

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

A Cross-Departmental Graduate Research Conference

January 30th, 2025
9:30 am - 5:30 pm
Stony Brook University

SAC Auditorium
SAC Ballrooms A & B

Hosted by The SBU Graduate Arts & Sciences Magazine

The Stony Brook Graduate Arts & Sciences Magazine

The SBU Graduate Arts & Sciences Magazine (GradMag) at Stony Brook University is an official student organization. We serve as a platform where graduate students can share their academic research with their peers, faculty, and the wider community. The magazine provides an opportunity for graduate students to showcase their talents, explore new topics, and engage in interdisciplinary discussions. With a focus on intellectual curiosity and community building, graduate students are given the opportunity to engage and collaborate with others through our events.

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B.R.I.D.G.E.S: A Cross-Departmental Graduate Research Conference

BRIDGES: A Cross-Departmental Graduate Student Conference, hosted by a student organization *The SBU Graduate Arts & Sciences Magazine*, will take place on January 30, 2025, from 9:30 am - 5:30 pm, at Stony Brook University in Stony Brook, NY in the Student Activities Center (SAC). This interdisciplinary event will highlight the diverse research, creativity, and innovation of Stony Brook University's graduate students. Representing over 30 different campus departments, the conference aims to foster collaboration and communication among scholars from various fields by providing a platform for students to connect across departments and share their work with a broad audience.

The conference will feature 63 research poster presentations, where graduate students will showcase their cutting-edge projects spanning the sciences, humanities, engineering, arts, and more. Attendees will also enjoy a keynote address by the Provost, offering an inspiring vision for interdisciplinary collaboration and innovation in graduate education. The Alan Alda Center for Communicating Science will host a seminar to equip participants with strategies for effectively communicating complex ideas to diverse audiences. Additionally, the Career Center will lead a practical workshop designed to help graduate students navigate their career paths within and beyond academia.

Creativity will take center stage with the screening of 6 short films by Stony Brook students, celebrating diverse perspectives and artistic talents. An art gallery and dynamic installation will further showcase the innovative work of graduate students, pushing the boundaries of traditional mediums. There will also be performances by 5 graduate student musicians, featuring the Turkish flute, piano, guitar, and voice, adding a rich cultural and artistic dimension to the event. The Graduate Department Fair will allow attendees to explore the range of academic programs and resources at Stony Brook University, fostering connections and showcasing opportunities for current and prospective students.

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Alan Alda Center for Communicating Science

Student Community Development

Special thank you to Dean Celia Marshik, Stephanie Bak, Gillian Farnan, Isobel Brehany-Schafer, Karen Kernal, Marina Fandaros, Jessica Roman, Provost Carl W. Lejuez, FedEx printing, Canwell MTS LLC, Maxaie Belmont, Elizabeth Moon, Kelly Liu, Leanne DeMay, Alfreda James, Alissa Moeller, Jimmy Levin, Tara Truhan, Sila Gecir, Laura Infante, Kalin Yuen, USG Events Management, Abhinav Koora, VS Chandra Mourya, Bindu Bhargava Reddy Chintam, George Osei, and Lisa Carter.

Conference Schedule

9:30 am	Breakfast	<i>SAC Ballroom B</i>
10:00 am - 10:30 am	Opening Remarks Ava Nederlander, President of GradMag Dr. Celia Marshik, Dean of The Graduate School Jennifer L. O'Connor, Vice President of GradMag Isobel Breheny Schafer, Assistant Director of Student Media	<i>SAC Ballroom B</i>
10:30 am - 11:30 am	Creating Connections: SciComm at SBU Alan Alda Center Seminar	<i>SAC Ballroom B</i>
11:30 am - 12:00 pm	Career Center Workshop: Jessica Roman	<i>SAC Ballroom B</i>
12:30 pm - 1:30 pm	Keynote Address: Provost Carl W. Lejuez	<i>SAC Auditorium</i>
1:30 pm - 3:00 pm	Graduate Departments Fair	<i>SAC Ballroom B</i>
1:30 pm - 3:00 pm	Research Poster Session	<i>SAC Ballroom A</i>
1:30 pm - 3:00 pm	Art Gallery	<i>SAC Ballroom A</i>
2:30 pm - 3:30 pm	Music Concert	<i>SAC Ballroom B</i>
3:00 pm - 4:30 pm	Film Screenings	<i>SAC Auditorium</i>
4:30 pm	Final Remarks & Winners Announced Narmin Mekawy, Managing Editor of GradMag Jessica Roman, Assistant Director of Graduate Career Services Ava Nederlander, President of GradMag Jennifer L. O'Connor, Vice President of GradMag Veronica Borracci, Secretary of GradMag	<i>SAC Auditorium</i>

Research Poster Presentations

#01 Timing the Kinome to Illuminate the Kinetic Selectivity of Kinase Inhibitors

Madeeha Ali

PhD, Department of Chemistry

Advisor: Peter Tonge

#02 Shining Light on Quantum Dots

Caitlin Hetherington and Benjamin Levine

PhD, Department of Chemistry

Advisor: Benjamin Levine

#03 Resonance Effects for Sequentially Ligand Exchanged Gold Nanoclusters

Wangshu Wen, Hanna Morales Hernández, Satoshi Ohtsuka, Arshad Mehmood, Jake Bordenca, Benjamin G. Levine, and Christopher J. Johnson

PhD, Department of Chemistry

Advisor: Chris Johnson

#04 Elucidating the Role of Histidine Kinase NahK in *Pseudomonas aeruginosa*

Natalie Alfano, Alicia Mendoza, Jason Withorn, and Elizabeth Boon

Masters, Department of Chemistry

Advisor: Elizabeth Boon

#05 The Role of NahK in Quorum Sensing Systems and Biofilm Formation in *Pseudomonas aeruginosa*

Ngozi J. Ohagwa, Alicia G. Mendoza, Jason M. Withorn, and Danielle Guercio

PhD, Department of Chemistry

Advisor: Elizabeth Boon

#06 Heavy Bodies in Classical Liouville Gravity

Gurulakshmi Subramanian

PhD, Department of Physics and Astronomy

Advisor: Alexander Zamolodchikov

#07 Quantum Monte Carlo simulations of atom-ion clusters

Saajid Chowdhury

PhD, Department of Physics and Astronomy

Advisor: Jesus Perez-Rios

#08 Spectroscopic constants from atomic properties: A machine learning approach

Mahmoud Ibrahim

PhD, Department of Physics and Astronomy

Advisor: Jesus Perez-Rios

#09 Hot Department of Chemistry in a Cold Chamber

Rian Koots, Qi Sun, Jinyu Dai, Benjamin Riley, Debayan Mitra and Tanya Zelevinsky

PhD, Department of Physics and Astronomy

Advisor: Jesus Perez-Rios

#10 **Ultracold long-range van der Waals Rydberg trimers**
Mateo Londono, Jesus Perez-Rios, Vanessa Olaya, and Felipe Herrera
PhD, Department of Physics and Astronomy
Advisor: Jesus Perez-Rios

#11 **Trap-dressed atom-ion quantum elastic scattering**
Ruiren Shi, Michael Drewsen, and Jesus Perez-Rios
PhD, Department of Physics and Astronomy
Advisor: Jesus Perez-Rios

#12 **Valve gaping behavior in the eastern oyster, *Crassostrea virginica*, as a proxy for water clearance**
Bryanna Porter-Pompey and Ian Dwyer, Nils Volkenborn
Masters, Department of Marine and Atmospheric Sciences
Advisor: Nils Volkenborn

#13 **At what depths are New York's sharks swimming and does this affect the use of drones to monitor their presence?**
Brittney Scannell
PhD, Department of Marine and Atmospheric Sciences
Advisor: Bradley Peterson

#14 **Influence of Aged Canadian Wildfire Smoke on VOC Speciation and Chemical Reactivity in the New York Metropolitan Area in June 2023**
Julia Marcantonio, Cong Cao and John E. Mak
PhD, Department of Marine and Atmospheric Sciences
Advisor: John Mak

#15 **Coastal Inundation for Future Climate Scenarios: Hurricane Florence (2018)**
Jackson Parker, Brian Blanton, Brian Colle, and Kevin Reed
PhD, Department of Marine and Atmospheric Sciences
Advisor: Brian Colle

#16 **Spatially Investigating the Scale of Vertical Latent Energy Flux within Cold-Air-Outbreak via Wavelet Analysis: A CAESAR Case-Study**
Flynn McGinnity
PhD, Department of Marine and Atmospheric Sciences
Advisor: Zhien Wang

#17 **Shucking the Shell: piecing together the physiological response of ribbed mussels, *Geukensia demissa*, to temperature and food**
Julia Dovi, Nicolas Anderson, and Dianna Padilla
Masters, Department of Ecology and Evolution
Advisor: Dianna Padilla

#18 **Population genomics of rapid adaptation in Threespine Stickleback**
Alexander Kwakye, Kerry Reid, Michael Bell, and Krishna Veeramah
PhD, Department of Genetics
Advisor: Krishna Veeramah

#19 **AMPK in Action: A developmental plot twist for oligodendrocytes**
Maryam Azmi
PhD, Department of Genetics
Advisor: Holly Colognato

#20 **The Effect of Medical Ethics and Compassionate Care on Empathy Decline in Medical Education**
Ramsha Shoaib
Masters, Department of Medical Humanities, Compassionate Care, and Bioethics
Advisor: Maria Basile

#21 **The Chimera of Sequel: Alternate Destinies, Racial Subversions, and Gendered Incarceration in Canon Compliant Legend of Korra Fanfiction**
Michelle Chen
Masters, Department of English
Advisor: Timothy August

#22 **Spanish Diacritic Restoration**
Maria Elizabeth Garza
PhD, Department of Linguistics
Advisor: Lori Repetti

#23 **Are Speech Sounds Always Present in Our Mind? A Case Study on Persian**
Elnaz Azimi
PhD, Department of Linguistics
Advisor: Lori Repetti

#24 **Foucault and the Voice: Citizen Artistry and Chant d'appel**
Jeanai La Vita
DMA, Department of Music
Advisor: Jeremy Little

#25 **The way they play the game: What makes East Asian artists famous in the global art field?**
Daseul Kim
PhD, Department of Sociology
Advisor: Nicholas Wilson

#26 **2D mixture model analysis of visuospatial working memory performance in Parkinson's disease**
Jennifer Tepan, L. Jiang, and H.C. Leung
PhD, Department of Psychology
Advisor: Hoi-Chung Leung

#27 **A DTI study on region of interest selection for tract modeling: superior longitudinal fasciculus branching and terminations**
Katherine Farber, Matthew Amandola, and Hoi-Chung Leung
PhD, Department of Psychology
Advisor: Hoi-Chung Leung

#28 **Human-Robotic Interaction for the Social World**
Courtney Kidd
PhD, School of Social Welfare
Advisor: Shari Miller

#29 **The Alternative Model for Personality Disorder and Internal Family Systems Theory: An Integrative Model for the Treatment of PD Traits in Mental Healthcare**
Sophia Syed and William R. Calabrese
Masters, Department of Psychiatry & Behavioral Health
Advisor: William R. Calabrese

#30 **Elucidating the Effects of Microgravity on Osteoblast and Osteoclast Activity**
Isaiah Taylor, Sardar MZ Uddin, and David E Komatsu
PhD, Department of Pharmacological Sciences
Advisor: David Komatsu

#31 **Dystrophins in Oligodendrocytes: New Insight into Brain Phenotypes in Duchenne Muscular Dystrophy**
Zijian Shao, Andrea Arreguin, and Holly Cognato
PhD, Department of Pharmacological Sciences
Advisor: Holly Cognato

#32 **Investigating a potential connection between the Dp71 Isoform and Lamin B1 in Oligodendrocyte Progenitor Cell Differentiation**
Samira Akthar Uzzaman, Zijian Shao, Ana Candia Flores, and Holly Cognato
Masters, Department of Pharmacological Sciences
Advisor: Holly Cognato

#33 **Astrocytic FABP5 Mediates Endocannabinoid Transport at Hippocampal Synapses**
Mohammad Fauzan, Saida Oubraim, Martin Kaczocha and Samir Haj-Dahmane
PhD, Department of Molecular and Cellular Biology
Advisor: Martin Kaczocha

#34 **Neurons rely on local PIP2/PIP3 homeostasis at ER-PM contact sites to support dendrite development**
Chia-Te Chien, Joanna Szczurkowska, Athena Choi, and Munassar Hussein
PhD, Department of Neurobiology and Behavior
Advisor: Maya Shelly

#35 **The Scaffold Scribble Regulates Rac1 Activity During LTD**
Tamor Khan, Manahil Kashif, Cameo Frechette, Laura Cancedda, and Maya Shelly
PhD, Department of Neurobiology and Behavior
Advisor: Maya Shelly

#36 **Gut microbiota-mediated celecoxib treatment for stress-induced depression in a pre-clinical model**
Kimberly Nnah, Miguel Madeira, Zachary Hage, Alexandros Kokkosis, and Stella Tsirka
PhD, Department of Neurobiology and Behavior
Advisor: Stella Tsirka

#37 **A Reel Slowdown: Optimizing Prime Edited Disease Models in Zebrafish**
Gina Rizzo, Rehman Basharat, Howard Sirotnik, and Lonnie P. Wollmuth
PhD, Department of Neurobiology and Behavior
Advisor: Howard Sirotnik

#38 **The role of NMDA receptors and neural crest abnormalities in neurodevelopmental disorders**
Shazmin Lakhani, Amalia J. Napoli, Christieann Aprea, Sabrina Hafeez, Kiele, Morgan, Sarah Schubel, Sophia Cadolino, Jinah Kwak, Howard Sirotnik, Benjamin, and Lonnie P. Wollmuth
Masters, Department of Neurobiology and Behavior
Advisor: Lonnie P. Wollmuth

#39 **Artificial Intelligence and Energy Research: Analyzing Growth and Trends in Publications Over Time**
Sumeyra Danisman
PhD, Department of Technology and Society
Advisor: Elizabeth Hewith

#40 **Evaluating the Prerequisites for Representative Personas using Large Language Models: A Study of ChatGPT-Generated Synthetic Data**
Peter Saenz
PhD, Department of Technology and Society
Advisor: Kevin Moriarty

#41 **The Monkey's Paw and Responsible AI: Teaching AI Ethics, AI Alignment, and Societal Impacts in Engineering Education**
Joongho Lee
PhD, Department of Technology and Society
Advisor: Sira Maliphol

#42 **3D Scanning**
Junqi Huang, Xinmu Wang, Xiang Gao
PhD, Department of Applied Mathematics and Statistics
Advisor: Xianfeng Gu

#43 **Predicting Prosthetic Fit and Functionality Using Gait Analysis Data**
Mohammed Hamza Malik, Saida Oubraim, Martin Kaczocha, and Samir H. Dahmane
Masters, Department of Applied Mathematics and Statistics and Computer Science
Advisor: Martin Kaczocha

#44 **Visiting Alternative Quantum Computation Models**
David Miloschewsky and Supartha Podder
PhD, Department of Computer Science
Advisor: Supartha Podder

#45 **Geometric Object Arithmetic**
Anthony Ripa
PhD, Department of Computer Science
Advisor: Klaus Mueller

#46 **Transformers but not the Kind You're Thinking of: Commodity Market Forecasting using Natural Language Processing**
Khushboo Singh, Dana Golden, and Dikshya Mohanty
PhD, Department of Economics
Advisor: Yiyi Zhou

#47 **Offshore Horizons: HVDC Wind Farms - Exploring Techno-Economic Dimensions**
Deepi Singh, Dana Golden, Gauruv Bhansali, Ali Anwar, Shreepooja Singh, Fang Luo, and Yiyi Zhou
PhD, Department of Economics
Advisor: Yiyi Zhou

#48 **Investment and the Transfer of Power: Dynamic Effects of Transmission in Electricity Markets**
Dana Golden
PhD, Department of Economics
Advisor: Yiyi Zhou

#49 **How Does School Violence Affect Immigrant and Native-Born Children? Exploring Impacts on Mental Health and Academic Outcomes**
Junyu Zhang and Hualong Diao
PhD, Department of Economics
Advisor: Steven Stern

#50 **Risk Adjustment, Self-Selection and Plan Design in Medicare Advantage**
Zhu Liang
PhD, Department of Economics
Advisor: Yiyi Zhou

#51 **Education Cost and Study Effort in Family Decision-making Process, Considering Mental Health**
Xin Lu
PhD, Department of Economics
Advisor: Steven Stern

#52 **Consumer Learning and Package Size Choices: The Turbulent U.S. Beer Market**
Chundi Guo
PhD, Department of Economics
Advisor: Yiyi Zhou

#53 **On the Hydrodynamic Analysis of a Vertical Axis MHK Turbine: Investigating Fish Trajectories via large-eddy simulation**
Hossein Seyedzadeh, Guglielmo Sonnino Sorisio, Catherine Wilson, and Ali Khosronejad
PhD, Department of Civil Engineering
Advisor: Ali Khosronejad

#54 **A laboratory study of critical mineral leaching through fractured rock with heterogeneous ore presence on the fracture surface**
Zijin Mei and Wei Li
PhD, Department of Civil Engineering
Advisor: Wei Li

#55 **A Cross-scale Characterization of Porous Rocks Altered by Flow and Dissolution**
Zijie Xu and Wei Li
PhD, Department of Civil Engineering
Advisor: Wei Li

#56 **Robust and Intelligent Integration of Micro-Grids to Improve Isolated Site Resilience**
Abdul Wasay and Ryan Qu
Masters, Department of Electrical and Computer Engineering
Advisor: Fang Luo and Vyacheslav Solovyov

#57 **Residential Battery Energy Storage System Optimization Using Model Predictive Control**
Mohammadreza Bakhtiari and Yue Zhao
PhD, Department of Electrical and Computer Engineering
Advisor: Yue Zhao

#58 **Statistical Sampling Techniques: A Systematic Review from Classical to Modern Methods**
Mohammadreza Bakhtiari and Reza Khalili
PhD, Department of Electrical and Computer Engineering
Advisor: Yue Zhao

#59 **Algorithms for Faster Computations to Enhance Efficiency and Security of Power System Operations**
Reza Khalili and Yue Zhao
PhD, Department of Electrical and Computer Engineering
Advisor: Yue Zhao

#60 **Xenon Trapping in Nanocages: Scaling up with Metal Powders from Lab to Industry**
Laiba Bilal (Zenvee Pillay) and J. Anibal Boscoboinik
PhD, Department of Electrical and Computer Engineering
Advisor: Mónica Bugallo

#61 **Quantum Error Mitigation and Error Removal Strategy on Ion Trapping and Superconducting Technology**
Songye Lian and Thomas Robertazzi
PhD, Department of Electrical and Computer Engineering
Advisor: Thomas Robertazzi

#62 **Evaluation of Thermo-Physical Properties of Bentonite and Graphite Composite for Nuclear Waste Repositories**
Akhil Kolanti, Praveen Negi, and Nirmala Rani
PhD, Department of Materials Science and Chemical Engineering
Advisor: David Sprouster

#63 **Multimodal 5-DOF Stretchable Electromagnetic Actuators toward Haptic Information Delivery**
Si Chen, Li Yu, Weijun Shen, Brian Fong, Yizong Li, Penghao Dong, Hantang Qin, and Shanshan Yao
PhD, Department of Mechanical Engineering
Advisor: Shanshan Yao

Music Concert

Partita No. 1 in B-Flat major, BWV 825

Johann Sebastian Bach

Praeludium

Gigue

Impromptu No. 3 in B-Flat Major, D. 935

Franz Schubert

(Theme and Variations)

Muli Yu, piano

Piano Performance DMA, 2027

The Scientist

Coldplay

Stay ft. Mikky Ekko

Rihanna

Gina Rizzo, voice

Neurobiology and Behavior PhD, 2027

Despedida n.2

Eduardo Gutterres

Choro Eterno

Celso Machado

South Loop

Sergio Assad

Henrique Carvalho, guitar

Guitar Performance MM, 2025

Hasretinle Yandı Gönlüm (Turkish Folk Music)

Yalçın Tura

Nazende Sevdigim (Azerbaijan Folk Music)

Reşit Bekirof

Ahmet Karagedik, Turkish flute (Kaval)

Critical Music Studies PhD, 2029

Interrogando

João Pernambuco

Tu y Yo

Agustín Barrios

Feito em Casa

Josué Costa

Nicolas Silva, guitar

Guitar Performance MM, 2025

Film Screenings

LGBTQ+ Comedy Pilot

Suddenly Closer | 2022 | Seattle, WA | 13:51

A proof of concept for a new tv sitcom about a young, queer married couple, Dylan & El, whose idyllic life is about to be interrupted by BOTH of their moms moving in with them.

Written and Directed by Candice Clark

MFA Television Writing 2027, Advisor: Alan Kingsberg

TV Comedy pilot

Wallballers | 2022 | New York | 21:06

Practice doesn't always make perfect. At his therapist's suggestion, Jasper recruits friends and internet strangers for a weekly wall ball meet-up—but clashing personalities and unexpected snags derail his meticulous plans for the group.

Directed by Ethan Alexis Scarduzio

MA Film & TV 2017, Advisor: David Hinojosa

Musical/Drama

TogetherMess | 2024 | New York City | 11:00

When Gina's sick father runs away from home in the middle of the night, she must venture out into the cold NYC streets to save him from himself.

Directed by Lina Sarrello

MFA Directing in Film 2025, Advisor: Perry Blackshear

LGBTQ+ Comedy

The Misadventures of Bucky & Beene | 2023 | Catskill, NY | 20:30

The Misadventures of Bucky & Beene follows the lives of two campy pirate radio DJ's, Pepper Buckthorne who was once Miss Gay USA, and her sassy younger sidekick, Jelly Beene who threatens the locals in upstate New York with their WRU-GAY in the morning radio show and befriend Sharon their free-spirited albeit ditzy neighbor in the process.

Directed by Lisa Thomas

MFA Directing in Film 2023, Advisor: Jennie Allen

Drama

Two Eagles | 2022 | New York | 9:25

June 6, 1944: D-Day. An American paratrooper flees from battle, finding a fragile sense of security in a dilapidated barn.

Directed by Ethan Alexis Scarduzio

MA Film & TV 2017, Advisor: David Hinojosa

Suspense

Immune | 2024 | The Poconos, PA | 14:00

The last living human on Earth teeters between life and death as she grapples with her survivor's guilt and solitude.

* *This film depicts Suicide, Depression, and PTSD*

Directed by Lina Sarrello

MFA Directing in Film 2025, Advisor: Niav Conty

Art Gallery

Traffic Jam (2025)

Danielle Henneborn

MFA 2027

30" x 24"

Acrylic on canvas

Suburban wildlife is a special subject to me. They have fascinated me since childhood, but I've sadly seen them deceased on the roadsides more often than not. What is there to do about that? We're too fast, some too careless, to let them make it to the other side. All of this is a lot. Caring takes a lot, especially about what others disregard, but I'll remain empathetic and I hope that you will see them too. I lay them out here in front of you, idealized and organized, easily digestible and hopefully understandable, perhaps somewhat familiar.

Many Instances of Light (2024)

Ria Rajan

MFA 2025

24" x 36", 24" x 36"

Digital Photographs

This series is an investigation into the phenomena of light using lens-based media, as a spatial exploration. Inspired by Gaston Bachelard's Poetics of Space, this work explores how one's imagination fills a space with spirit and meaning, evoking a feeling, a memory, or fantasy in the occupant's imagination.

Epidermis (2024)

Diana Salomon

MFA 2024

20" x 20"

Digital Photograph, Printed on Metal

Epidermis is a deeply personal and abstract portrayal of the transformation a woman's body undergoes during the journey of motherhood, capturing the essence of change and resilience. Through this image, I aim to communicate a profound tribute to the belly that cradled the lives of my four children—a testament to the beauty of that journey and a farewell to the prospect of further pregnancies. Major influences for this piece include my experiences as a mother and artist and a desire to challenge preconceived notions about the female form and its narrative significance in art.

Molecular Galaxies

Mohammad Fauzan

PhD 2025, Molecular and Cell Biology
8" x 11", 8" x 11", 8" x 11", 8" x 11", 8" x 11"
Digital Photographs, Printed on Glossy paper

As scientists we often form a habit of diving deep into our research—so deep, we tend to forget the bigger picture. We may forget why we're doing what we're doing and get lost in the tiny details. This collection serves as a tribute to the value of stepping back and seeing the bigger picture with a different perspective. These are immunofluorescent stained images of mouse brain sections marked with antibodies to label neurons, astrocytes, and the protein FABP5. However, from afar they appear as molecular galaxies.

Impulse Rhythm (2018)

Stephanie Laderwager

PhD 2028, Neurobiology and Behavior
11" x 14"
Graphite on paper

Being fascinated by the brain, with these pieces I tried to capture the heart not only as an organ but as a conduit of rhythmic energy, reflecting the neural signals that govern its every beat. Drawing from the principles of neuroscience, these pieces illustrate how the brain's electrical activity sends impulses that regulate the heart's rhythm, creating a symbiotic relationship between our cognitive and physical states. The undulating contours and complex patterns mirror the brain's neural networks, suggesting that emotions, driven by our neurological responses, shape the very pulse of our existence. In this way, this collection emphasizes how deeply interconnected our minds and bodies are, revealing the delicate balance between reason and instinct that guides our heartbeat.

I Lay Waiting (2024)

Rebecca Osborn

MFA 2026

14' x 20'

Ceramics

“I Lay Waiting” is an experimental installation that depicts what the “journey of grief” may look like as a physical landscape. While grief’s quantifiability surpasses words, I propose that grief can be imbued into art. This installation depicts what those first moments of grief may look like in a physical space: a lifeless bog. This bog represents this muddy and cosmic journey when we first dip our toes (or are fully immersed) into grief. It’s murky. Things feel familiar and not familiar. Everything looks a little “off”. Even though at first glance, one might ask “What could possibly thrive here?” The truth is that so much is growing, even thriving, beneath the surface.

Observers are encouraged to bring their own grief as they step into this installation

Keynote & Guest Speakers

Keynote Address

Carl W. Lejuez, Provost and Executive Vice President for Academic Affairs, will talk about the opportunities and challenges of empowering interdisciplinarity in higher education. He'll speak to how a university administration can support collaborative research and researchers, interdisciplinary success stories at Stony Brook, and share personal reflections on his own interdisciplinary journey.

Carl W. Lejuez, PhD
Executive Vice President and Provost
Keynote Speaker

Creating Connections: SciComm at SBU

Since its founding in 2009, the Alan Alda Center for Communicating Science has applied improvisational exercises and communication strategies to help people build connections and trust across backgrounds, experiences, and expertise. To date, over 20,000 scientists and experts from all over the world – and at every stage in their careers – have experienced our professional development workshops. As Stony Brook University graduate students, you have unique access to the Alda Center and their expertise because the center is based here. In this introduction to the Alda Method, you will deepen your understanding of communication as a collaborative process, and experience how connection is a key element in empathetic and effective science communication.

Elizabeth Bojsza, MFA
Assistant Professor of Practice
Seminar Speaker

Career Center Workshop: Crafting Your Resume

Join the Career Center for a workshop on crafting a standout resume! Learn key techniques to build a strong foundation and customize your resume for each position to increase your chances of success.

Jessica Roman, MA
Assistant Director of Graduate Career Services
Workshop Speaker

Faculty Judges

Rafael D'Andrea, PhD

Department of Ecology and Evolution

Alex Doboli, PhD

Department of Electrical and Computer Engineering

Sam Dodd, PhD

Department of Art

Tamara Fernando, PhD

Department of Africana Studies, Department of History

Anna Hayward, PhD

School of Social Welfare

Vibha Mane, PhD

Department of Electrical and Computer Engineering

Liz Montegary, PhD

Department of Women's, Gender, and Sexuality Studies

Joshua Plotkin, PhD

Department of Neurobiology and Behavior

Joav Prives, PhD

Department of Pharmacological Sciences

Graduate Departments Fair

Alan Alda Center for Communicating Science

Auxiliary Services Association (ASA)

Center for Inclusive Education (CIE)

Graduate Student Organization (GSO)

The SBU Graduate Arts & Sciences Magazine

The Graduate School

SBU Eats

Student Community Development

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

The Career Center