Skidmore College

FACULTY STUDENT SUMMER RESEARCH PROGRAM

SUMMER 2024

FINAL PRESENTATIONS
AUGUST 1, 2024

Faculty Student Summer Research Program

Funding Sources for Faculty-Student Summer Research Programs

ALUMNI, FAMILY, AND FRIENDS

Patricia Brennan ‘74
Marlene Oberkotter Fowler ’61
Ralph Garboushian ’92
Stephanie and Steven Kasok P ‘16
Jim Lippman and Linda Friedman Lippman ’82
Richard A. Mellon ’87
Michael I. Rose ‘90
Mike Brodney ‘94
Judy Reed Smith ‘68
Margaret Williams Page ’43
Tina and David Wilson P’25
Mr. and Mrs. Kenneth Woodcock, Parents ’96

Axelrod-Porges Scholars

Established in 2006 by Felicia Axelrod ’62 and Robert Porges to support faculty-student teams in the area of the sciences

Schupf Scholars

Established in 2008 by Sara Lubin Schupf ’62 to support summer faculty-student research with a preference given to students pursuing projects in the STEM disciplines. The Schupf Scholars Program begins during the summer after their freshman or sophomore year. Schupf Scholars may access additional

ROOM C

THE FORM OF THINGS UNKNOWN
Andi-Grey Sheingold, 2026
Amy Frappier, Associate Professor, Geosciences Department

ANALYZING ENGLISH LANGUAGE ARTS TEACHER PLANNING AND INTERACTIONAL MOVES
Lucy McCulloch, 2026
Jessica Somerville Braun, Assistant Professor, Education Studies Department

11-11:45 am Poster Presentations Session 2

ROOM A

RESOCIALIZATION RESCUES DELETERIOUS SLEEP EFFECTS OF DEVELOPMENTAL ISOLATION IN DROSOPH ILA MELANOGASTER
Ely S. Lettow, 2025
Christopher G. Vecsey, Associate Professor, Neuroscience Program

ROOM C

EFFECT OF SALT ON A FULLY BOUND PEPTIDE SH3 INTERACTION
Ally Mujica, 2025
K. Aurelia Ball, Associate Professor and Chair, Department of Chemistry

A DAYTIME PATHWAY FOR THE FORMATION OF ATMOSPHERIC NITROUS ACID (HONO)
Sofia Chihade 2026; Lily Watson 2027
Juan G. Navea, Professor, Chemistry Department

11:45 am-12:45pm Lunch Murray Aikins Dining Hall

12:55– 1:45pm Oral Presentations Session 2

ROOM A

THE CONSEQUENCES OF DEPARTMENT-BASED SYSTEMS OF FACULTY EVALUATION AT SKIDMORE COLLEGE
Jazmin Ruiz Hernandez, 2027; Ilena Berro Pizzarossa, 2024.
Kimberley Frederick, Professor, Chemistry Department

EVALAUTION OF THE SUPPORT SYSTEMS ECOMAP FOR LGBTQ+ YOUTH
Sofia Iacobucci 2024; Syre Zenon, 2024
June Paul, Assistant Professor, Social Work Department

5 IMAGINED WAYS IN WHICH YOUR BIRTH MOTHER CEDES YOU TO FATE & 5 IMPOSSIBLE WAYS IN WHICH YOU MEET HER AGAIN
May Braaten, 2024; Katie Mastriano, 2024
Mao Chen, Professor of Chinese, World Languages and Literatures Department

ROOM B

CURATING THE FIRST CRITICAL EDITION OF ALDOUS HUXLEY'S BRAVE NEW WORLD
Kimberly Pienkawa, 2025; Ellery Shea, 2025.
Tim Wientzen, Associate Professor and Chair, English

ENDEAVOURS, JOURNEYS, AND THE FRIENDS WE MADE ALONG THE WAY: TRANSCRIBING PETER BRISCOE'S EXPERIENCES ON THE FIRST VOYAGE
Amelia DeDominicas, 2026
Tillman Nechtman, Professor, History Department

A BEAUTIFUL DEFIANCE
Udo Hemmelgarn, 2025
Flagg Taylor, Associate Professor, Political Science Department

1:45-2:30 pm Poster Presentations Session 3

ROOM A

REDESIGNING THE LINUX LAB WEBSITE
Cian Schneider, 2026
Christine Reilly, Associate Professor and Chair, Computer Science Department

ATMOSPHERIC MOBILITY OF IRON FROM SIMULATED COMBUSTION PARTICLES
Lyra Flinn, 2025
Juan G. Navea, Professor, Chemistry Department

THE CO-ACTIVATION OF OCTOPAMINE NEURON AND ASTROCYTE IN DROSOPHILA MELANOGASTER
Yiwen Su, 2026
Christopher G. Vecsey, Associate Professor, Neuroscience Program

ROOM B

INVESTIGATING THE IMPACT OF SSRIs ON CARDIOVASCULAR RISK FACTORS: A CASE-CONTROL STUDY
Elena Shostak, 2024
Steve Ives, Associate Professor, Health and Human Physiological Sciences Department

IMPACTS OF SALT ON AMPHIBIAN DISEASE DYNAMICS
Ryan Thompson, 2026; Jack Lubitz, 2026; Elliott Zajac, 2027
Emily Le Sage, Assistant Professor, Biology Department

SALT DISRUPTS THE BINDING PATHWAY OF AN ArkA-abpSH3 PEPTIDE COMPLEX
Jorge Cardoso 2026; Ally Mujica 2025
K. Aurelia Ball, Associate Professor and Chair, Chemistry Department

THE ETHICS OF WEAPONIZING THE GENOME
Bridget Coyer, 2025
Yelena Biberman Ocakli, Associate Professor, Political Science Department

EFFECTS OF VARYING INTENSITY OF RED LIGHT ON SLEEP IN DROSOPHILA MELANOGASTER
Jack Mongan, 2026; Makenzie Keir, High School, 2026
Christopher G. Vecsey, Associate Professor, Neuroscience Program

ROOM C

DOES pH AFFECT PRECIPITATION OF GOLD NANOPARTICLES ON IMMOBILIZED PROTEINS?
Liam Babitz, 2026
Maryuri Roca, Senior Teaching Professor, Chemistry Department

CAN LARGE LANGUAGE MODELS BE SKEPTICAL? APPLICATION OF LARGE LANGUAGE MODELS IN FINANCIAL STATEMENT AUDITING
Lane Grey, 2026

DOESp

mM), the formation of the encounter complex is disrupted, highlighting the critical role of electrostatic interactions. This research provides insights into the importance of sequence-specific electrostatic interactions in stabilizing key intermediate states in IDP binding pathways.

DIFFERENTIAL SCANNING FLUORIMETRY AND COMPUTATIONAL STUDIES OF SEX4

Isabelle Crampton, 2026
K. Aurelia Ball, Associate Professor and Chair, Chemistry Department
Madushi U. Raththagala, Associate Professor, Chemistry Department

Starch EXcess4 (SEX4) is a plant glucan phosphatase that is required for efficient starch degradation in plants. The structure of ligand-free SEX4 isolated from Zea mays has been previously determined, and the structural and biochemical information of SEX4 reveals how this enzyme dephosphorylates starch substrates. However it is unclear how SEX4 interacts with substrates inside the cell. Differential scanning fluorimetry (DSF) was used to determine SEX4-substrate binding affinity from the change in protein PHOWLQJ WHPSHUDWXUH ¨7P &RPSXWDWLRQDO PHWKRGV ZHUH different starting structures were identified from the Protein Data Bank (PDB) and prepared for molecular dynamics simulations. Computational methods will provide insight into the overall trends, flexibility, and compactness of the structure.

options for the Unites States and the international community given the diversity of philosophical perspectives.

DETECTION OF CEFTRIAXONE USING PRINTER INK CHIPS

Kristyn Kirton, 2027
Kim Frederick, Professor, Chemistry Department

Ceftriaxone is a common antibiotic that is used to treat both people and animals, therefore is important to regulate the amount that is being used to prevent drug resistance. The goal of this work is to develop a rapid and effective method to measure the amount of Ceftriaxone in a commercial sample in environments that have inadequate equipment through the use of microfluidic paper analytical devices (μPADs) which utilize two lines: one new method for producing chips using laser printer ink of the colorimetric assay. We developed a new method for producing chips using laser printer ink to create μPADs which are more easily available and conditions for the quantification of Ceftriaxone using colorimetric-based cell phone detection.

THE CONSEQUENCES OF DEPARTMENT-BASED SYSTEMS OF FACULTY EVALUATION AT SKIDMORE COLLEGE

Jazmin Ruiz Hernandez, 2027; Ilena Berro Pizzarossa, 2024.
Kimberley Frederick, Professor, Chemistry Department.

This research examines the departmental nature of the teaching evaluation systems used at Skidmore College and their implications. Skidmore College has a unique commitment to departmental autonomy, which results in divergent long student evaluation forms, forms, criteria evaluation, and evaluation policies. While well-intended, this variability makes it so that faculty receive varying levels and quality of feedback and evaluation, depending on their department. Therefore, evaluating committees struggle to ensure fair assessments for faculty due to disparities in the content and quality of materials provided by departments. Our findings suggest both a need and a preference for standardized evaluation policies and instruments to ensure clarity and fairness in faculty assessment.

DETERMINING THE AMOUNT OF ACETYLSALICYLIC ACID IN ASPIRIN TABLETS USING A MICROFLUIDIC PAPER ANALYTICAL DEVICE

Claire Stone, 2026
Kimberley Frederick, Professor, Chemistry Department

Acetylsalicylic acid (ASA) , the active ingredient in aspirin, has been found in inconsistent amounts from tablet to tablet throughout the world. When an incorrect dose of ASA is received it can have detrimental effects on the consumers health. Therefore, we made it our goal to produce an easy-to-use microfluidic paper analytical device (μPAD) to determine the amount of ASA is in an aspirin tablet. Analysis of the μPAD is done by measuring the intensity of accessible cell phone technology. The focus of this work has been to determine the proper reagent concentrations, necessary sample-preparation and the micropads analytical performance.

CHARACTERIZATION AND REACTIVITY OF LAYERED DOUBLE HYDROXIDE PARTICLES IMMOBILIZED WITH TRIAZINE HYDROLASE

Angeline Mozrall, 2026
Steven Frey, Associate Professor, Chemistry Department

Triazine hydrolase (TrzN) is an enzyme that degrades atrazine, a toxic herbicide found in water supplies. The goal of our work is to immobilize TrzN on layered double hydroxide (LDH) to produce a biocomposite capable of degrading atrazine. LDH was synthesized using a known procedure and characterized by atomic absorption spectroscopy, X-ray powder diffraction, FT-IR spectroscopy and gravimetric analysis. The LDH was treated with TrzN in buffered solution,

INVESTIGATING THE IMPACT OF SSRIs ON CARDIOVASCULAR RISK F ACTORS: A CASE-CONTROL STUDY

EXPLORING THE PRODUCTION OF IMMUNOMODULATORY COMPOUNDS PRODUCED BY THE FUNGAL PATHOGEN, BATRACHOCHYTRIUM DENDROBATIDIS

Krista Longo, 2026, Michael Brennan, 2026

CAN LARGE LANGUAGE MODELS BE SKEPTICAL? APPLICATION OF LARGE LANGUAGE MODELS IN FINANCIAL STATEMENT AUDITING

Lane Grey, 2026
Yueqi Li, Assistant Professor, Management and Business Department

As large language models (LLM) are adapted to external auditing, professional skepticism exercised by LLMs when conducting financial audit tasks is unclear. An inadequate level of professional skepticism used can lead to reduced audit quality and audit failure. In this study, we investigate ChatGPT's performance and exercise of professional skepticism in various audit tasks with different prompts (personas) used. The responses from ChatGPT are evaluated by experienced external auditors. The persona with the mos(s)-5 ((uej 0 g 7.25 0 TdAo10 (a)4)-14 (hn)-4

atmospheric reactions. Despite rapidly photodissociating, recent field measurements have shown that HONO reaches maximum concentration during the daytime over the marine boundary layer (MBL). Our laboratory recently revealed a previously unknown light-initiated pathway leading to the daytime formation of HONO in the MBL. This pathway involves the reduction of adsorbed nitrogen dioxide (NO_2) by light-absorbing compounds in marine dissolved organic matter (m CDOM), influenced by pH and nitrates (NO_3^-

EVALAUTION OF THE SUPPORT SYSTEMS ECOMAP FOR LGBTQ+ YOUTH

Sofia Iacobucci 2024; Syre Zenor 2024
June Paul, Assistant Professor, Social Work Department

LGBTQ+ youth face significant challenges accessing supportive environments due to anti-LGBTQ victimization and systemic barriers, which are exacerbated for BIPOC and trans/nonbinary youth. This project evaluates a practice tool tailored for LGBTQ+ youth, assessing support networks through surveys, interviews, and observations. The tool, created by youth and practitioners, highlight the quality and types of support crucial for identity development and resilience against bias. Research aims include exploring the tool's accessibility and efficacy in fostering dialogue and enriching support systems. Findings aim to inform practice strategies in diverse youth settings, promoting safe, affirming environments and better outcomes. The dissemination of this study includes peer-reviewed manuscripts and presentations at LGBTQ+ research symposia, contributing to policy and practice improvements for LGBTQ+ youth.

partnership by digitizing and transcribing physical files and media pertaining to the history of Kanatsiohareke and the Haudenosaunee. This decolonial project aims to preserve and share culturally significant Indigenous media, knowledge, and histories. Through these efforts, we intend to expand the accessibility of Kanatsiohareke's media collection and advance the traditional teachings, ways of knowing, and histories of the Mohawk people. As part of our commitment, we participated in service and learning activities during Kanatsiohareke's annual Strawberry Festival. Ultimately, this project will culminate in an informative exhibit at Kanatsiohareke as well as a digital humanities project.

REDESIGNING THE LINUX LAB WEBSITE
Cian Schneider, 2026
Christine Reilly, Assp0EDES K (ED)5orr utso1.15 ts (n)-403 Tw T* [-15 (ED9>>BDCm(ed)-4 (i)(n)-4 6

mutated enzymes to study how specificity evolved. The work will provide insight into the evolution of life and tools for synthetic biology.

CHARACTERIZATION OF THE DUAL PATHWAYS FOR B. HALODURANS ASPARAGINYL -tRNA FORMATION

Sophia Witkon 2027; Trisha Tran 2027
Kelly Sheppard, Professor, Chemistry Department

sleep activity and timing of peak wake activities during the daytime periods. Nighttime sleep also appeared to increase in most groups, particularly in the male fly lines.

THE CO-ACTIVATION OF OCTOPAMINE NEURON AND ASTROCYTE IN DROSOPHILA MELANOGASTER

Yiwen Su, 2026
Christopher G. Vecsey, Associate Professor, Neuroscience Program

Astrocyte, as an important type of glial cell, plays a key role in homeostatic process during sleep, especially generate sleep rebound after manually activation. TDC2 neuron releases octopamine (OA) to promote wakefulness during night time by manually activation. One paper published in 2022 points out that after sleep deprivation for a long time, one of the key point for the generation of rebound is that astrocyte could bind various type of monoamines such as octopamine. Thus, my research focuses the co-activation of TDC2 neuron and astrocyte to see how the co-activation could change sleep pattern of fruit fly. My study includes regular LD 12:12, DD, and LL for 24 hours and by using thermogenetic manipulation to examine the sleep pattern of flies. The LD experiment demonstrated a strong rebound sleep for the co-activation line, but there is no significant rebound in DD environment. 5 different genotypes flies show significantly different sleep pattern and cumulative sleep in DD and LD environment.

EXAMINATION OF HOW CARBAMAZEPINE AFFECTS SLEEP IN DIFFERENT LIGHT -CONTROLLED ENVIRONMENTS IN DROSOPHILA MELANOGASTER

Eve G. Waldron, 2025; Lara Strunk, 2025
Christopher G. Vecsey, Associate Professor, Neuroscience Program

Carbamazepine (CBZ) is commonly used to treat bipolar disorder and epileptic seizures. In a study with the fruit fly Drosophila melanogaster, CBZ was found to promote wakefulness at night, particularly during dark hours. Further exploration

Faculty Student Summer Research Program

Schedule of Final Research Presentations

Thursday, June 27, 2024

9:00 am – 9:20 am Coffee, Fruit, Yogurt, Muffins

9:20 am – 10:20 am Oral Presentations

ROOM A

CRAFTING THE LIFE AND DEATH OF JOHN LANSING, JR: NOVEL WRITING FOR THE FOUNDING ERA
Ella Haney Foulds, 2026
Beau Breslin, Professor, Political Science Department

ANALYSIS OF PROPAGANDA LEAFLETS DURING THE KOREAN WAR
Ally Vickery, 2026
Joowon Park, Associate Professor, Anthropology Department

CHINA'S YOUNG DIGITAL NOMADS: WORK, LABOR, AND THE STATE
Marcelina Komornicka, 2026
Xiaoshuo Hou, Professor, Sociology Department and Asian Studies Program

MY SPANISH FAMILY
Carla Hamilton, 2024
Mary Kate Donovan, Associate Professor, World Languages and Literatures Department

ROOM B

SURVIVOR STRENGTHS: PERCEPTIONS OF PARENTING AMONG YOUTH EXPOSED TO INTIMATE PARTNER VIOLENCE (IPV)
Grace McCafferty, 2024
Johanna Reiter, Assistant Professor, Social Work Department

TEMPORAL CHANGES IN THE ECONOMIC LIVES OF THE POOR
Stacy Chen, 2025
Smriti Tiwari, Associate Professor, Economics Department

TALES OF RACIAL APPRENTICESHIP IN COLONIAL FRENCH LITERATURE
Liam Moren, 2025
Catherine Talley, Assistant Professor, World Languages & Literatures Department

ROOM C

DEVELOPING AND EVALUATING LOW-COST SOIL BULK DENSITY COLLECTION METHODS IN DIVERSIFIED FARMS IN THE NORTHEAST.
Eleanor Herbert, 2027; Carlin Krisher, 2027; Jenna Lovemark, 2027; Linden Amster, 2027
Kris Covey, Assistant Professor, Environmental Science and Studies Department
Kurt Smemo, Associate Professor, Environmental Science and Studies Department

LAKE GEORGE BATTLEFIELD STATE PARK GPR AND EXCAVATION
Lily Whelden, 2025; Cerys Forster, 2026
Siobhan Hart, Associate Professor, Anthropology Department

TWO TREES: A DOCUMENTARY FILM-IN-PROGRESS
Callahan Mainzer, 2026
Adam Tinkle, Associate Professor, Media and Film Studies Department and Director of John B. Moore Documentary Studies Collaborative

10:30 am – 11:10 am Poster Presentations Session 1

ROOM A

DYING IN DEBT: EXPLORING THE EXISTENTIAL IMPLACATIONS OF FINANCIAL DEBT
Jonah Levy, 2026
Harrison Schmitt, Assistant Professor, Psychology Department

ANALYSIS OF PHOSPHORYLATED AND UNPHOSPHORYLATED RNA POLYMERASE II CTD

PROJECT ABSTRACTS

(In alphabetical order by professor's last name)

ANALYSIS OF PHOSPHORYLATED AND UNPHOSPHORYLATED RNA POLYMERASE II CTD

Kian Sethi, 2026
K. Aurelia Ball, Associate Professor and Chair, Chemistry Department

The RNA Polymerase II C-Terminal Domain (CTD) is an intrinsically disordered region which regulates the transcription of RNA. Residues within CTD are phosphorylated and unphosphorylated during transcription. Our lab aims to understand how phosphorylation affects the conformation of the CTD and how, in turn, the ability of RNA Polymerase II CTD to regulate transcription is altered. CTD is comprised of heptad repeats, or recurring patterns of seven ("hepta") amino acids. For this project, we specifically analyzed the 1st heptad repeat, and how their conformations change when phosphorylated. Our results suggest that when phosphorylated, there are more intra-heptad interactions, compared to the inter-heptad interactions between all heptads found in unphosphorylated CTD. Future research should focus on understanding the mechanism by which phosphorylation of RNA Polymerase II CTD affects the conformation.

UNBINDING OF AN INTRINSICALLY DISORDERED PROTEIN FROM AN SH3 DOMAIN: A MOLECULAR DYNAMICS SIMULATION STUDY

Daniela Poaquiza, 2027
K. Aurelia Ball, Associate Professor and Chair, Chemistry

training in a cross-over design and completed two weeks of training. The near-infrared spectroscopy-vascular occlusion test was used to evaluate vascular function. Results No significant differences were observed between resistance and endurance training. The change in 10s slope, time to peak, and time to halfway to peak post occlusion were greater after endurance training than resistance training. Conclusion This data suggests that resistance training has similar effects as endurance training on cardiovascular health.

CRAFTING THE LIFE AND DEATH OF JOHN LANSING, JR: NOVEL WRITING FOR THE FOUNDING ERA

Ella Haney Foulds, 2026
Beau Breslin, Professor, Political Science Department

John Lansing Jr. (1754-1829) is a compelling figure of the early American republic. That is all the more reason why the mysterious circumstances of his disappearance on the evening of December 12, 1829 are still so fascinating. He left his Manhattan hotel room at dusk to deliver a letter to a transport sailing for his hometown in Albany. The letter never arrived at its ultimate destination...and Lansing was never seen again. His disappearance captivated New York's high society. Some insisted that he was murdered; others were convinced that he stumbled into the water and was swept out to sea. No answer would ever come. It was an intriguing end to a beguiling political life. We are writing an historically accurate novel of his life and shadowy death.

AN EFFICIENT METHOD TO SYNTHESIZE TECOVIRIMAT

Xiaoran Liu, 2026
Beatrice Kendall, Senior Instructor, Department of Chemistry

This study explores a synthetic method for the syn

this experiment validate the synthesis of Tecovirimat by amidation followed by Acids with 32.5 percent yield for the first reaction and 98.25 crude percent yield for the second reaction.

DEVELOPING AND EVALUATING LOW -COST SOIL BULK DENSITY

Potentiometric titrations were performed to determine the stability of the two manganese complexes in aqueous solution.

LAKE GEORGE BATTLEFIELD STATE PARK GPR AND EXCAVATION
Lily Whelden, 2025; Cerys Forster, 2026
Siobhan Hart, Associate Professor, Anthropology Department

We discuss the use of both invasive and non-invasive archaeological methods utilized while studying the Lake George Battlefield State Park. We addressed two questions: 1) location of the battlelines of the French and Indian war and 2) location of the remains of a Revolutionary War smallpox hospital. Using ground penetrating radar (GPR), we located many potential cultural anomalies (PCAs). Based on these results, we excavated three test units in areas with high concentrations of PCAs. We found bedrock surfaces that appeared to have been maintained as interior floors, animal bones, and other 18th century artifacts along with modern discarded artifacts. We have demonstrated that GPR is an effective method for identifying PCAs and features. Additionally, there is demonstrated interest from the park in future archaeological research.

CHINA’S YOUNG DIGITAL NOMADS: WORK, LABOR, AND THE STATE
Marcelina Komornicka, 2026
Xiaoshuo Hou, Professor, Sociology Department and Asian Studies Program

Neoliberal globalization has prompted an increase in non-standard, informal forms of employment – often referred to as the gig economy – while new technologies and the internet infrastructures have [illegible]

TALES OF RACIAL APPRENTICESHIP IN COLONIAL FRENCH LITERATURE

Liam Moren, 2025
Catherine Talley, Assistant Professor, World Languages & Literatures Department

Throughout the early- to mid-19th century, a particular subgenre of French fiction emerged to depict Atlantic crossings—travel between France and its colonies—as a form of initiation into different understandings of race and racial hierarchy. These narratives generally involve white passing creole characters who, when returning to the racialized social structure of the colonies from an "enlightened" and thus "race-blind" French society, are confronted with the implications of their own mixed-race identity. Our research focused on understanding these stories in relation to their historical context: What were the real racial politics of France and its colonies during this period? Are they accurately represented in these texts? What might have been at stake in representing them this way?

QUANTUM CHEMICAL CALCULATION OF CARBOLINE: A MODEL SYSTEM FOR ENVIRONMENTAL CHROMOPHORES

Raul Manana, 2024
Juan G. Navea, Professor, Chemistry Department

Environmental chromophores, such as marine dissolved organic matter (DOM), are highly complex, light-absorbing organic compounds. Reactions involving DOM play a significant role in environmental processes, yet their study is challenging due to DOM's intricate composition. In this study, we propose harmaline as a molecular model for DOM, given its high aromaticity and nitrogen content, which closely resemble the characteristics of DOM. We utilized computational tools to investigate the absorption spectra of harmaline in the UV-Vis range, as well as its vibrational spectra. This approach provides a simplified yet effective way to study the behavior and properties of DOM.

ANALYSIS OF PROPAGANDA LEAFLETS DURING THE KOREAN WAR

Ally Vickery, 2026
Joowon Park, Associate Professor, Anthropology Department

Psychological warfare has played a prominent role in military operations for thousands of years to demoralize the enemy, create dissension, and spread ideologies. During the Korean War (1950-53), approximately 2.8 billion propaganda leaflets, or "paper bombs," were dropped by the United Nations forces (including the United States and South Korea) and the North Korean and Chinese militaries. "Bury the enemy with paper," ordered Frank Pace, US Secretary of State at the time. Drawing on archival data from the War Memorial of Korea (in Seoul), this summer collaborative research analyzed the narrative contents of fifty propaganda leaflets. What messages did these leaflets carry? What cultural framings were used to encourage surrender or defection? And how were aerial tactics deployed in relation to the terrestrial warfare?

DIFFERENTIAL SCANNING FLUORIMETRY STUDIES OF GLUCAN PHOSPHATASES

Isabelle Crampton, 2026; Brandon Yomtov, 2027
Madushi Raththagala, Associate Professor, Chemistry Department

themselves. Such discrimination often results in children being placed into the child welfare system, with low-income people of color disproportionately affected. However, previous research suggests that parents in contexts of IPV demonstrate considerable strengths in parenting in such contexts of adversity. The present study explores youths' perceptions of parents' strengths in contexts of IPV. Through a review of existing literature, we utilized a total of 20 articles exploring youths' experiences facing IPV in the home and we designed a study implementing dialogic interviews as well as arts-based research methods to understand youths' perceptions of their victimized parents' strengths in parenting.

DYING IN DEBT: EXPLORING THE EXISTENTIAL IMPLACATIONS OF FINANCIAL DEBT
Jonah Levy, 2026
Harrison Schmitt, Assistant Professor, Psychology Department

With U.S household debt totaling over $17 trillion, people are struggling to flourish financially and psychologically. Recent research suggests that different forms of debt may be seen as socially (dis)advantageous. For instance, culturally-defined "good" debts like mortgages afford financial stability while culturally-defined "bad" debts like payday loans are used to merely survive. A mixed-methods study examined mental health impacts of various kinds of debt. Study 1 offers qualitative analyses of existential themes in debt narratives from StudentDebtCrisis.org (N = 164). Study 2 (N = 399) provides correlational evidence that using "good" debts positively predicts self esteem, and negatively predicts death anxiety. These studies suggest that different forms of debt have different existential implications which these studies situate within the cultural context of the contemporary United States

TWO TREES: A DOCUMENTARY FILM-IN-PROGRESS
Callahan Mainzer, 2026
Adam Tinkle, Associate Professor, Media and Film Studies Department and Director of the John B. Moore Documentary Studies Collaborative

Inspired by the Mohawk story of the Peacemaker, Chief Jake Swamp (1949-2019) planted trees all around the world to spread a message of peace. Two were planted in Saratoga Springs: one on the campus of Skidmore College and the other in High Rock Park, with a history important to the relationship between Mohawk and Native people. Unmarked by any plaque, that second Tree of Peace still stands, surrounded by signage that acknowledges only certain threads of that indigenous history. The other Tree is missing – and no one at Skidmore seems to know what happened to it in the 34 years since its planting. In this film, we hear from Skidmore archaeologist Siobhan Hart and Mohawk storyteller Ionataie:was Kay Olan, using these two trees as a lens to examine how and what gets remembered and forgotten.

TEMPORAL CHANGES IN THE ECONOMIC LIVES OF THE POOR
Stacy Chen, 2025
Smriti Tiwari, Associate Professor, Economics

Indonesia witnessed a remarkable 12% reduction in its poverty rate over two decades. One feature of economic growth is a shift out of agriculture and into manufacturing industries. Using

panel data collected between 1993 and 2014, we study whether and how Indonesian households' participation and outcomes in non-farm and farm businesses have evolved. We explore this by heterogeneously looking at households that fall in different quintiles of the expenditure distribution. Are households in the bottom 20th percentile different from those within 20th to 40th percentile? Do we see a shift from farm to non-farm businesses? Is this trend more significant for