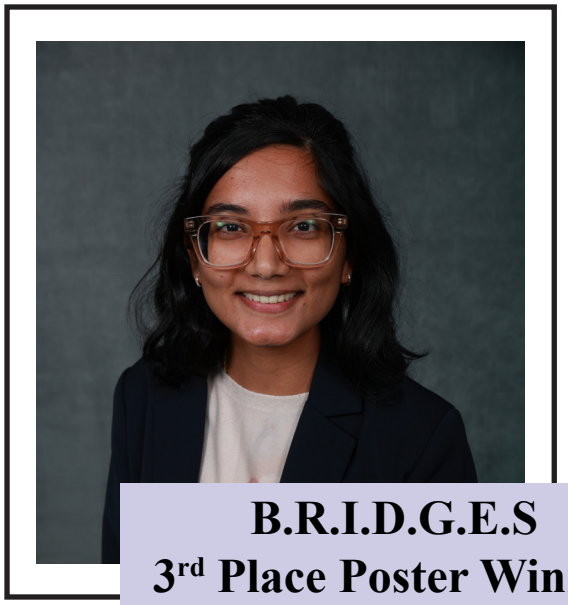
As biofilms mature, some bacterial cells transition from a sessile biofilm state to a planktonic state, dispersing into the surrounding environment where they become more susceptible to antimicrobial treatments. Nitric oxide (NO), a small signaling molecule, has been shown to trigger this dispersal response. In the Boon lab, NosP has been identified as a nitric oxide–sensing protein that, when bound to heme, inhibits its co-cistronic histidine kinase (NahK) upstream of the global post-transcriptional regulator RsmA. This signaling cascade modulates expression of the genes governing the shift between biofilm-associated and planktonic states and regulates a signaling pathway controlling the transition between biofilm and planktonic states.

My research focuses on characterizing NosP activity in *P. aeruginosa.* I developed a functional assay that measures production of pyocyanin, a phenazine pigment that can be quantified spectroscopically. Overexpression of NosP produced pyocyanin levels similar to those observed when the kinase NahK is deleted, validating the assay as a platform for studying NosP function. By screening mutant variants of NosP, this approach enables the identification of residues critical for protein activity and provides insight into mechanisms that could ultimately inform strategies for combating biofilm-associated infections.

Woven Bone-Mimicking Organoids as a Preclinical Platform and Therapeutic Construct for Bone Repair

Sai Aishwarya Abasolo | PhD Student
Department of Biomedical Engineering

My research focuses on understanding early bone development and creating tissue engineering models to study bone formation and repair. Bone constantly remodels itself, yet the earliest stages of its formation are difficult to study using traditional 2D cell culture. A key phase is woven bone, an early form that appears during embryonic development and fracture healing. Woven bone forms through the merging of mesenchymal stem cell (MSC) clusters, which gradually differentiate into osteoblasts. Understanding this process is important for studying bone development, evaluating drugs that stimulate bone growth, testing osteogenic biomaterials, and developing treatments for bone injuries. My work explores bone organoid models that better capture the spatial organization of MSC clustering and osteogenesis.



B.R.I.D.G.E.S
3rd Place Poster Winner

To address this challenge, we developed a woven bone-mimicking organoid model inspired by the natural process of intramembranous ossification. In this system, small clusters of MSCs are inserted into a soft gel matrix called Matrigel, allowing the cells to grow and connect while maintaining a spatial structure that resembles early bone formation. These clusters act as focal points of growth and osteogenic activity. The organoids are then cultured in a specialized osteogenic medium that guides the MSCs to differentiate into osteoblasts and produce bone-like tissue.

Compared to existing bone organoid approaches involving a homogenous suspension of MSCs, these woven bone-mimicking organoids demonstrated improved performance in culture. Our novel fabrication method allowed the cells to survive longer and maintain higher levels of osteoblast activity, whereas traditional homogeneous cell suspensions often experience increased cell death and reduced osteogenic function. To further evaluate the potential of these organoids as therapeutic constructs, they were implanted into critical-size mouse skull defects, which are bone injuries too large for the body to repair naturally. In these experiments, organoids fabricated from MSC clusters also showed improved cell viability, sustained osteogenic activity, and greater bone defect coverage. Together, these results suggest that spatially organized stem cell clusters play an important role in early bone formation and may be useful for developing new regenerative therapies. Beyond serving as a platform for studying bone development, this organoid system may also help researchers evaluate new biomaterials, drugs, or regenerative strategies that target early stages of bone repair.

¡Capicu!

Issack Cintrón | MFA Student
Department of Creative Writing, Film and Television

B.R.I.D.G.E.S Film Winner

When my great-grandmother passed away in 2022, it was the first death in my family in nearly 40 years. After Bisí's passing, my family gathered to clean out her apartment, and in sorting through her belongings we rediscovered some items that sparked memories and some impromptu story circles. It was as if her possessions teleported us to times we seemingly took for granted.

Over the next two years, my family would say goodbye to her husband, her sister-in-law, and my grandfather. The sudden loss of an entire generation profoundly impacted my close-knit family's dynamic. The grief we shared brought us even closer together and more appreciative of the time we have with one another.

In the summer prior to this film, I asked my grandmother to play dominoes with me. She only agreed after I pointed out that we had never played together before. Soon enough, we were engaged in some fiercely competitive games, with me determined to prove myself and her determined to reassert her role as the matriarch. In the end, what we gained was a memory. In those games I was a kid again. Learning to dance salsa with her, helping decorate her table for Thanksgiving, taking countless trips down to Virginia to see her mother and sisters. *¡Capicu!* was born out of that love. For my grandmother, for my family, and for the memories that keep us tethered.

¡Capicu! follows a grieving Francisco as he cleans out his late grandmother's apartment with his son, Dominic. When Francisco discovers Amelia's domino set, he is pulled into a vivid childhood memory of the first time they played together, presented as a heightened sports broadcast. When the memory ends, Francisco is left at the table with his son, ready to pass the game and the tradition forward.

A moment from Issack Cintrón's *¡Capicu!* (2026).

Beaver Jesus

Benjamin Truong | MFA Student
Department of Art

B.R.I.D.G.E.S Art Winner

Why are things the way they are? Are things we perceive today the way they have always been? And if not, what were they like in the past? My art, in its essence, is etiology, etymology, and mythology. I am interested in the origin of all things and their definitions over time. I became inspired by all things that are now foreign, unheard of, underrepresented, or censored in our modern Western culture. I reference history and storytelling in my work through the use of iconography from different cultures around the world. I think that, if a "picture is worth a thousand words," then the inverse should be true.

When producing art, I have a tendency to work with mental images of subjects that I have studied and memorized in the past. I believe that many artists end up creating work with ingredients that have already been laid out for them without questioning them, while I have the tendency to question the ingredients themselves. When depicting two lovers, why does a man and a woman typically come to mind? When imagining a family pet, why does a dog or cat come to mind? When depicting death, why is the first thing most people think of human remains or disease? My desire with my work is to alter these preconceived ideas of imagery. Within my artwork, I am always seeking new and interesting ways of depicting something.

My main current goals are to continue to exhibit my artwork and teach. Within my field, physical spaces where art can be produced and shown are vital. I personally believe that art is losing its place to efficiency and "cost-effectiveness." The aesthetics of our modern world are a shadow of what they once were in the early 2000s. Therefore, my long-term dream would be to somehow combat that issue.

Benjamin Troung's award-winning artwork, *Beaver Jesus*.

The Essential Biomolecule

Saheed Lawal | PhD Student
Department of Neurobiology and Behavior

Sometimes conserved across species,
Destined for a specific, noble thesis.
Coded, encrypted, nucleotides' verse,
Within the nucleus, where I traverse.
Awaiting synthesis signal, confined yet wise,
Yearning for liberation from nuclear ties.

Assembled in ribosomal artisanry,
Crafted by Golgi's skilled delivery.
Directed to varied paths, with grace,
A servant to my environment's embrace.
Sent afar, to fulfill a distant plight,
A cellular molecule, yet so much more in sight.

Navigating an immense, purposeful course,
Messenger, signaler, with potent force.
Accelerating reactions, aiding transit's stride,
Initiating change, where chaos may reside.
Beyond a block, I shape life's design,
An architect of fate, in this grand design.

Synthesis, not a constant, unbroken chain,
Regulated by forces, both internal and external.
Responding to cellular beck and call,
Resting upon completion, duty's thrall.
Halted at times, to safeguard the whole,
My production rate, subject to nature's scroll.

In purification's embrace, handle with care,
Balancing harshness, gentleness rare.
Mindful of my properties, both known and unknown,
Protected in purity, my essence is shown.
A gift to humankind, I surrender true,
An essential biomolecule, protein I'm named.

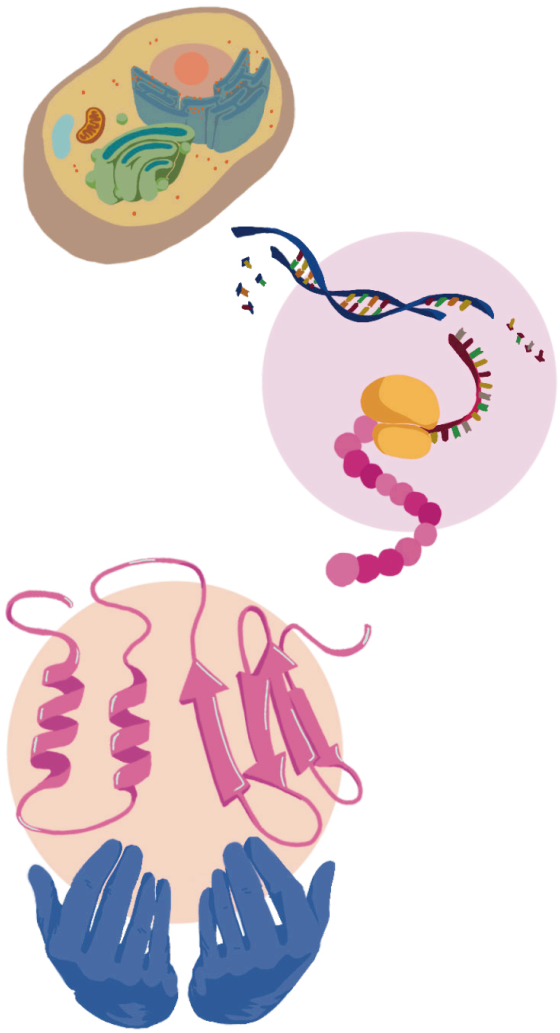


Illustration by Ming-Wei Chou

3 DAYS BEHIND

Lora René Tucker | MFA Student
Department of Creative Writing, Film and Television

There are days
when Thursdays feel like Mondays
time moves on an angle
dropping memories in the
cracks between thoughts that widen
like fissures reacting to seismic yawns.

There were times that
I used to live worrying about
the present becoming extinct.

Now
when standing at my event horizon
I don't look for hope in my handbag
or other's pockets
I hide my rainbow under my shirt
and leave against clinical advice.

No one will steal my
joy
bliss
self.

Illustration by Manahil Chaudhry

Translationally Medicated

Gina Rizzo | PhD Student
Department of Neurobiology and Behavior

Scientists pursue research to explore the unknown, driven by a desire to understand the world and use that knowledge to better society. My path into neuroscience followed this same motivation, but it was also shaped by a desire to understand my own experiences. At eighteen years old, I began working in neuroscience research labs, and around the same time, I was diagnosed with bipolar II disorder. During this time at my undergraduate university, I struggled to go to classes and keep up with coursework. For me, working in labs focused on neuropsychiatric disorders extended beyond an academic purpose: it motivated me and provided a sense of connection that solidified my commitment to pursuing neuroscience and enrolling in graduate school. This allowed me to apply myself more academically and gave me a tangible goal to pursue while also feeling less isolated in my diagnosis. Still, despite this clarity, the process of entering graduate school became a hurdle I was not fully prepared to face.

Starting graduate school in the fall of 2022 was both the most rewarding and challenging time in my life. I relocated to a new environment with no support system and immersed myself in a real academic career. The weight of my unmanaged mental health became overwhelming, and as the semester progressed, I felt increasingly unwell and unsure of how to move forward.

Everything shifted when I finally received the right professional care. A new therapy involving Esketamine, a compound related to ketamine, had recently emerged and offered an alternative for individuals, like myself, who have not responded well to traditional medications. This period coincided with my beginning Esketamine treatments right as I joined a research group studying NMDA receptors (NMDARs), the primary target of Esketamine.

My current research focuses on neurodevelopmental disorders rooted in NMDAR disruption. As the major excitatory receptors in the brain, NMDARs are essential for learning, memory, and neural communication. They are also heavily involved in synaptic plasticity, which is the brain's ability to rewire, adapt, and form new connections, a term that has also gained broader attention outside of clinical research. For people with treatment-resistant mental illness, these pathways function differently, creating patterns that are difficult to shift. This is why Esketamine has demonstrated efficacy in treatment resistant individuals. Esketamine temporarily alters how NMDARs respond and opens a window in which new, healthier patterns can form. During Esketamine treatment, providers guide patients through calming, positive experiences and these steps help the brain strengthen those connections.

Working in a lab where my research has clear translational relevance is deeply meaningful to me. The work I do focuses on populations affected by NMDAR disruption, with the goal of identifying mechanisms and therapeutic strategies that can improve quality of life. Being able to study these receptors at a mechanistic level while knowing that similar pathways are targeted in clinical care has strengthened my commitment to translational neuroscience. Much like in my own experience, advances in NMDAR research and medication development have the potential to fundamentally change lives.

During a time when I struggled to get out of bed to go to my graduate courses and rotations, these treatments changed my mood and outlook on my life. Going to class no longer felt burdensome, but more of an opportunity to see my supportive friends. Rotations no longer generated a sense of dread, but rather inspired

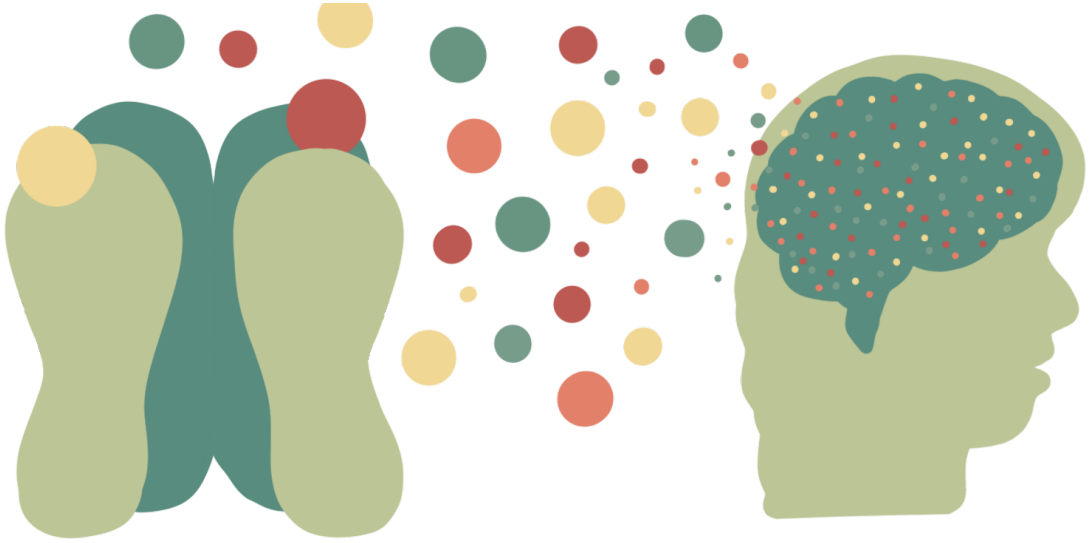


Illustration by Gina Rizzo

me to learn more about my research. I became grateful for where I was and the people I had in my life–a shift that is often difficult for individuals with treatment-resistant depression.

Living with untreated mental health challenges in academia presents significant challenges. Expectations are high, deadlines are constant, and all of this unfolds while students are adjusting to the demands of new environments and responsibilities. Bipolar II, unlike bipolar I, is shaped mainly by long stretches of depression, and for students navigating these lows, even basic academic demands can become overwhelming. Being a neuroscientist, though, has provided a framework for interpreting my own behaviors. Understanding the circuitry behind mood and motivation has shown me that I have some degree of control over my emotional patterns, and that my struggles are rooted in biology rather than personal failure. That knowledge has softened my internal stigma and made me more compassionate toward myself.

Esketamine treatments have truly reshaped my life. Before starting them, I had not realized it was possible to wake up with a genuine sense of motivation to begin the day. Suddenly, routine tasks became manageable again. Doing my laundry was no longer impossible, and making it to a 9 a.m. lecture no longer felt out of reach. Because NMDARs are so deeply involved in how we think and respond to the world, these treatments, done in a safe, positive environment, create a form of emotional reinforcement that functions similarly to muscle memory. During sessions, I surround myself with familiar and grounding music or call supportive friends to reinforce the idea that there are still bright, grounding experiences in the world around me.

Working with NMDARs in the lab while simultaneously experiencing their effects in my own treatment created an unexpected bridge between my identities as researcher and patient. Understanding the receptor-level mechanisms behind my symptoms did not just make me more scientifically curious; it made me a more empowered, educated patient. It allowed me to approach my own mental health with the same clarity, precision, and compassion that I apply to my research. It also helped me empathize more deeply with individuals whose disorders arise from NMDAR dysfunction; their biology differs from mine, but the underlying path toward stability, function, and self-understanding is shared.

The stigma I carried for so long has dissolved in the presence of colleagues who respect both my work and my lived experience. With a deeper understanding of NMDARs and their impact on mental health, I have learned not only to speak openly about my treatment, but to understand my brain more intimately and compassionately.

Fishing for Solutions to Human-Caused Whale Deaths

Abigail Costigan | PhD Student
School of Marine and Atmospheric Sciences

Lucky was a North Atlantic right whale and her mother's first calf. At just a few months old, Lucky was hit by a ship and the propellers cut her deeply. She got her name because she survived, and lived with jagged scars for fourteen years, until she became pregnant with her own calf. The weight gain put pressure on her lacerations, causing her old scars to reopen. She died in 2005.

Ship strikes are common in Lucky's species and family. Her aunt, Reyna, was carrying a full-term fetus when a ship hit her. Their skeletons are now on display at the New Bedford Whaling Museum. In 2023, Lucky's brother was killed by a catastrophic blunt force trauma: a vessel hit him, separating and fracturing his spine. Magic, Lucky's mother, has been entangled in fishing gear twice. Her immediate family has suffered 27 entanglements in fishing gear and three fatal vessel strikes. But Magic perseveres: on January 16, 2026, she was seen with her youngest calf. Lucky's tragic family history is not unique among the estimated 384 remaining North Atlantic right whales (National Oceanic and Atmospheric Administration [NOAA], 2026). Since 2017, twenty-seven known vessel strikes and fifteen other related deaths have occurred (NOAA, 2024). Container vessel traffic has also increased substantially on the U.S. East Coast, especially in New York and Virginia, both of which are hotspots for cetacean vessel strikes (Rockwood et al., 2017).

Now NOAA wants to strike down a 2008 vessel speed restriction aimed at preventing and reducing the severity of vessel strikes to right whales (NOAA, 2008). The original ruling limited all ships 65 ft or over to 10 knots during certain areas and times along the east coast (NOAA, 2008). The proposal calls to "modernize" the vessel speed rule by revoking the 10-knot speed limit and introducing technical solutions. However, there are no technical solutions that reduce vessel strike risk as effectively as the 10-knot rule. A recent federal proposal to expand these speed restrictions to vessels 35 ft or larger was withdrawn before it could be finalized, leaving the original 2008 rule in place. Without these speed restrictions, more whale families will be left shredded and scarred.

Ship strikes and entanglement in fishing gear are the biggest threats to right whales. Reducing these problems is frustratingly within reach if only we had the policy imperative to do so. Instead, we value efficiency over all else, jeopardizing biodiversity and fueling extinction across all domains of life.

By the end of February, 2026, there had already been two known right whale deaths. A four-year-old male named Division died from entanglement in fishing gear, and a three-year-old female was found stranded in Virginia. Another calf, born in 2025 to Monarch, has also been found entangled this year (National Oceanic and Atmospheric Administration [NOAA], 2026). Something clearly needs to change, yet in our often prepackaged world, I cannot advocate for simple abstinence from fishing.

Catching, killing, and cleaning my own food has become an important part of my life through the mentorship of Dr. Carl Safina, the Endowed Research Chair for Nature and Humanity at SoMAS. He has taught me how to read the water, watch the birds, and find fish, but the most important lessons are all beneath the surface of

the hard skills. Fishing puts our connection to nature in blunt terms that can not be ignored. In our prepackaged world, it is easy to forget that we are part of the web of life, not puppetmasters. An added bonus is that this pursuit sometimes puts me in the proximity of whales.

On an especially memorable August morning, while fishing eight miles offshore on Carl's boat, a great exhale filled the air, creating a pungent fishy cloud followed by another and another. We were surrounded by whales, but in the dim light, the world's biggest animals cannot be seen—only heard, smelled, and felt. I kept jigging, trying to convince the fish below that the beige rubber attached to my line was really a sand eel. The whales, the fish, and I are all here for the same reason: to eat.

As light unfurled across the horizon, we could finally see the whales. We made out about a dozen humpbacks and three fin whales. Their presence charges the atmosphere. Shearwaters swoop, grabbing fish forced up by the whales while storm petrels skip across the surface of the water, skimming for copepods. We are interrupting the delicate dance of real fishers with our clumsy lines and lures. "Fish on!" I hear, quickly reeling in my line to assist with the landing. Midway through, I hook up too. One bluefin tuna for the cooler, one released to live another day, all before 7:00 am.

From our typically terrestrial vantage point, the ocean looks like a single, albeit large, entity. But in reality, it is comprised of vast spatial differences. Ecologically productive areas of the ocean force fish, people, and whales into close range. Fishing brings humans into contact with whales, instilling a sense of awe and wonder, but also leading to potential negative interactions. These clashes can involve competition over the same prey—for example, depredation, like a sperm whale snagging a meal off a tuna longliner—and entanglement, like when a harbor porpoise gets entrapped in purse-seine nets, aiming for the same herring the fishermen are after.

But in the decades-long saga of the American lobster fishery versus the right whale, entanglement does not involve a food fight. Right whales are skim feeders, swimming slowly with their huge mouths open, trapping tiny copepods and other zooplankton in their fine, hair-like plates of baleen. In contrast, lobsters stick to the sea floor, feeding on anything they can get, dead or alive. They should not have a conflict, but when lobstermen set traps connected to surface buoys with lines, they connect the surface and benthos. In the productive Gulf of Maine, traps are very common, creating a dangerous obstacle course for right whales migrating through or foraging in this area.

Entanglement has many alarming consequences for North American right whales. It can result in a slow death from starvation if the rope gets wrapped around a whale's mouth (Knowlton et al., 2012). The exhaustion of carrying heavy traps can leave whales unable to surface for air, leading to drowning. Alternatively, a female could survive entanglement but be too thin and weak to give birth to a calf. For a species with only an estimated 380 individuals, reductions in calving rates are a sentence for extinction (Pace et al., 2017).

North Atlantic right whales were historically heavily exploited by whalers, as their high blubber content boils down into valuable whale oil. Basque whalers began hunting them in the eleventh century, and they, along with other Europeans, pursued them across the Atlantic to Newfoundland by the mid-fifteenth century. Heavy exploitation has led to the extirpation of European right whales. They unfortunately made easy targets, sticking close to the coast, where their prey aggregates. They even float when dead, politely allowing whalers to get them ashore. Now, though we shudder at the thought of killing whales, entanglement is a far crueler fate that does not receive the same visceral reaction, despite having the same dire consequences for whale populations. No one, including fishermen, wants to see whales suffer. But we are all responsible for their demise when we fail to support the few regulatory interventions in place to protect them.

North Atlantic right whales have a new nickname, "the urban whale." Their home along the continental shelf from Canada to Florida intersects with fertile fishing grounds, military training areas, recreational boating zones, and some of the busiest shipping routes in

the world. While they no longer have to worry about harpoons, they do have to navigate overcrowded seas, play a dangerous game of leapfrog to avoid ships, and weave through fishing gear while foraging.

Reducing the risk of entanglement to right whales must include buy-in from fishermen. It hinges on finding economically viable solutions for fishermen, whose businesses are typically owner-operated and passed down through generations. This includes evaluating the efficacy of innovative gear that reduces the time a line is in the water by sinking the buoy with the trap, allowing fishermen to remotely release it to retrieve the trap, thereby reducing the amount of time rope spends in the water column.

Research plays a key role. By analyzing catch data over long periods, we can model how lobster distributions are expected to shift with warming waters and predict where the fishery is likely to overlap with right whales in the near future. But the utility of our academic study of the temporal and spatial processes underlying patterns of species distribution is limited unless we maintain open lines of communication with fishermen.

Fishing is so much more than catching fish and making money. It incorporates cultural traditions, family heritage, and a deep connection to the ocean. When conflict arises, we must work with fishermen to find solutions that are tenable while holding other businesses, like the shipping industry, accountable. This work is messy, interpersonal, and difficult, but much better than the alternative: maiming and killing whales.

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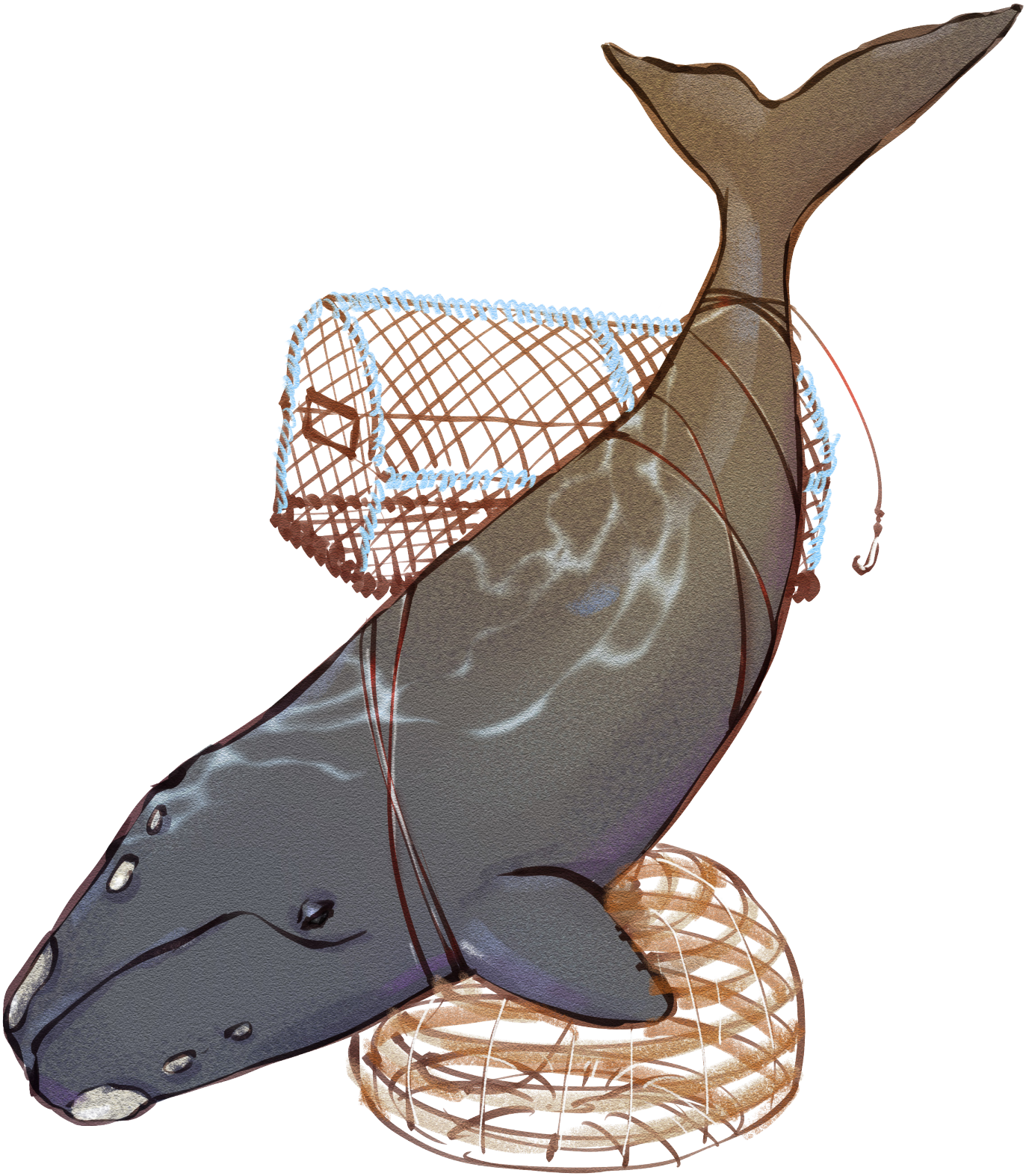

Illustration by Kejia Xie

Building a Research Portfolio That Builds on Itself

Dana Golden | PhD Student
Department of Economics

As graduate students, we are led to believe that success is about checking boxes and consistent progress. The road to finding a niche is the exact opposite of a straight line. The path involves the realization that some questions hold your attention while others quietly lose their grip. Along the way, it is easy to accumulate a scattered collection of papers that are not relevant. You can feel you did everything right, create a portfolio that looks busy, but actually lacks direction.

Here, I examine the alternative: building a research portfolio where the pieces reinforce one another. Expertise from one project spills over into the next, and where the whole adds up to more than the sum of its parts. I draw from my own experiences of finding my way to electricity market research. I outline principles that apply across disciplines. Know what excites you, test your fit before committing, build around a core question, and learn when to let go.

Know What Kind of Problems Excite You

Before you can choose a research area, you should know what kind of work excites you. Do not pick a topic from a list of trending fields. Focus on honest self-assessment. Does empirical research drive more interest, or do you prefer theoretical structures? Does working in a field where the core questions may be settled excite you, or do you yearn for one where the landscape is shifting fast enough to sustain interest and curiosity for decades?

I learned this about myself during two years as an agricultural economist at the USDA Economic Research Service. There, I learned that I thrive on high-frequency data, physical systems with real constraints, and problems that evolve over time. Crop markets had an interesting structure, but the fundamental dynamics felt static relative to what I needed. I realized I need a technical and rapidly evolving field to sustain my curiosity over time.

If you can articulate what you want in a research area, including the type of data, pace of change, and a preference of theoretical or empirical work. This way you can evaluate fields systematically and engage in research with passion, curiosity and genuine interest.

Test Your Fit Before You Commit

Self-reflection has limits. At some point, you should gain hands-on experience in a field to understand the fit. Strategic internships, research assistantships, and short-term collaborations can serve as low-pressure, high-reward opportunities before investing years in a field.

The pivotal moment for me came during a summer internship at the Federal Energy Regulatory Commission (FERC), which regulates wholesale electricity markets in the United States. Initially, I was not committed to the electricity markets. What convinced me was not a lecture or a paper, but an electricity market simulation run for FERC employees. Participants manage portfolios of generating assets, competing to supply power to a simulated grid. I watched prices spike during periods of transmission congestion, and competitors adjusting their bidding strategies in real time. At this moment, I knew I wanted to spend the rest of my life staring at data on the grid.

Electricity markets combined and offered everything I had been looking for. Commodity market dynamics and physical constraints that create strategic complexity, high-frequency data, and a policy landscape undergoing rapid transformation. Importantly, I could see that the

field would continue to generate new questions for decades, so I could stay passionate and engaged in this field for the long term.

The broader principle is simple: treat early-stage exploration as hypothesis testing. If you think a field might be right for you, find a way to do the work briefly before committing to the long-term investment in research. The cost of a summer spent figuring out your goals is small relative to the cost of discovering a poor fit three years into a research field.

Build Around a Core Question

Once you decide on a field, the next challenge is constructing a coherent set of projects. Many students spend graduate school accumulating papers opportunistically. They will contribute to one project with an advisor, another from a methods class, and a third from available data. Suddenly, they have written a dissertation that is unclear and lacks structure. The result can be a CV with many lines but no story.

An alternative is to organize your portfolio around a central question or theme so projects connect and inform each other. Find what excites you, then explore it from multiple angles. In my case, the unifying thread of my research is how physical infrastructure, policy, and economic incentives interact to shape energy markets. My dissertation examines how transmission capacity affects where and when generators invest. A collaboration with engineers allowed me to study the technical and economic dimensions of connecting offshore wind farms to the grid. A project with my advisor investigates how industrial policy drove cost reductions in solar panel manufacturing. A newer collaborative project with computer scientists examines how artificial intelligence is affecting electricity demand and grid reliability.

These projects span different technologies, methods, and co-authors, but share a common logic. Each explores a different dimension of how physical constraints shape energy markets. Having a common thread is the difference between a structured dissertation and a set of random research projects. It shows expertise from one project that transfers to the next. Institutional knowledge about grid operations from the transmission work informs the AI project. Structural estimation techniques developed for solar panel markets carry over to the dissertation analysis. The portfolio compounds rather than fragments.

You do not need to plan this architecture in advance. In practice, coherence often emerges gradually as you recognize how emerging opportunities connect to what you already know. The key is to ask: Does this new project deepen your expertise or pull you to an unrelated direction? Both answers can be valid, but you must make the choice deliberately.

Let Your Methods Spill Over

Methodological spillovers are a dramatically underappreciated benefit of a coherent and well-structured portfolio. When your projects share analytical approaches, the fixed cost of learning a technique gets amortized across multiple papers. You become skilled at a set of tools rather than a novice in many.

For instance, several of my projects involve estimating dynamic structural models of decision-making under uncertainty. Firms decide when and where to build power plants. Manufacturers choose how aggressively to expand capacity. The government decides how to help firms make a socially conscious decision. The modeling frameworks look the same even when the policy questions are different. Each project deepens fluency with the approach, which in turn makes the next project more impressive.

This is not an argument for methodological narrowness and intense constraint. It is an argument to be cognizant of the value of your time and intentional about which new tools you invest in learning. Should you invest in a technique that serves only one project or one that opens doors across your portfolio?

Know When to Drop a Project

Not every project you start will succeed. Learning to abandon unproductive work is as important as choosing

productive work. This is one of the hardest skills to develop in graduate school, partly because the months of effort make it difficult to walk away. However, delaying the decision will bring more harm than good.

Some difficulties are signs that you are working on something valuable. Like computational problems that respond to persistence, tedious datasets that produce a unique resource, or tricky identification strategies that eventually come together. Other difficulties are signs that reallocation would be wise: data that does not exist, research questions whose policy relevance has evaporated, and projects that remain disengaged despite constant efforts.

I once spent several months on a project trying to use game theory to examine the behavior of grain silos, only to discover there was no way to get data on the amount of grain held. Letting it go freed up time for research that mattered, like the AI and power systems project, which has been far more tractable and productive. The judgment to distinguish these cases develops with experience, honesty, and self-reflection. It helps to have trusted advisors and peers who can offer advice and new perspectives.

Own Your Research Direction

Perhaps the most important takeaway here is that there is a difference between a research direction you actively shape and one that shapes itself passively. There are many ways to lose control of your research identity. You can follow trending topics on the job market, accumulate side projects that do not connect to your main work, or have an advisor decide what you study.

None of these routes is inherently bad. Some are embedded in certain fields. Advisors often have strong instincts about productive questions, and responsiveness to the job market is a highly rational behavior. The danger is passivity. You must actively curate your portfolio, even if you have limited independence over the types of work you can do. The projects you take on today can both expand and constrain future options. Treating project selection as a deliberate decision is one of the most consequential choices you will make in graduate school.

Looking Forward

A coherent research portfolio is not just a set of CV line items. It crafts intellectual identity. It is a reflection of you, expressed through a set of questions, methods, and commitments that give your work direction and highlight your unique value. Building one takes time, self-awareness, and the willingness to say no to projects that do not fit.

Maybe you are early in your program and still need directions. Maybe it feels like every other graduate student is “ahead” of you. Here are a few questions worth sitting with: What kind of problems captivate you? Have you tested your interest through direct experience? When a project is not working, are you struggling productively, or are there other issues?

There are no correct answers here. What matters is asking them deliberately. Instead of allowing your portfolio to assemble itself by accident, curate your research story. This is the difference between work that you are proud and passionate about and work that feels meaningless and directionless.

Illustration by Ming-Wei Chou

Bridge

Isabel Keleti | DMA Student
Department of Music

When I miss you,
I think of Brooklyn Bridge.
There, our glories lived
along the water's edge,
where Walt Whitman wrote
of thousands before us
and thousands to come.
But we were there—
bestowing thousands of kisses.

When I miss you,
I recall simple kitchen joys:
your imperfect doll,
miming a salsa's steps,
tossed when my triumph is yours,
the lightness of heaven
on your shoulders,
I taste shimmering red Hibiscus tea—
too hot to drink. plucked
marshmallow threads
from flushed cheeks,
I hear Lorca reverberate
in your chest's sighs,
duetting piano-tinkled lullabies,
to sleep and awaken
with your hand holding mine

When I miss you,
I lie in the dark, cuticles torn,
grasping for you in dreams, forlorn.
Like over-steeped and bitter tea,
I remember the unsolvable problem you
gave me:
a city of seven B.R.I.D.G.E.S, paths
undone
when to cross, we needed
only one.

Illustration by Ming-Wei Chou

A Truth Shared for Reasons Unknown

LJ Shabazz | PhD Student
Department of Chemistry

Confounded by what is reality,
Retreat in any such fashion seems the key to bliss.
The reader of hundreds of books, the watcher of thousands of episodes,
Finds only fleeting escape from the constant, yet ever-moving society that constricts one in place.
No man nor woman can ever be free of these bounds,
For it is other men and women who fabricate the means of apparent vacation.
There is no place for the key to be inserted,
Nor is there truly a key to be grasped,
But that's not to say existence is a futile matter.
Absorption of the minds of those around you,
And even of those from afar and previous, expand and shape our own.
Through this web of consciousness,
Each individual's role is continuously evolved and confirmed.
Each conversation, each laugh shared, and even every passing glance,
Is a form of recognition of one's own earthly humanness.
Simply to see– to feel any sense of surroundings, is proof.
In the cycle of feeling the harshness of being alive and fantasy,
One delves both into comfort and discomfort, what is real and what is not.
By this, one is for life, gaining experience and insight on the physical and mental level.
It is through consistency and staticity that humans fight the fear of the unknown,
And while the world around us never seems to stop,
The relative principle of it never seems to change,
Granting it its immortality.
The rule of all living things, even us who stand at the pinnacle,
Is that they must submit to one thing–mortality.
To live is to die.
It is in this that the singularity of a life is highlighted.
If a tree dies, another surely will take root.
If a person perishes, one surely will be born again.
The world itself in which we live in,
while the lives within it may be affected,
Fails to sincerely bat an eye and continues forward,
following unspoken laws and rules.
Against this stagnancy and natural indifference,
There is no illusion or imagination one can find permanent refuge in,
Yet it is only through each other and temporary distractions
that we find the will to navigate what it means to be alive.

Illustration by Srividya Pattisapu

Illuminating the Brain: Non-Invasive Neuro Monitoring

Yashwanth Pateel | MS Student
Department of Electrical and Computer Engineering

In the high stakes world of neurotrauma, monitoring a patient's brain often requires invasive procedures, including drilling into the skull to insert needle based sensors. At Stony Brook University, Dr. Ulas Sunar, a SUNY Empire Innovation Professor in the Department of Biomedical Engineering, has explored an alternative: using light to monitor the brain safely and non-invasively.

A Light Based Window into the Brain

Some of the most direct bedside measures of brain physiology are invasive, while many noninvasive tools provide only indirect or intermittent information. Dr. Sunar's innovation utilizes low energy, non-ionizing light that penetrates the skull to measure cerebral blood flow and oxygenation related signals in the brain. The system operates somewhat like ultrasound, but with light instead of sound. By sending near infrared light into tissue and analyzing the returning photons, the system can detect blood flow related changes in real time without needing an incision. The sensors rest on the surface of the head, functioning in a way that is conceptually similar to a pulse oximeter used on a fingertip.

Adopting a non-invasive approach allows for more localized measurements. Unlike standard monitors, the device can provide regional information about cerebral perfusion and brain physiology, offering higher contrast and the potential for earlier detection of physiologic deterioration. This real time feedback is critical because traumatic brain injuries often impair the brain's autoregulation, the natural ability to adjust blood flow based on activity or posture. In the long term, closing this feedback loop could help physicians make better informed bedside decisions, from adjusting medications to changing the angle of a patient's bed, to maintain critical blood flow before irreversible damage occurs.

From Lab Prototype to Clinical Device

The transition from a laboratory system to a usable medical device presents significant challenges. "We identified a clinical need and then developed the toolset to solve it," Sunar explains.

Dr. Sunar's team is working to scale the technology into a compact, FPGA-based (Field Programmable Gate Array) system. The FPGA-based processing pipeline enables rapid analysis of the optical signals in a more portable format. The goal is to replace bulky, expensive equipment with a streamlined device that offers superior data. The mission goes beyond engineering. It is about democratization. By lowering the cost and complexity of advanced optical neuromonitoring, Dr. Sunar aims to make this technology far more accessible for routine hospital use.

One long term goal is to help clinicians determine whether an unresponsive patient may still have hidden brain activity despite being unable to communicate. In other words, the technology may help distinguish between patients who are truly unresponsive and those with covert consciousness.

Bridging the Gap: From Lab Prototype to Market Reality with CurrentEdge

Yashwanth Pateel | MS Student
Department of Electrical and Computer Engineering

At Stony Brook University, Dr. Fang Luo, Empire Innovation Associate Professor in the Department of Electrical and Computer Engineering, leads a team developing new power electronics aimed at improving how different energy systems interact. Through his lab and the startup CurrentEdge, this work focuses on solid-state transformers, devices that can serve as flexible interfaces between renewable energy sources, storage systems, and the electrical grid. The project reflects a broader challenge in engineering: moving from a working prototype in the lab to a system that can operate reliably in real-world environments.

A Modular Approach to Power Conversion

Modern energy systems rely on a wide range of specialized converters, each designed for specific applications. CurrentEdge's approach replaces this fragmentation with a modular system. Their solid-state transformer acts as a multi-port energy hub, allowing multiple energy sources, such as battery storage, solar, or fuel cells, to connect through a single platform. The system is designed to be scalable, with modules that can be combined depending on power requirements.

For Gaurav Bhansali, a candidate in Dr. Luo's Lab, a key challenge is ensuring that these systems perform consistently outside controlled lab conditions, particularly in microgrid test environments.

Transitioning from Research to Deployment

Moving from academic research to a market-ready product requires more than technical performance. It involves system reliability, cost considerations, and alignment with real-world use cases.

Richard Roper, CurrentEdge's Director of Program, describes the transition as a shift in priorities In a startup environment, technical solutions must also meet constraints related to funding, timelines, and customer needs. The process can be iterative and unpredictable. Technical challenges may take weeks to resolve, requiring persistence beyond what is typically expected in academic settings.

Scaling Beyond the Lab

One of the most difficult steps for CurrentEdge is moving from a controlled prototype to a system that can operate reliably under real-world conditions. In the lab, variables can be isolated and performance can be optimized. In practice, the system must handle fluctuating loads, multiple energy sources, and integration with existing grid infrastructure.

This shift requires more than refinement. It demands rethinking how the system is designed, tested, and validated. Components must be robust, repeatable, and able to perform consistently outside of controlled environments. For the team, success is no longer defined by whether the system works once, but whether it can work continuously under changing conditions.

Looking Ahead

As CurrentEdge continues to refine its system, the team remains focused on translating research into real infrastructure. As Dr. Luo puts it, "The best time to start making an impact should be yesterday—but since I missed yesterday, now's the second-best time." In practice, that urgency is what drives the transition from prototype to deployment.

High-Fidelity Simulation for Advancing Marine Tidal Energy:

Modeling Clean Power Generation in the Long Island Sound

Hossein Seyedzadeh | PhD Student
Department of Civil Engineering

Marine renewable energy has the potential to play a transformative role in building a clean and sustainable energy future. In collaboration with Verdant Power, this research uses advanced computational modeling to support the development of tidal energy systems in the Long Island Sound.

Instead of relying solely on costly and time-intensive field deployments, this work uses high-fidelity simulations to recreate real environmental conditions, including water flow, turbine geometry, and seabed characteristics. These models make it possible to predict turbine performance, evaluate environmental interactions such as sediment movement, and test design improvements before physical installation.

By combining engineering analysis with real-world data, this research helps enable more efficient deployment of tidal energy technologies and contributes to broader efforts to strengthen regional energy resilience.

From Simulation to Sustainability

When I began my doctoral studies in Civil Engineering at Stony Brook University, I knew I wanted to pursue research that combined scientific rigor with real-world impact. My background was rooted in fluid mechanics and computational modeling, but I was looking for a way to apply those tools to problems tied to sustainability and long-term environmental responsibility.

I found that opportunity through a collaboration between Stony Brook University and Verdant Power, a company focused on advancing marine renewable energy technologies. This work introduced me to the role high-fidelity simulation can play in improving engineering design, while also showing how research is shaped by industry needs and regional sustainability goals.

My research centers on computational modeling of a utility-scale tidal farm in the Long Island Sound. These simulations allow us to study turbine performance, flow behavior, and environmental interactions without relying entirely on field deployments. Working in this space has shown me how computational tools can help develop energy solutions that are both technically effective and tailored to the needs of coastal communities.

In this article, I reflect on the core components of this work, the questions that drive it, and the ways it has shaped my experience in graduate school.

Understanding the Promise of Tidal Energy

Tidal currents offer a unique and highly predictable source of renewable energy. Unlike wind or solar power, which can fluctuate throughout the day or

across seasons, tidal flows follow consistent and cyclical patterns driven by the gravitational pull of the moon. This reliability makes tidal energy an especially promising option for regions seeking stable and dependable sources of clean power.

At the same time, designing efficient and environmentally responsible tidal turbine systems is far from straightforward. It requires a detailed understanding of how moving water interacts with turbine blades, the seabed, and the surrounding marine ecosystem. Field experiments alone cannot fully capture these dynamics. They are time-consuming, dependent on weather conditions, and limited by the challenges of collecting precise measurements underwater.

Computational modeling offers a way to bridge this gap. Using high-fidelity simulations, our team builds digital representations of tidal turbines operating under realistic flow conditions in the Long Island Sound. These models allow us to explore how turbulent currents affect power generation, how turbine wakes evolve downstream, and how multiple turbines interact within an array. They also provide insight into broader environmental questions, such as how turbine structures may influence sediment transport or fish movement, and what design adjustments could improve efficiency while reducing ecological impact.

By addressing these questions in a controlled, virtual environment, computational research supports safer and more effective deployment of tidal energy systems. It also gives engineers a flexible framework for testing new ideas and advancing the design of renewable energy technologies.

Building a High-Fidelity Digital Environment

These models are not just engineering tools. They shape decisions about where turbines should be placed, how environments should be monitored, and how systems can be deployed over time. By testing scenarios in a digital setting first, developers and policymakers can make more informed and cost-effective choices before

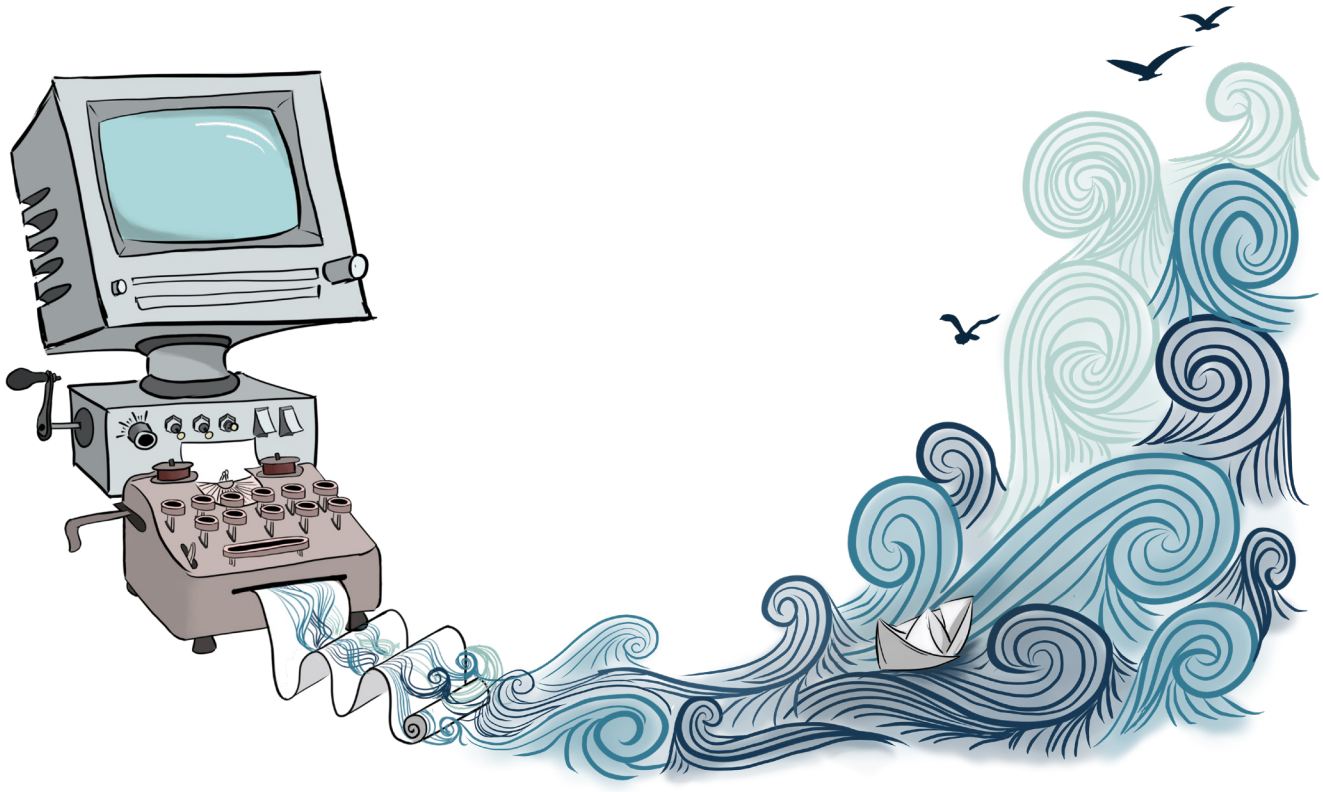

Illustration by Srividya Pattisapu

any physical installation begins.

To study turbine performance, we recreate conditions in the Long Island Sound using advanced computational fluid dynamics. This process combines multiple layers of data and modeling, requiring both technical precision and close collaboration with industry partners.

A critical part of this work is grounding the simulations in real-world data. We incorporate field measurements collected by Verdant Power, including water velocity profiles, seabed characteristics, turbine geometry, and observed tidal cycles. Integrating these inputs ensures that our models reflect real operating conditions rather than idealized assumptions, which increases confidence in the results.

One of the central challenges in this research is capturing turbulence, the complex and irregular motion of water as currents interact with the seabed and turbine structures. In tidal environments, this leads to constantly evolving eddies and vortices that affect both energy generation and ecological conditions.

To represent this behavior, we use Large-Eddy Simulation, a computational method that resolves the three-dimensional, time-varying structure of turbulent flow. Although computationally intensive, this approach allows us to analyze wake dynamics, sediment transport, near-bed shear stress, mixing patterns, and even how fish may move through turbine wakes.

Collaboration with Verdant Power plays an essential role in this process. The company has deployed turbines in the East River and brings extensive operational experience that helps guide our modeling decisions. Their perspective ensures that our work remains aligned with practical engineering challenges and real deployment constraints.

For me, this partnership has been just as valuable as the technical work itself. It has shown how computational research translates into engineering decisions and how academic work can directly support the development of real-world energy systems.

Research Outcomes and Scientific Significance

Our simulations produced several key insights that extend beyond individual experiments and directly inform how tidal energy systems can be designed and deployed. Most notably, we developed a clearer understanding of wake behavior, including how turbine wakes expand, break down, and reenergize downstream. This is especially important for multi-turbine arrays, where the performance of one turbine depends on the flow conditions created by another.

At the same time, our models allow us to predict turbine performance without relying on full-scale field testing. By recreating realistic tidal conditions computationally, we can estimate efficiency and structural loads while significantly reducing both cost and development time.

The simulations also revealed areas of elevated turbulence and shear stress, helping identify environmentally sensitive zones. These insights can guide turbine placement and inform monitoring strategies to minimize ecological impact.

Taken together, these outcomes support the development of scalable tidal energy systems and contribute to broader regional efforts to diversify renewable energy sources and strengthen coastal resilience. More broadly, this work highlights how high-fidelity simulation can accelerate clean energy deployment, reduce uncertainty in marine infrastructure design, and enable more sustainable decision-making in complex environmental systems.
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Reflection: A Transformative Academic Journey

Working on this project has shaped my experience as a graduate student in ways I did not expect.

I developed a deep appreciation for the precision and patience required to run high-fidelity simulations. A single large Large-Eddy Simulation model can take days, weeks, or even months to compute, and small changes in mesh quality or boundary conditions

can significantly affect the results. Navigating these challenges pushed me to think more critically and to become more comfortable troubleshooting complex systems.

I also came to value the role of interdisciplinary collaboration. Working with Verdant Power connected academic research with real engineering needs and showed me how computational modeling translates into practical decisions. Seeing this connection reinforced my motivation to pursue work that has a tangible impact beyond the lab.

At the same time, this project deepened my awareness of regional sustainability. The waters around Long Island hold significant potential for clean energy, and it has been meaningful to contribute to research that supports more resilient and environmentally responsible communities.

Looking Ahead

High-fidelity simulation is transforming how tidal energy systems are designed and evaluated. By recreating the physical and environmental dynamics of the Long Island Sound, this work provides a powerful tool for understanding turbine performance, environmental interactions, and opportunities for technological improvement.

More broadly, this research demonstrates how computational modeling can accelerate the development of clean energy technologies while supporting safe and sustainable design. As I complete my graduate studies, I am motivated to continue advancing simulation tools that contribute to renewable energy innovation and resilient infrastructure.

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Impressions from the Classroom and Beyond

Vibha Mane | Assistant Professor
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My impressions of students have been shaped by teaching many bright and motivated individuals at both the undergraduate and graduate levels. While undergraduate classrooms often reveal a wide range of backgrounds, ways of thinking, and approaches to learning, I have been equally struck by the drive of graduate students to transform ideas into ambitious, often complex projects. I share here a few reflections on what has stood out to me in each setting.

At the undergraduate level, what stays with me most are not just academic outcomes, but moments of engagement, questions that linger, discussions that deepen, and students whose perspectives leave a lasting impression. The following vignettes highlight a few such students, each representing a distinct background and intellectual style.

Undergraduate Perspectives

Yijiang Zhu and Xiaonan Zhang struck me as brilliant students in my Signal Processing class. They came to Stony Brook through the Anhui University–Stony Brook Institute, a collaborative program established with the support of C. N. Yang. Yijiang has since developed a strong interest in time–frequency analysis and continues to work with me on a wavelet-based project involving brain signals.

Eric Yang brought a distinctive energy to several of my classes. He asked many questions throughout each lecture, keeping discussions lively and intellectually demanding, and he consistently solved some of the most challenging problems on exams. He believes his willingness to ask questions reflects the vulnerability required to express oneself and truly learn. A classroom feels richer with a student like him.

Pedram Kayedpour often stayed after class to continue our discussions. His intellectual curiosity runs deep; he is eager to connect ideas across disciplines, for example, by linking what he learned about entropy in physics with our treatment of entropy in information theory. Hailing from Iran, he describes himself as a people person who enjoys making connections with his professors and peers.

Ahmik Muhammad regularly asked questions or offered comments that anticipated ideas I planned to introduce in future lectures, a sign that he was actively thinking ahead. His description of the Signal Processing course as "peeling back the curtain" on functions, viewing their components at various resolutions, captured exactly the depth of understanding I hope students take away. He also pursues leadership as Vice President of our campus's National Society of Black Engineers (NSBE) chapter.

Esther Bonilla Corniel and Emily Hsieh often sat together, listening closely and asking thoughtful questions. Their quiet collaboration and steady engagement were evident throughout the semester. It was perhaps no surprise that they emerged as among the strongest performers in a class of over one hundred students. Emily exemplifies the "whole student," pairing technical talent with creative pursuits such as acting and music.

Stanley Cokro often stopped by for discussions beyond the classroom. He described a "Pi Day" bicycle experiment in which he used Fourier analysis of the buzzing sound produced as the grooves on his tire struck the pavement to estimate his riding speed, even incorporating the constant π into his calculations.

From Inquiry to Creation

While undergraduates provide the spark of inquiry, graduate students bring a different but equally compelling form of engagement. They arrive deeply motivated not just to learn concepts, but to build something substantial. Many come well prepared, with strong Python programming skills and prior exposure to machine learning through coursework or online study. This readiness has turned the classroom into an environment where ideas are built, tested, and refined, rather than simply absorbed.

Graduate Work and Exploration

It was out of this environment that the course "Practical Machine Learning (ML) and Artificial Intelligence (AI)" was born. In this class, students propose their own projects, and my role becomes one of guidance: helping refine ideas into ambitious yet feasible projects while encouraging depth over breadth. The results have been remarkable, ranging from real-time American Sign Language recognition to large-scale visual landmark retrieval and topic modeling of NeurIPS conference abstracts. What stands out is both the technical sophistication of these efforts and the ownership students take in carrying ideas from conception to implementation.

Gokul Ramanjaneya approached his work with remarkable motivation and focus. For his master's thesis, he analyzed time-series EEG signals to study emotional responses, applying deep learning methods to model complex patterns in the data. His project reflected both technical rigor and a strong curiosity about how machine learning can help illuminate signals originating from the brain.

Asif Iqbal and his project partner undertook an ambitious project analyzing laptop product reviews from an online retail platform. Using web scraping and text-based classification, they addressed real-world complexities, including variations in language, writing style, vocabulary, and symbols, producing a detailed report.

Graduate students also demonstrated a willingness to tackle problems whose scope and difficulty were uncertain from the outset. One student undertook a large-scale sentiment analysis of responses and reposts from a prominent public account, assembling a dataset of hundreds of thousands of text samples and performing substantial preprocessing and feature extraction. While the project's magnitude eventually required more focused refinement, the attempt reflected a readiness to engage with real-world complexity rather than safer, well-bounded tasks.

Pushing the field's frontier, another student explored image classification using a Quantum Convolutional Neural Network (QCNN), a technically demanding approach. While the results highlighted current limitations compared to conventional CNNs, the student clearly explained the underlying concepts and implementation, demonstrating a willingness to venture into unfamiliar territory. In both cases, what stood out was not the outcome alone, but the confidence to pursue challenging ideas without guaranteed results.

Looking Back, Looking Forward

Ultimately, what endures are not just the projects completed or the grades earned, but the intellectual journeys these students undertake. Teaching offers a vantage point from which to witness the emergence of confidence, curiosity, and independent thinking. Whether in undergraduate or graduate classrooms, the students who stay with me are those who engage deeply, question persistently, and continue learning long after the course has ended. Their energy, insight, and determination remind me that education is not merely the transfer of knowledge, but a shared process of discovery—one that continues well beyond the classroom.

Illustration by Gina Rizzo

States of Dance: Accessible Arts Programming and Graduate Student Engagement at Stony Brook University

Valentina Pucci | PhD Student
Department of Hispanic Languages and Literature

"Sol Invictus will be luminous, generous and universal. Always halfway between hip-hop physicality and classic elevation, Sol Invictus is a declaration of love—my declaration of love for dance, its past, its present, and its future. I wanted an encounter between the physicality of hip-hop and the elevation of ballet. For that, I gathered dancers from around the world, 18 dancers, and as many nationalities. I will not tell you which nationalities. But the only thing I will tell you is that some of them, regarding actuality, are absolutely not supposed to dance together. To believe that dance has this extraordinary power, that of bringing people all together, is simply [amazing]. With Sol Invictus I also wanted to revolt, to make us revolt. Yes, to dance like a child... Stanley Kubrick said that 'life of which we are a part, is only a small and ephemeral part to which the universe is probably, and will remain, indifferent.' The only way to overcome this unbearable condition would be to find meaning in it, answers for me. Love and dancing are a big part of [this] world, that is life. I would like Sol Invictus to be a spark, the spark that [ignites within] us, a life with joy of dancing together. Thank you." (Hervé Koubi, Sol Invictus, 2025)

Before the performance began at Staller Center in October 2025, choreographer Hervé Koubi stood alone on stage and addressed the audience directly, offering a declaration of love for dance, for its past and future, for the possibility of bringing together dancers from across the world who, as he put it, are "absolutely not supposed to dance *together*." It was an unusual and necessary gesture: making visible the intention behind the work before a single movement had occurred.

I write this piece as both a consistent audience member of dance performances and a practitioner of contemporary dance since childhood. Too often, I hear people say they "don't know how to watch dance," as if this language requires technical training not only to perform but also to receive. My argument here is the opposite: that dance, when made accessible, is one of the few spaces where embodied, communal experience requires nothing but presence.

I aim to engage critically with dance while also highlighting how arts programming can expand creativity, provide rest from rational thinking and work, and create opportunities for collective encounter. It offers the possibilities of a shared joy, specifically the happiness of dancing together, as described by the director. Being present in this moment is sharing with the dancers and makers of this performance their happiness, and therefore, being happy ourselves. I feel deeply that this kind of sentiment and sensibility is needed.

Accessible arts programming at Stony Brook offers graduate students spaces where intellectual and embodied engagement converge beyond disciplinary and cultural boundaries. *Sol Invictus*, presented with free admission for Stony Brook students, serves as a case study for how accessible cultural programming

supports graduate student intellectual vitality, not as a supplement to academic life, but as an essential part of it.

Koubi's work exemplifies contemporary dance, a form that emerged from Isadora Duncan's twentieth-century departure from classical ballet and evolved through experimental movements of the 1960s and 1970s into a space of radical hybridity. Contemporary dance blends classical technique with urban forms such as hip-hop, resisting a single aesthetic allegiance, and prioritizing expressive possibility over predetermined movement vocabularies. While ballet emphasizes elevation and the illusion of weightlessness, contemporary dance engages directly with gravity, using the floor and the body's weight as central elements of movement. As a result, ballet often produces highly stylized gestures, whereas contemporary dance draws more closely from everyday motion, such as walking, running, or the uninhibited movement of a child.

Drawing on my training with Chilean contemporary dance choreographer Marcela González Cortés, I analyze *Sol Invictus*—named after the Roman god of the Unconquered Sun, whose cult was revived by Emperor Aurelian in AD 274—through what she calls "states of dance," distinct modes of corporeal expression that illuminate modes of living dance in different ways of inhabiting the body. These states can be understood as forms of expansive, non-judgmental self-expression grounded in shared experience and collective joy.

The performance oscillated between two primary states. The first, a virtuosic mode fusing dance and acrobatics, pushed bodies to seemingly superhuman limits. Dancers executed breakdance head spins with balletic precision, moved with circus-like agility, and deconstructed bodily axes to explore extreme expressive possibilities. These moments evoked divine or warrior-like figures; bodies transcending human limitation yet rendered monstrous through their very extremity.

There were moments of the performance that served as a break for the impetuous rhythm—and for the dancers themselves—in which the golden cloth that serves as a surface where they dance is gathered by all the dancers and brought to the back of the stage. At this moment, approximately fifteen minutes after the beginning of the performance, one dancer begins pulling the cloth while the rest of the dancers remain quiet in the front of the stage, in the dark, since the only illuminated part is the back of the stage, until she reaches the front, pulling the cloth with her. This suggests a ritual act, and solemn congeniality of all of them in silence, with the dancer inviting them to slow down and cherish the encounter with the golden material.

Midway through the performance, a rupture occurs. The lights dim except for stark white spots illuminating the dancers, who turned to face the audience directly. Their bodies, suspended in impossible poses, scream—sounds stripped of linguistic meaning yet charged with intensity. This moment, where the fourth wall dissolves and spectators become implicated, marks the transition into the second state.

The communal and festive mode offers something radically different. In sequences evoking folkloric celebration, dancers move as if at a festival, playing together, their joy contagious. This is a second moment in which the continuous, expansive dynamism of their acrobatic movements shifts toward a relaxed tone. The music, as I remember it, is folkloric music from Europe, with violins and percussion, and they start playing, "dancing like a child," exchanging smiles and inviting one another to join them, until all of them are in the "dancefloor," as if they were in a festival. This is what I mean by a "state of dance": the shared, communal and contagious act of dancing together to joyful music, a moment where worldly problems dissolve, where "[...] the world shuts down its disasters / Thank you, world, for not being more than world / and nothing else," as the poet would say (Gelman, 2007, free translation).

This collective mode creates what formal academic spaces consistently fail to provide: opportunities for connection unmediated by disciplinary gatekeeping or productivity metrics. The body becomes a nonverbal language accessible across departmental divides, generating what graduate students need—moments

of release from judgment, spaces where creative and critical capacities can regenerate through shared experience.

Trained in the "school of dance", notably with Rosella Hightower, Hervé Koubi decided in 2000 to develop his choreographic project around what the brochure describes as "the tradition, and all the verbal and physical transmission that it carries within it," which captures his interest. A dance that departs, that unites, that creates links between people. His 2009 journey to Algeria, in search of his own roots, led him to urban dancers and practices, inspiring him to explore what he terms as "the porosity of the techniques between them as a space of experimentation which would exceed the frameworks and the technical and aesthetic affiliations."

Reflection

Attending *Sol Invictus* reinforced for me the vital importance of accessible cultural programming for graduate students. As a PhD candidate in Hispanic Languages and Literature whose research examines forms of oblique expression in Argentine literature, I found unexpected resonances between Koubi's choreographic strategies and the textual mechanisms I study. Both involve communication that operates beyond explicit statement—the screams of the dancers, like the ambiguous narratives I analyze, convey meaning precisely through what remains unsaid. This experience reminded me that intellectual work, while demanding sustained focus and isolation, becomes unsustainable without spaces for embodied, communal experience. Accessible arts programming is not a luxury, but essential infrastructure for the creative and critical resilience that scholarship requires.

As universities increasingly acknowledge graduate student isolation and burnout, accessible arts programming emerges as vital infrastructure for building the intellectual community and creative resilience that scholarly work requires. Koubi closed his opening remarks by invoking filmmaker Stanley Kubrick: "The only way to overcome this unbearable condition would be to find meaning in it." For him, "love and dancing are a big part of [this] world, that is life. I would like *Sol Invictus* to be a spark, the spark that [ignites within] us, a life with joy of dancing together."

Stony Brook University's support for such programming recognizes that sustaining graduate student intellectual life requires more than library access; it demands cultural spaces where embodied, interdisciplinary engagement can flourish, where we might, as Koubi urges, rediscover the capacity to "dance like a child."

About the Company and the Performance

Sol Invictus
Compagnie Hervé Koubi
Staller Center for the Arts, Saturday, October 25, 2025

Choreography: Hervé Koubi
Assistant: Fayçal Hamlat
Dancers: Francesca Bazzucchi, Badr Benr Guibi, Joy Isabella Brown, Denis Chernykh, Samuel da Silveira Lima, Youssef El Kanfoudi, Abdelghani Ferradji, Elder Matheus Freitas Fernandes Oliveira, Oualid Guennoun, Hsuan-Hung Hsu, Pavel Krupa, Nadjib Meherhera, Ismail Oubbajaddi, Ediomar Pinheiro de Queiroz, Matteo Ruiz, Allan Sobral dos Santos, Karn Steiner
Music: Mikael Karlsson, Maxime Bodson, Steve Reich, Ludwig van Beethoven
Arrangements: Guillaume Gabriel
Lighting Design: Lionel Buzonie
Costume Design: Guillaume Gabriel
Artistic Advisor: Bérengère Alfort
Production: Compagnie Hervé Koubi
External Advisors: Odile Cougoule, Mohamed Zerouali

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Illustration by Sharmin Alam

A Conversation

with the Graduate Student Advocate

The GradMag Editorial Team

Donal Thomas, a PhD candidate in History at Stony Brook University, serves as the Graduate Student Advocate. He spoke with Dennis Jourdain of the GradMag team about his research, his role supporting graduate students, and the resources available across campus.

"Could you introduce yourself and maybe share a bit about your academic background, where you were before Stony Brook?"

My name is Donal Thomas, and I'm a PhD candidate in the Department of History. My research focuses on environmental history, particularly [the] British Empire and [the] Indian Ocean. Environmental history in general is the study of relationships between plants, animals, humans and landscapes in global history and it's a relatively new field in history that gained traction mostly after the 1970s and 1980s. I focus on how plants and animals move across the world and how that movement influences local and native populations and landscapes. It's a great time to be at Stony Brook because we have strong faculty working on the British Empire, the Indian Ocean, South Asia and Environmental History, so I feel fortunate to be here. Before coming to Stony Brook, I did my undergraduate degree in English literature with a minor in history, and then completed my master's in history before starting my PhD.

"What brought you to Stony Brook?"

Stony Brook is a great space for social sciences and the humanities, particularly in the context of interdisciplinary research. The academic engagement here is really strong, especially the three-year coursework, which is a very valuable part of the program. It gives you time to go through the major works in your field and really prepare before submitting your prospectus(proposal). It's rigorous, but it's very useful if you want to go deeper into your research. Another big factor is the travel and research opportunities. My work requires archival research, and I've been able to visit libraries and archives in the U.S., England, Scotland, India, Singapore, Malaysia, and Thailand. Being in this environment helps you access those opportunities, which has been a great experience.

"How did you become the Graduate Advocate?"

As someone in history, I have always wanted to engage with people beyond academics. It's easy to get caught up in your own research, but this role helps me stay connected to the broader community. Before this, I was involved with the Graduate Student Organization, where I served as a senator then vice president and interim president, and I was also a resident assistant. Those roles helped me understand campus resources and student needs. What drew me to this position is helping students navigate those resources more easily.

There's always a learning curve, especially for new or international graduate students, and it can take a semester or more to figure things out. I try to reduce that gap so students can access support earlier. It's also helped me better understand student experiences beyond academics and think about support in [a more holistic way].

"How would you describe your role as Graduate Advocate?"

The position isn't new, but one of my main goals this year has been to make it more visible. Any graduate student, at any stage, can reach out to me. I'm a point of support for academic or personal challenges. I'm not a counselor, but I can connect students to the right resources. Not everyone knows what's available, so I help navigate that. Through experience and training, I'm familiar with many resources, and I'm also continuously learning, especially how to be a better listener. Sometimes students need someone to talk to, and I always try to be available for that. I also organize events like the Grad Connect Series, which launched in Fall 2025. Each month, we bring in different campus resources so students can get familiar with them. Recently, we've worked with the Career Center and Graduate School Marketing Team on things like free headshots, and with CELT to support graduate instructors with teaching and accessibility. Beyond that, I spend time connecting directly with students, visiting departments, meeting people, and making sure they know support is available.

"What's a typical day like for you?"

A typical day is centered around connecting with people. I spend a good amount of time answering emails from students who have question's or concerns about resources. I also meet with students flexibly, either in person or over Zoom, depending on what works best for them. Sometimes that's in an office, but other times it's just somewhere on campus where they feel comfortable. On event days, I meet a lot of students in a short time, which I really enjoy. It's energizing, and it's rewarding to see students benefit, like getting a professional headshot or discovering a resource they didn't know about. Along with that, I have regular meetings with supervisors and committees. So it's a mix of student support, events, and administrative work.

"What kinds of issues do students usually come to you with?"

It really varies, there's no single issue. It can be anything from academic to personal concerns. Many students ask about resources like financial support, health services such as CAPS, or specific policies. Others need help with things like transferring credits or figuring out who to contact, and I help connect them so the process is smoother. Sometimes students are looking for advocacy. Depending on the situation, I can step in and help communicate with the appropriate offices. But a big part of my role is listening to graduate students. Graduate school, especially a PhD, is kind of like a marathon, with ups and challenges. Students don't always have space to talk about things beyond their research. Some just need someone to talk to, especially if they're far from home or feeling isolated. Being there for those conversations is really important.

"What advice would you give to new graduate students?"

My main advice is: don't hesitate to reach out. If you have questions or concerns, I'm here to help you navigate graduate life and connect you with resources. I'd also encourage students to take part in programs like graduate resilience training. It's a six-session program that helps students prepare for challenges like imposter fears, self-advocacy, and communicating their research. It's not about fixing everything, but about building tools to navigate those challenges. The sessions are discussion-based, and I act as a peer facilitator. Overall, stay connected, use available resources, and remember that graduate school is a process, you don't have to figure everything out on your own and there are resources and teams to support you.

A Fox at Midnight

Douglas Marr | PhD Student
RSOM, Molecular and Cellular Biology

I am a spectre in the night:
A shadow on the wind.
My steps are as soft as a leaf
Landing on a lake, black and still.

And now, a bush to slink beneath.
I pool myself like a spill of ink.
Not even my eyes announce me
as I sniff what scents the night betrays.

My stillness is not as the frightened hare:
petrified. But I am no less vigilant.
A grassy musk wafts from the field,
where geese lay, heads and pinions tucked.

One holds its head high,
A watchtower over the others,
sleep fogging only a single eye
His vigil will offer me no troubles.

Bringing a lithe paw forward,
I ready myself to spring.
My every movement unheard,
And my pulse quickening.

Now, I am a rushing wind!

A raccous cawing disturbs the stillness
accompanied by a flurry of beating wings:
The flock of geese takes flight;
scleras wide with panicked frenzy.

I worry the neck between my teeth
to quell the struggles of my next meal
as I stalk towards the darkened treeline
thinking of my den.

Illustration by Sharmin Alam

To My Beloved

Troi McKenzie | MSW/MPH Student
School of Social Welfare

A patchwork quilt made of pieces of universes and stars
Of flesh and bone
Of nature and nurture
A creation of love gifted to my most beloved
to wrap warmth around her and ease her pain

This quilt handed down from generations past
Wraps her in ancestral stories of pain and love
Each strand woven into hands that cradle her so tenderly,
Protect her from a world that continuously tries to harm her so

When fear encases her spirit, when insecurity plagues her heart
When she retreats into herself
She'll wrap this gift around her, to feel, to breathe, to be
And with those woven caresses
Her heart will still

When one day she no longer has use for her quilt
When she outgrows it and passes it on
When her form has changed and memories faded
That gift, now in the hands of her beloved
Holds her just as it held her

Illustration by Manahil Chaudhry

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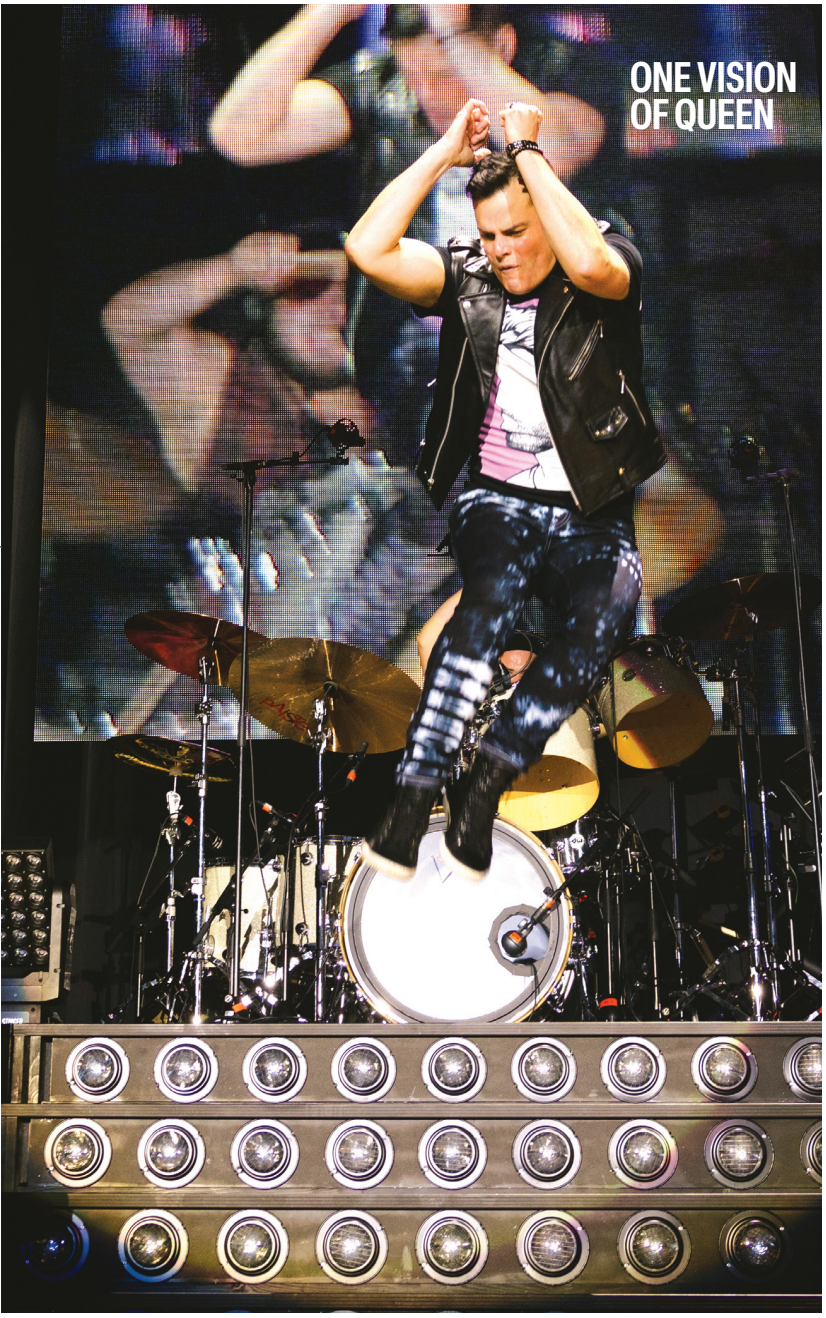
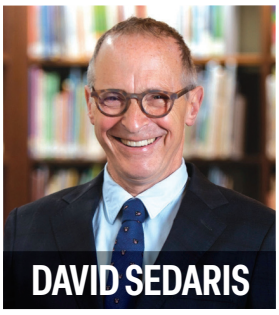
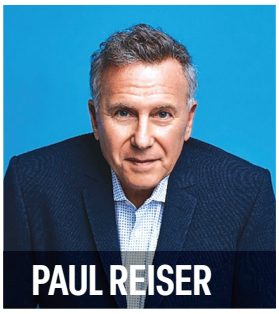


FALL 2026 AT-A-GLANCE

- David Foster & Katharine McPhee
  Sat. Sep. 26 @ 8pm
- David Sedaris
  Sun. Oct. 4 @ 7pm
- The Hot Sardines
  Sat. Oct. 10 @ 8pm
- Emerson Legacy Concert
  Sun. Oct. 11 @ 5pm
- Gravity & Other Myths
  Sun. Oct. 18 @ 7pm
- Paul Reiser
  Sat. Oct. 24 @ 8pm
- Jennifer Fraustchi & Christina Dahl
  Wed. Oct. 28 @ 7pm
- Disney Pixar's COCO
  Fri. Oct. 30 @ 6:30pm
- One Vision of Queen
  Sun. Nov. 8 @ 7pm
- Starry Nights
  Colin Carr & Arnaud Sussmann
  Wed. Nov. 11 @ 7pm
- A Midsummer Night's Dream
  Sat. Nov. 14 @ 8pm
- Ballets Jazz Montréal
  Sat. Nov. 21 @ 8pm
- Holiday Pops
  Sun. Dec. 6 @ 4pm
- Jessica Vosk: SLEIGH
  Fri. Dec. 11 @ 8pm
- Stony Brook Symphony Orchestra
  Oct. 3, Nov. 7, Dec. 5,
  Feb. 20, Apr. 3 @ 7:30 pm





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