

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

A Cross-Departmental Graduate Research Conference

February 19, 2026

9:00 am - 5:00 pm

Stony Brook University

SAC Auditorium

SAC Ballrooms A & B



Hosted by The SBU Graduate Arts & Sciences Magazine

About Us

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 for graduate students to 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. We also proudly host the annual BRIDGES conference.

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

The 2nd Annual BRIDGES: A Cross-Departmental Graduate Student Conference is hosted by *The SBU Graduate Arts & Sciences Magazine*, the only graduate student media organization at Stony Brook University. Representing more than 35 academic departments, BRIDGES brings together graduate students from across campus to share research and creative work in an interdisciplinary academic setting.

This year, BRIDGES showcases over 100 graduate student projects through research poster presentations, an art gallery and dynamic installation, the screening of short films, and live performances by graduate student musician. The work presented spans the sciences, humanities, engineering, and the arts. The keynote address is presented by Dr. Peter Stokes, Managing Director of Strategy and Operations at Huron Consulting Group. The conference also includes seminars led by the Alan Alda Center for Communicating Science, focused on effective strategies for communicating complex ideas to diverse audiences, and a practical workshop led by the Stony Brook Career Center that supports graduate students in navigating career pathways within and beyond academia. The Graduate Departments Fair provides opportunities for direct engagement with academic departments, campus resources, and graduate programs across Stony Brook University.

The BRIDGES team is proud to award cash prizes recognizing exceptional graduate student work and will be highlighted in the third edition of *The SBU Graduate Arts & Sciences Magazine*, to be released in May 2026. Poster Awards include a \$1,000 1st Place Winner, \$500 2nd Place Winner, and \$250 3rd Place Winner, and the Art Award and Film Award each recognize a \$350 Winner. Award recipients are selected by a panel of faculty and industry judges, with winners announced during the Closing Remarks and Awards Ceremony. The conference extends special thanks to Dean Celia Marshik and the Graduate School for generously sponsoring these prizes and for their continued support of graduate student scholarship and creativity.

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Graduate Student Organization

Alan Alda Center for Communicating Science

Student Community Development/WUSB

Special thank you to Dean Celia Marshik, Gillian Farnan, Marianna Savoca, Isobel Breheny-Schafer, Karen Kernan, Marina Fandaros, Jessica Roman, Dr. Peter Stokes, Provost Carl W. Lejuez, FedEx printing, Canwell MTS LLC, Elizabeth Moon, Dr. Alfreda S. James, Nancee Moes, Ethan Chen, USG Events Management, James Boglioli, WOLFIE, Simone Binneman, Consuelo Montes, and Lisa Carter.

Conference Schedule

9:00 am	Breakfast	<i>SAC Ballroom B</i>
9:30 am - 9:45 am	Opening Remarks Ava Nederlander, Founder / President of GradMag Gillian Farnan, Assistant Director for Student Engagement & Activities Isobel Breheny-Schafer, Assistant Director of Student Media Narmin Mekawy, Secretary of GradMag	<i>SAC Ballroom B</i>
9:45 am - 10:30 am	Alan Alda Center Seminar: Nancee Moes	<i>SAC Ballroom B</i>
10:30 am - 10:50 pm	Career Center Workshop: Dr. Alfreda S. James	<i>SAC Ballroom B</i>
11:00 am - 12:00 pm	Keynote Address: Dr. Peter Stokes	<i>SAC Auditorium</i>
12:00 pm - 1:00 pm	Music Concert	<i>SAC Ballroom B</i>
1:00 pm - 3:00 pm	Research Poster Session	<i>SAC Ballroom A</i>
1:00 pm - 3:00 pm	Art Gallery	<i>SAC Ballroom A</i>
1:00 pm - 3:00 pm	Graduate Departments Fair	<i>SAC Ballroom A</i>
2:30 pm - 4:00 pm	Film Screenings	<i>SAC Auditorium</i>
4:00 pm	Final Remarks & Awards Ceremony Dr. Carl W. Lejuez, Executive Vice President and Provost Dr. Celia Marshik, Dean of The Graduate School Ava Nederlander, Founder / President of GradMag Narmin Mekawy, Secretary of GradMag Dennis Jourdain, Managing Editor / HR Director Candice Clark, Media Director of GradMag	<i>SAC Auditorium</i>

Keynote & Seminar Speakers

Creating Connections: Research Communication at Stony Brook

Nancee Moes, MFA

Assistant Professor of Practice, Alan Alda Center for Communicating Science

Seminar Speaker

Network Essentials

Alfreda S. James, PhD

Career Center Instructor and Strategist for Graduate Students, Career Center

Workshop Speaker

Keynote Address

Peter Stokes, PhD

Managing Director at Huron Consulting Group

Keynote Speaker

Music Concert

Sonata in A major for Violin and Piano

César Franck

Shiqi Yang, violin
Changyue Liu, piano
Department of Music, DMA

The Hand

Annabelle Dina

Coffee

Chappell Roan

Zombie

The Cranberries

Moon Song

Phoebe Bridgers

On the Radio

Regina Spektor

Gina Rizzo, piano and voice
Department of Neurobiology and Behavior, PhD

Tarantelle, Op. 6

Camille Saint-Saëns

Petite Suite for Violin, Clarinet, and Piano

Claude Debussy

Kevin Kyaw, piano
Da Young (Rachel) Lim, violin
Guilherme Batalha, clarinet
Department of Music, DMA

Poster Session

- #1 **Sinus Inspection - Using Surface Microtexture to Diagnose Cranial Pneumaticity**
Ani Chaudhary, Brian Beatty, Emma Schachner, Drew Moore
PhD Student, Department of Anatomical Sciences
Advisor: Andrew Moore
- #2 **Adult ontogeny of the papionin midfacial skeleton**
Maria Feiler, Christopher Percival
PhD Student, Department of Anthropology
Advisor: Christopher Percival
- #3 **In-situ Laser Sampling of Micromammals for Isotopic Analysis**
Alexandra Campbell-Grey, Samuel Lavin, Gregory Henkes, Tara Smiley
PhD Student, Interdepartmental Program for Anthropological Sciences
Advisor: Katheryn Twiss
- #4 **Using fecal nitrogen to examine the pace of weaning in wild geladas (*Theropithecus gelada*)**
Ginna Natalia Camargo, Laurie Reitsema, India Schneider-Crease, Noah Snyder-Mackler, Thore Bergman, Jacinta Amy Lu Beehner
PhD Student, Interdepartmental Doctoral Program in Anthropological Sciences
Advisor: Amy Lu Beehner
- #5 **The Role of Inflammatory Monocytes in the Granulomatous Response to Persistent Salmonella Infection**
Katie Donnelly, Julie Bettke
PhD Student, Department of Biomedical Engineering
Advisor: Adrianus van der Velden
- #6 **The cGAS/STING pathway impacts the tumor-suppressive function of p53**
Xiaoteng Niu
PhD Student, Department of Pathology
Advisor: Luis A. Martinez
- #7 **Traumatic Brain Injury Accelerates TDP-43 Pathology in *Drosophila Melanogaster***
Trisha Gollamudi, Dr. Joshua Dubnau
PhD Student, Department of Biomedical Engineering
Advisor: Joshua Dubnau
- #8 **Effect of Exercise and Immersive Virtual Reality Mindfulness on Cardiometabolic Health of Undergraduate Students With Stress: An Interdisciplinary Randomized Controlled Trial**
Alicia Persaud, Wei Yin, Kelly Warren, Sharon Martino
PhD Student, Department of Biomedical Engineering
Advisor: Wei Yin

- #9 **Angiotensin II-induced fibrotic changes in the Kidney**
Carlyn Annunziata, David A. Rubenstein
PhD Student, Department of Biomedical Engineering
Advisor: David A. Rubenstein
- #10 **Laparoscopic Detection and Treatment of Micrometastatic Tumors Using Near-Infrared Light**
Elias Kluiszo, Rasel Ahmmed, Luigi Belcastro, Ulas Sunar
PhD Student, Department of Biomedical Engineering
Advisor: Ulas Sunar
- #11 **Polyvalent guide RNAs enhance the CRISPR-mediated suppression of a human coronavirus**
Merna Melad, Rachel Tinker-Kulberg
PhD Student, Department of Biomedical Engineering
Advisor: Eric Josephs
- #12 **Antagonistic Roles of RKIP and BACH1 in Triple-Negative Breast Cancer Progression**
Mariana Cabral, Gábor Balázs
PhD Student, Department of Biomedical Engineering
Advisor: Gábor Balázs
- #13 **Woven Bone-Mimicking Organoids as a Preclinical Platform and Therapeutic Construct for Bone Repair**
Sai Abasolo, Juncen Zhou
PhD Student, Department of Biomedical Engineering
Advisor: Donghui Zhu
- #14 **Location, Location, Location! Compartment-specific differences in stratal output neurons**
Taryn Brechbill, Eric Prager, Joshua Plotkin
PhD Student, Department of Biochemistry and Structural Biology
Advisor: Joshua Plotkin
- #15 **Studying dynamic of sound representation in the auditory cortex using two photon imaging in freely behaving mice**
Yuhan Zhang, Xike Peng, Shaoyu Ge, Qiaojie Xiong
PhD Student, Department of Biochemistry and Structural Biology
Advisor: Qiaojie Xiong
- #16 **Modeling Autism Spectrum Disorder in Zebrafish**
Gina Rizzo, Rehman Basharat, Howard Sirotkin, Lonnie Wollmuth
MS Student, Department of Biochemistry and Structural Biology
Advisor: Howard Sirotkin
- #17 **Role of TDP-43 Proteinopathy in Cell and Cell-Non Autonomous De-repression of LINE-1**
Ariel Nieves, Shreevidya Korada Ph.D., Dr. Roger Sher
PhD Student, Department of Biochemistry and Structural Biology
Advisor: Roger Sher

- #18 **A Novel Role For NMDA Receptors In Neural Crest Development**
Christieann Aprea, Amalia J. Napoli, Sabrina A. Hafeez, Kiele Morgan, Shazmin Lakhani, Sophia Cadolino, Jinah Kwak, Howard I. Sirotkin, Benjamin L. Martin, Lonnie P. Wollmuth
PhD Student, Department of Biochemistry and Structural Biology
Advisor: Lonnie Wollmuth
- #19 **NMDA receptors in neurodevelopment and seizure pathogenesis**
Erica Nebet, Diya Saini, Howard Sirotkin, & Lonnie P. Wollmuth
PhD Student, Department of Neurobiology and Behavior
Advisor: Lonnie Wollmuth
- #20 **The Scaffold Scribble Coordinates AMPAR removal with Rac1 and Endosomal Proteins during LTD**
Tamor Khan, Manahil Kashif, Maya Shelly
PhD Student, Department of Neurobiology and Behavior
Advisor: Maya Shelly
- #21 **The role of NMDA receptors, cell cycle regulation, and neural crest abnormalities in neurodevelopmental disorders**
Shazmin Lakhani, Amalia J. Napoli, Christieann Aprea, Sabrina A. Hafeez, Kiele Morgan, Sarah Schubel, Sophia Cadolino, Jinah Kwak, Howard I. Sirotkin, Benjamin L. Martin, Lonnie P. Wollmuth
MS Student, Department of Neurobiology and Behavior
Advisor: Amalia Napoli
- #22 **Effects of Acute Administration of a Serotonin (5-HT) 1B Receptor Agonist on Breathing Abnormalities in SN-6-OHDA-Induced Rat Model of Parkinson's Disease**
Sarah Lutchman, Irene Solomon
PhD Student, Department of Neurobiology and Behavior
Advisor: Irene Solomon
- #23 **Scalp and Sub-scalp Biofeedback Implant for Alzheimer's Disease or TBI Patients with Memory Loss**
Ginia Chakraborti, Shennan Weiss, Katrina Wendell, Charles B Mikell, Sima Mofakham, Petar M Djuric
MS Student, Department of Neurobiology and Behavior
Advisor: Shennan Weiss
- #24 **Investigating Age-dependent Decline in Hsp70-mediated Co-translational Interactions in Saccharomyces Cerevisiae**
Modinat Akinboade, Jae Ho Lee
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Jae Ho Lee
- #25 **Design and Synthesis of PROTACs to Study the Role of Kinetics in Targeted Protein Degradation in BTK**
Anzasuneer Rahiyanath, Grace Yoon, Madeeha Ali, Alyssa C. Pollard, Peter J. Tonge
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Peter Tonge
- #26 **Uncovering NosP's Role in P. aeruginosa Biofilm Dispersal via Pyocyanin Profiling of Functional Residues**
Lily Cam
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Elizabeth Boon

- #27 **Mechanistic Investigations of Pyridoxal-Inspired Charge Transfer Photocatalysis**
Kiran Soma, Timothy D. Schoch, Caitlin V. Hetherington, Benjamin G. Levine, and Jeffrey M. Lipshultz
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Jeffrey Lipshultz
- #28 **Hook-and-slide: B2h Amino acids from simple amino acids**
Ayah Fidama, Vincent Huang, Yetong Lin, Jaclyn Mauro, Jeffrey Lipshultz
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Jeffrey Lipshultz
- #29 **Pseudomonas aeruginosa maintains RsmA homeostasis through cyclic di-GMP signaling**
Karishma Ramcharan, Jason M. Withorn, Ngozi Ohagwa, Simran Singh, Elizabeth Boon
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Elizabeth Boon
- #30 **Bursting the Bubble: Biofilm Dispersal as a Mechanism to Combat Antimicrobial Resistance in Disease Causing Bacteria**
Jason Withorn, Karishma Ramcharan, Natalie E. Alfano, Alicia G. Mendoza, Jiayuan Fu, Kendra E. Byrne, Aine MacDermott, Elizabeth M. Boon
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Elizabeth Boon
- #31 **Small Molecule Transfer of Astrocytes and its Mechanism of Transfer from Neurons to Astrocytes**
Shangrila Singh, Scott T. Laughlin
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Scott T. Laughlin
- #32 **Quantitative Modeling of Intracellular Kinetic Selectivity in BTK Inhibitors**
Madeeha Ali, Bharath Srinivasan, James Vasta, Matthew Robers, Peter J Tonge
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Peter Tonge
- #33 **Synthesis and Characterization of Bimetallic Pyridazine Complexes for Electrochemical CO₂ Reduction**
Linsusara Abraham, Quinton J Bruch
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Quinton J Bruch
- #34 **Investigation of transient heme coordination of the Nitric oxide sensing Protein (NosP) of Legionella pneumophila**
Hiruni SMD Silva Jamuni, Jason M Withorn, Archana Sudevan, Elizabeth M Boon
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Elizabeth M Boon
- #35 **Nitric oxide -Driven Dual Regulation of Nitric oxide sensing Protein (NosP) Through Interdependent Cysteine S-Nitrosylation and Heme Binding in Burkholderia thailandensis**
Archana Sudevan, Sweta Anantharaman, Jiayuan Fu, Elizabeth M. Boon
PhD Student, Department of Chemical and Molecular Engineering
Advisor: Elizabeth M Boon

- #36 **Hydroelastic modeling of flexible marine hydrokinetic turbine blades considering torsion and bending moments**
Jonathan Craig, Christian Santoni, and Ali Khosronejad
PhD Student, Department of Civil Engineering
Advisor: Ali Khosronejad
- #37 **Blue Power in Long Island Sound: A Physics-Based Model for Clean Energy & Economic Impact**
Hossein Seyyedzadeh, Ali Khosronejad
PhD Student, Department of Civil Engineering
Advisor: Ali Khosronejad
- #38 **In-Situ Mining in Fractured Sulfide-Bearing Rocks: A Digital Rock Assessment**
Zijin Mei, Wei Li
PhD Student, Department of Civil Engineering
Advisor: Wei Li
- #39 **Quantitative Network Analysis of Acid-Induced Wormhole Structure in Carbonate Rocks**
Liquan Mai, Wei Li
PhD Student, Department of Civil Engineering
Advisor: Wei Li
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Zijie Xu, Md Rakibul Islam Prince, Jiabin Liu, Shaoting Lin, Yu She, Wei Li
PhD Student, Department of Civil Engineering
Advisor: Wei Li
- #41 **Sea Ice Transport Regulated by Ice Arches in Narrow Straits: Visualization of Its Granular Nature Through 3D Photoelastic Tests**
Shiyao Wang, Wei Li, Laura Zhang
PhD Student, Department of Civil Engineering
Advisor: Wei Li
- #42 **High-Fidelity Wake Flow and Sediment Transport Simulations Around Horizontal and Vertical Axis Hydrokinetic Turbine Arrays**
Gabrielle Narh, Ali Khosronejad
MS Student, Department of Civil Engineering
Advisor: Ali Khosronejad
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Mustafa Aksen, Ali Khosronejad
PhD Student, Department of Civil Engineering
Advisor: Ali Khosronejad
- #44 **Learning River Turbulence from Snapshots: Neural Network Surrogates for the Piscataqua River**
Samin Shapourmiandouab, Ali Khosronejad
MS Student, Department of Civil Engineering
Advisor: Ali Khosronejad

- #45 **Technology Driven Workforce Transformation in Transportation Industry**
Alireza Ershad, Anil Yazici
PhD Student, Department of Civil Engineering
Advisor: Anil Yazici
- #46 **Understanding Geo-Environmental Factors for Landslide Occurrences Using Geographically Explainable AI: A Case Study from the Northeastern United States**
Qianyi Liu, Xiaolu Liu, Te Pei, Naresh Devineni, and Yingli Tian
PhD Student, Department of Civil Engineering
Advisor: Te Pei
- #47 **A Causal Dashboard for Exploring the Effects of Public Health Interventions Across County-Level Subgroups**
Yanming Zhang, Abhinav Vanga, Deepshika Raghuraman, Mithilesh Kumar Singh, Recai Yucel, Scott Burris, Klaus Mueller
PhD Student, Department of Computer Science
Advisor: Klaus Mueller
- #48 **Demonstrate Once, Deploy Anywhere**
Fumi Honda, Prof. Nilanjan Chakraborty, Prof. CR Ramakrishnan
PhD Student, Department of Computer Science
Advisor: Nilanjan Chakraborty
- #49 **Hierarchical GraphCut Phase Unwrapping Based on Invariance of Diffeomorphisms Framework**
Xinmu Wang, Xiang Gao, Junqi Huang, Xianfeng Gu
PhD Student, Department of Computer Science
Advisor: Xianfeng Gu
- #50 **Unraveling Misinformation Propagation in LLM Reasoning**
Yiyang Feng, Yichen Wang, Shaobo Cui, Boi Faltings, Mina Lee, Jiawei Zhou
PhD Student, Department of Computer Science
Advisor: Jiawei Zhou
- #51 **ProST: Progressive Sub-task Training for Pareto-Optimal Multi-agent Systems Using Small Language Models**
Biddut Sarker Bijoy, Mohammad Saqib Hasan, Pegah Alipoormolabashi, Avirup Sil, Aruna Balasubramanian, Niranjana Balasubramanian
PhD Student, Department of Computer Science
Advisor: Niranjana Balasubramanian
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Zainab Aamir, Saeed Boorboor, Arie Kaufman
PhD Student, Department of Computer Science
Advisor: Arie Kaufman
- #53 **Enhancing Classification of Indeterminate Pulmonary Nodules at Multiple Scans in NLST Dataset through Integrated Spectral CT Radiomics**
Haiyi Li, Marc J. Pomeroy, LiCheng R. Kuo, Ilan Y. Pesselev, Prateek Prasanna, Zhaozheng Yin, Zhengrong Liang, Ankit Dhamija
PhD Student, Department of Electrical and Computer Engineering
Advisor: Jerome Liang

- #54 **Quantum Noise Error Analysis with Gate noise operation**
Songye Liang
PhD Student, Department of Electrical and Computer Engineering
Advisor: Thomas Robertazzi
- #55 **Investment and the Transfer of Power: Dynamic Effects of Transmission in Electricity Markets**
Dana Golden
PhD Student, Department of Economics
Advisor: Yiyi Zhou
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Shafira Widjaja
PhD Student, Department of Economics
Advisor: Steven Stern
- #57 **Selection Across Matching Environments: Homophily and Network Formation**
Sarah Betz
PhD Student, Department of Economics
Advisor: Mihai Manea
- #58 **Ternary Lattice Monte Carlo applied to Nanocrystalline W–Ti–Cr**
Sean Mascarenhas, Spencer Thomas
PhD Student, Department of Environmental Studies
Advisor: Jason Trelewicz
- #59 **Structural Determinants for pH-dependent Activation of a Plant Metacaspase**
Haijiao Liu, Max Henderson, Zhili Pang, Qingfang Zhang, Eric Lam and Qun Liu
PhD Student, Department of Environmental Studies
Advisor: Qun Liu
- #60 **Marker-based CRISPR screening for novel cofactors discovery in Rhabdomyosarcoma**
Trace Le, Damianos Skopelitis, and Christopher Vakoc
PhD Student, Department of Geosciences
Advisor: Christopher Vakoc
- #61 **Removal of Per- and Polyfluoroalkyl Substances Using Granular Activated Carbon Under Complex Aqueous Conditions**
Brooke Peritore, Zhengyang Wang, Qingyun Li, Lokesh Padhye
PhD Student, Department of Geosciences
Advisor: Qingyun Li
- #62 **Elemental Mapping of CO₂-Attacked Wellbore cement using SEM-EDS versus synchrotron XRF Microprobe**
Lavish Arya, Qingyun Li
PhD Student, Department of Geosciences
Advisor: Qingyun Li

- #63 **Structural Characterization of CpgD: A critical player in a novel bacterial sphingolipid pathway**
Rideeta Raquib, Michael Airola
PhD Student, Health and Biomedical Sciences Graduate Program
Advisor: Michael Airola
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Levi Krausert, Anarv Mathur, Ezzeldin Enan, Adrianus van der Velden
PhD Student, Health and Biomedical Sciences Graduate Program, Department of Microbiology and Immunology
Advisor: Adrianus van der Velden
- #65 **Mental or Physical Change: Which Comes First in Sound Change? Evidence in Persian Vowels**
Elnaz Azimi
PhD Student, Department of Linguistics
Advisor: Lori Repetti
- #66 **Some Like it Hot! But Most Don't: Heat Stress in Eelgrass, and its Effects on Wasting Disease**
Anthony Murphy-Neilson, Sarah Stagner, Bradley Peterson
MS Student, Department of Marine and Atmospheric Sciences
Advisor: Bradley Peterson
- #67 **A Doppler Radar Climatology of Vertical Mesocyclone Alignment in Supercells**
Erik Creighton, Michael M. French, Darrel M. Kingfield
PhD Student, Department of Marine and Atmospheric Sciences
Advisor: Michael French
- #68 **Arl Aboard PLD1: Elucidating the Mechanism of Phospholipase D1 Activation by the Small GTPase Arl11**
Douglas Marr, Michael Airola
PhD Student, Department of Molecular and Cellular Biology
Advisor: Michael Airola
- #69 **Pulling Immune Strings: TolC-Dependent Host Modulation by Francisella tularensis**
Esther Opoola, Patrick A. McLaughlin, David Thanassi
PhD Student, Department of Molecular and Cellular Biology
Advisor: David Thanassi
- #70 **Altered Bone Formation and Resorption After Simulated Lunar, Martian, and Microgravity**
Isaiah Taylor, Kaitlin M. Farrell, Nihamul A. Ehan, Madeleine M. Deschamps, Erin B. Meymarian, Harry N. Divaris, Sardar M. Z. Uddin, David E. Komatsu
PhD Student, Department of Molecular and Cellular Pharmacology
Advisor: David Komatsu
- #71 **Seeing Evolution in 3D: A Structure-Aware Framework for Drug Target Prioritization**
Chelsea Kirkland
PhD Student, Department of Molecular and Cellular Pharmacology
Advisor: Joshua Rest

- #72 **Rate-dependent Microplane Triad Model for high strain rate behavior of Woven Composites**
Sajjid Hasan Asif, Taufiq Abdullah, and Kedar Kirane
PhD Student, Department of Mechanical Engineering
Advisor: Kedar Kirane
- #73 **On the Construction of Kinematic Hull for N-Poses of a Bounded Spatial Object**
Huan Liu, Jeff Ge, Mark P. Langer
PhD Student, Department of Mechanical Engineering
Advisor: Jeff Ge
- #74 **Why the Floor Wins Races: Uncovering the Flow Structures Driving F1 Downforce**
Amr Shaalan, Aditya Raman, Sameera Wijeyakulasuriya, Kelly Senecal, Dimitris Assanis
PhD Student, Department of Mechanical Engineering
Advisor: Dimitris Assanis
- #75 **MICOS Complex and Mitochondria Morphology Changes Across Aging in Cardiac Muscle**
Christopher T. Altamural, Andrea G. Marshal, Edgar Garza Lopez, Heather K. Beasley, Zer Vue, Larry Vang, Taylor Rodman, Kit Neikirk, Sandra Murray, Vernat Exil, and Antentor Hinton, Jr.
PhD Student, Department of Molecular Physiology and Biophysics
Advisor: Antentor Hinton
- #76 **Collective chain packing of flexible linear amorphous polymers at polymer-solid interfaces**
Yashasvi Bajaj, Avi Bajaj, Zhixing Huang, Jan-Michael Carrillo, Mesfin Tsige, Maya Endoh, Tad Koga
PhD Student, Department of Material Science and Chemical Engineering
Advisor: Tadanori Koga
- #77 **Multimodal Investigation of the Support Chemistry - Electrodeposit Structure Interdependence in Sodium Metal Anodes**
Chang-An Lo, Chang-An Lo, Yixian Wang, Varun R. Kankanallu, Dean Yen, Xiaoyin Zheng, Chonghang Zhao, Jianming Bai, Feipeng Yang, Ruipeng Li, Mingyuan Ge, David Mitlin, Yu-chen Karen Chen-Wiegart
PhD Student, Department of Material Science and Chemical Engineering
Advisor: Yu-chen Karen Chen-Wiegart
- #78 **Formal soundscapes in early modern scientific thought**
Hannah Waterman
PhD Student, Department of Music
Advisor: Erika Honisch
- #79 **Science Beyond the Spectacle: Performative Phenomenology as a Solution to the Humanities' Legitimation Crisis**
Sondra Charbadze
PhD Student, Department of Philosophy
Advisor: Robert Crease
- #80 **Learning Through the Chaos: Three-body scattering from neural networks**
Daniel Julian, Rian Koots, Jesus Perez-Rios
PhD Student, Department of Physics
Advisor: Jesus Perez-Rios

- #81 **Trap-Induced Atom-Ion Complexes: A Time-Independent Approach**
Zhongqui Liang, Ruiren Shi, Jesus Perez-Rios
PhD Student, Department of Physics
Advisor: Jesus Perez-Rios
- #82 **DiChem: The App for the spectroscopy of diatomic molecules**
Ruiren Shi, Saajid Chowdhury, Ahmed Elhalawani, Mahmoud A. E. Ibrahim, Jesús Pérez-Ríos
PhD Student, Department of Physics
Advisor: Jesús Pérez-Ríos
- #83 **Coordination-driven magic numbers in protonated argon clusters**
Saajid Chowdhury, María Judit Montes de Oca-Estévez, Florian Foitzik, Elisabeth Gruber, Paul Scheier, Pablo Villarreal, Rita Prosmi, Tomás González-Lezana, Jesús Pérez-Ríos
PhD Student, Department of Physics
Advisor: Jesús Pérez-Ríos
- #84 **Positronium: A Window to Test The Standard Model**
Rodrigo Cadiz
PhD Student, Department of Physics
Advisor: Jesús Pérez-Ríos
- #85 **Spectroscopic constants from atomic properties: a machine learning approach**
Mahmoud Ibrahim, X. Liu, Jesús Pérez-Ríos
PhD Student, Department of Physics
Advisor: Jesús Pérez-Ríos
- #86 **Searching for Halo Ellipticity Bias in Galaxy Survey Cosmology**
Benjamin Levine, Anja von der Linden, Tae-hyeon Shin
PhD Student, Department of Physics
Advisor: Anja von der Linden
- #87 **Intergenerational Transmission of Depression: Testing A Comprehensive Set of Putative Mediators**
Thomas Harrison, Connor Lawhead, Alison E. Calentino, Alexander Grieshaber, Benjamin A. Katz, Jamilah Silver, Thomas M. Olino, Daniel N. Klein
PhD Student, Department of Psychology
Advisor: Daniel N. Klein
- #88 **Temperament, Psychopathology, and Interpersonal Functioning Factors of Adolescent Social Media Use**
Lauren Rothburd, Thomas J. Harrison, Daniel N. Klein
MS Student, Department of Psychology
Advisor: Daniel N. Klein
- #89 **Protest in Pictures: A Computational Approach to Visual Framing in Global News Media**
Danial Vahabli, Alexander B. Kinney, Yongjun Zhang
PhD Student, Department of Sociology
Advisor: Yongjun Zhang

- #90 **Constructing a Digital Ecosystem of Memory: Tensions Between the National and Transnational Nas Ferns**
PhD Student, Department of Sociology
Advisor: Daniel Levy
- #91 **How Does That Make You Feel?: A.I. Simulation Training in Social Work Practice- A Pilot Study Courtney Kidd**
PhD Student, School of Social Welfare
Advisor: Gretchen Ely
- #92 **I Belong Regardless: The Impact of Identity-Based Centers in College Education and Above on Student Well-Being Epiphany Adams**
PhD Student, School of Social Welfare
Advisor: Miguel Munoz-Laboy
- #93 **Cigarette Use and Adolescent Suicidal Behaviors: Evidence from the 2023 Youth Risk Behavior Survey Xiao Liang**
PhD Student, School of Social Welfare
Advisor: Gretchen Ely

Art Gallery

If The Moon Was Made of Cheese, I Would've Eaten It

Danielle Henneborn

MFA Student, Department of Art

24" x 20"

Acrylic on canvas

If the full moon rose and it was made of cheese, howling at it wouldn't even be a consideration. I would've eaten it. Curiosity got the... wolf - I just had to know what type of cheese it was (the answer is Monterey Jack).

Collageno

Milena Acosta

PhD Student, Department of Hispanic Languages & Literature

50" x 60"

Digital Drawing

A collage love letter that claims for a destination.

Suspended

Sandra Albanna

MS Student, Department of Neurobiology and Behavior

Digital Drawing

A hand-drawn figurative work depicting a solitary, abstracted human form emerging from layered blue and green textures. The figure's raised arms and obscured features suggest vulnerability, tension, and emotional exposure. Color and mark-making dissolve the body into its surrounding space, blurring boundaries between self and environment. Originally created on paper and presented here as a photographic reproduction

Blue Wave Blossom

Fumi Honda

PhD Student, Department of Computer Science

4" x 8"

Photography

Hand-pulled this glass piece myself at the Corning Glass Museum.

Anatomy of Thought, Feeling, and Form

Stephanie Laderwager

PhD Student, Department of Neurobiology and Behavior

11" x 14"

Graphite on paper

This series examines the human interior through three fundamental structures: the brain, heart and skull. Rendered in monochrome, each drawing isolates its subject while inviting symbolic reading beyond anatomical accuracy. Thought, emotion, and physical form are treated as interdependent systems rather than discrete functions.

By exposing and recontextualizing these organs, this work collapses boundaries between cognition and emotion, structure and vulnerability. This collection presents the body as both a biological framework and a vessel of the human experience.

A Cacophany of the Senses

Tamor Khan

PhD Student, Department of Neurobiology and Behavior

16" x 20"

Ink and Photography

The 5 senses are engaged in mortal combat.

REUSE TIPS ?

Josh Ho

PhD Student, Department of Chemistry

8.5" x 11"

Ink on Paper

Reuse tips?

I wish they would give me more tips so I could do better.

Reuse can make it better while also making it worse.

Asking a good question is always better than giving a good answer.

Beaver Jesus

Benjamin Truong

PhD Student, Department of Computer Science

17" x 9"

Stone Lithography

In Idaho, 1948, beavers descended from the sky and brought with them entire ecosystems. Jesus was a carpenter, and so are beavers. Need I say more?

My Kitchen Series**Colin Gaelle-Aminata**

PhD Student, Department of Sociology

8.5" x 11"

Linocut Prints

Inspired by Carrie Mae Weems' Kitchen Table Series, I offer a series of prints around Loro's kitchen. Each print is a sensation, a scene reinvented from my own memories and my family's photographic archives. There are so many stories about shared meals and the kitchen table experience. But before the dining table, there is the kitchen, the kitchen space. And in our space, we dance, we sing, we try, we fail, we work... or we simply pass by. And when you pass by, the sound, the smell and the cleanliness of the kitchen are enough to guess the state of mind of the cook and the flavor of the dishes that will be served on the kitchen table.

In The Beginning**Madeline Yacovone**

MFA, Department of Art

13" x 17"

Lithography

This work has served as a pivotal step in my artistic exploration of the fig as a feminist symbol. Using the mezzotint technique, a reductive process in which the ink is removed from the lithograph stone, I was able to carve away at the fig, slowly revealing the diverse biological symbolism hidden beneath. I invite the viewer to search within the flesh for the universe within.

Verde Vita**Isaiah Taylor**

PhD Student, Department of Molecular and Cellular Pharmacology

16" x 25"

Photography

Verde Vita portrays a living veil of fluorescent green cells draped across a fractured landscape of human bone. Osteoblasts, glowing with vital dye, sweep over the red-tinged scaffold like a tide of renewal. Each luminous strand marks 28 days spent in microgravity, where Earth's pull was traded for continual suspension. In that weightless realm, the cells redefined how they sense, anchor, and build upon bone. The image becomes a meditation on life adapting at the edge of the unfamiliar—green vitality learning to inhabit a world where gravity is no longer the architect.

Heart of Glass

Allison George

PhD Student, Department of Neurobiology and Behavior

10" x 12.5"

Stained Glass

This stained glass piece depicts an anatomical heart constructed from a single sheet of vintage glass and mounted in an ornate frame. Each individual segment is carefully oriented to highlight specific patterns and striations, using the inherent movement within the glass to suggest muscle, depth, and organic structure. The pieces are cut and shaped by hand, wrapped in copper foil, and soldered together, forming a visible network of seams that echoes the heart's internal anatomy. A halo of wispy white glass radiates outward from the heart, centering the form and creating a sense of pulse and motion.

Glass sheets are poured in a molten state, and variations in flow, temperature, and composition create unique patterns. As a result, this artwork can never be exactly replicated.

Graduate Departments Fair

CELT

**School of Communication
and Journalism**

Department of English

**Department of Electrical
and Computer Engineering**

Department of Psychology

**Department of Technology
and Society**

**Graduate Student
Organization (GSO)**

**The SBU Graduate Arts &
Sciences Magazine**

The Graduate School

**Student Community
Development**

The Career Center

WUSB

Film Screening

LGBTQ+ Drama

Late to the Party | 2026 | Long Island, New York | 10:13

A young woman, Tez, visits her recently-deceased fiancée's family home to help prepare for the funeral. As tensions rise over their queer relationship, her fiancée's spirit tries to return to her.

Written and Directed by Rebecca Perez Bernal

MFA Student in Film 2027, Advisor: Jennie Allen

Comedy

¡Capicu! | 2026 | Long Island, New York | 10:30

A grieving grandson reminisces on a childhood memory of his late Abuela after finding her illustrious Dominoes set while cleaning out her house.

Written and Produced by Issack Cintrón

MFA Student in Film 2027, Advisor: Magdalene Brandeis

Drama

Finders Keepers | 2025 | New Jersey | 07:37

A young boy helps find a neighborhood kid's lost coin, but an unlikely friendship between them challenges the lie he's kept in his pocket the entire time.

Written and Directed by Nicholas Jun

MFA Student in Film 2027, Advisor: Jennie Allen

Comedy (Web Series)

The Temple | 2025 | New York City, NY | 04:56

A young, overly-ambitious kung-fu student must rally her less than enthusiastic classmates to save their beloved temple from closing.

Written and Produced by Haley Sakamoto

MFA Student in TV Writing 2026, Advisor: Alan Kingsberg

Drama

Housewife | 2026 | Cedar Grove, NJ | 05:00

Lonely housewife Lorelai struggles to befriend the neighbors.

Directed by Dalton Snider-Smith

MFA Student in Film 2027, Advisor: Niav Conty

Comedy

Shore Games | 2026 | Long Island, NY | 03:18

A lonely guy mishears a compliment on his morning walk, setting off an inward spiral.

Written and Directed by Jackson Macleod

MFA Student in Film 2028, Advisor: Perry Blackshear

Drama Romance

Her Flowers | 2026 | New York City, NY | 04:17

After a grueling performance, a lonely violinist engages in a play of glances with a man who's waiting in the same park as her to meet his girlfriend.

Written and Directed by Martial Junceau

MFA Student in Film 2028, Advisor: Magdalene Brandeis

Drama

So Long, My Friend | 2025 | New York City and Yonkers, NY | 12:36

A girl has to go on a trip with someone who broke her heart.

Directed by Xiaoxing Chen

MFA Student in Film 2027, Advisor: Magdalene Brandeis

Narrative Drama

War of the Weisses | 2025 | Brooklyn, NY | 12:25

Noah, a dutiful son, wants to leave a successful family business but must first wrestle with his own fear-and his father's.

Written and Directed by Vickie Tanner

MFA Student in Film 2026, Advisor: Magdalene Brandeis

Drama

Us | 2025 | Roselle, NJ | 03:53

June must navigate her girlfriend's recent diagnosis and decide how to best support the woman she loves.

Written, Directed and Produced by Kosoko Jackson

MFA Student in Film 2028, Advisor: Magdalene Brandeis

Judges

Poster Judges

Jesús Perez-Rios, PhD

Department of Physics and Astronomy

Alfreda S. James, PhD

Career Center

Elizabeth Boon, PhD

Department of Chemistry

Sarah Jourdain, PhD

Department of Languages and Cultural Studies

Yizhi Meng, PhD

Department of Material Sciences

Anna Hayward, PhD

School of Social Welfare

Elizabeth Kotseas, PhD

Department of Linguistics

Nancee Moes, MFA

Alan Alda Center for Communicating Science

Quinton Bruch, PhD

Department of Chemistry

Jill Alty, PhD

Department of Chemistry

Vibha Mane, PhD

Department of Electrical and Computer Engineering

Tara Rider, PhD

Department of Marine and Atmospheric Sciences

David Hwang, PhD

Department of Mechanical Engineering

Jeffrey Lipshultz, PhD

Department of Chemistry

Nicholas Wilson, PhD

Department of Sociology

Lori Repetti, PhD

Department of Linguistics

Art Judges

Patricia Maurides, PhD

Department of Art

Jason Paradis, PhD

Department of Art

Qin Han, PhD

Department of Art

Film Judges

Suree Towfighnia, MFA

*Department of Journalism and Media
Production*

Craig Downing, MS, MFA

University of Washington

Michelle Roadfeldt, MFA

Film Producer

Bry Troyer, BA

Top Secret Pictures



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