

MAY 13, 2022

UNDERGRADUATE RESEARCH AT UNION

HANDS-ON, FACULTY-MENTORED UNDERGRADUATE RESEARCH IS AT THE HEART OF A UNION EDUCATION.

Working closely with their professors—in classrooms, labs, studios, archives and in the field— Union students delve into topics that inspire and challenge them intellectually and creatively.

For one day each spring, the College suspends classes so that students can share their academic and creative interests and talents in the Steinmetz Symposium: a campus-wide celebration with peers, professors and families. Held annually since 1991, the symposium features an extensive array of oral presentations, posters, performances and exhibits. The day is part of Union's Recognition Weekend, which includes Prize Day on Saturday, a tribute to student achievement in all fields.

The Steinmetz Symposium celebrates a culture of personal discovery that integrates coursework, faculty mentorship and peer collaboration to deepen students' understanding of subject and self.

STEINMETZ



ELECTRICAL ENGINEER / EDUCATOR / INVENTOR

The Steinmetz Symposium is named for one of the College's most renowned faculty members, Charles Proteus Steinmetz (1865-1923), who taught electrical engineering and applied physics. Also a chief engineer for General Electric Co., he was widely regarded as America's leading electrical engineer and, after Thomas Edison, perhaps the most recognized name in the field.

Among his many contributions, Steinmetz fostered the development of alternating current, which made possible the expansion of the nation's electric power industry.

Born Carl August Steinmetz in Breslau, Germany (now Wroclaw, Poland), Steinmetz studied in Breslau, Zurich and Berlin, pursuing a broad course of scholarship that included astronomy, biology, chemistry, electricity, physics and political economy. He received his Ph.D. in 1888 and was forced to flee Germany after writing a paper critical of the government. He settled in New York City, where he developed the law of hysteresis, which enabled engineers to design better electric motors for use in industry. He joined General Electric Co. in 1892 and relocated to Schenectady.

In 1902, he became professor of electrical engineering at Union. Three years later, he took charge of Union's new electrical engineering program. After World War I, Steinmetz ceased lecturing at Union, but he remained an active friend of the College the rest of his life. Active in the community, he chaired the city's school board and parks commission. He also served as president of the Common Council.

A 1914 "Duplex Drive Brougham" Detroit Electric automobile that belonged to Steinmetz is on permanent display in the first-floor corridor between the Wold and Olin buildings. Steinmetz and Thomas Edison are memorialized in statues along Schenectady's Erie Boulevard.



Privilege presentations are brave spaces that engage all of us where we are, and help us grow toward further knowledge and understanding. With divergent ideas and personal and cultural approaches, these presentations work to expand understanding and respect for experiences and perspectives. Our commitment to Diversity, Equity, Inclusion and Belonging at Union College strives to enhance our vibrant learning and working community both inside and outside the classroom, leading with wisdom, empathy and courage."

DEIDRE HILL BUTLER / ASSOCIATE PROFESSOR OF SOCIOLOGY

The Templeton Institute

A number of presentations in the 2022 Steinmetz Symposium address this year's theme of the Templeton Institute for Engineering and Computer Science: "Risking Failure to Succeed: Creative Endeavors and Research Experiences of Resilience and Discovery." With topics ranging from identifying risk factors for depression to using cryptocurrency to help refugees, student presenters will share the risks they took in their endeavors.

The presentations are identified with the institute's logo shown here:

The Templeton Institute for Engineering and Computer Science is made possible by a gift from Rich and Mary Templeton of Union's Class of 1980. The mission of the institute is to enable connections, experimentation, innovation and discovery through integrative coursework, projects and research.

Race, Power and Privilege

The 2022 Steinmetz Symposium is presenting four sessions on the theme of Race, Power and Privilege: Healthcare and the Pandemic; the Arts; North America Past, Present and Future; and Cultural Politics. See program for details.

"Our Steinmetz Race. Power and

The Templeton Institute Exhibit

The Templeton Institute presents "Failsafe," an interactive exhibition on Friday, May 13, from 10 a.m. to 5 p.m. in the Imagine Lab, Wold Center 118. Centered on the Institute's current theme, "Risking Failure to Succeed," it showcases works made possible only through failure, trial and error and resilience. It celebrates creativity and fearlessness that eventually led to triumph and success. A video component and interactive pieces allow visitors to share stories about risking failure to succeed.

Friday, May 13 Steinmetz Symposium

8:40 a.m. – 5:00 p.m. Presentations on student creative, scholarly and research achievement. Programs and information are available throughout campus.

Student presentations begin at 8:40 a.m.

9:00 a.m. – 4:30 p.m. The 2022 Annual Steinmetz Student Visual Arts Exhibition The exhibition is open through May 15 with an artist's reception May 13,

from 4:30–6:00 p.m. The exhibition features 136 works from classes in digital art, drawing, painting, photography, printmaking and sculpture made by 79 students from all class years and majors this academic year.

CROWELL AND WEST GALLERIES, FEIGENBAUM CENTER FOR VISUAL ARTS

4:30 – 6:00 p.m. Artists' Reception for Steinmetz Student Visual Arts Exhibition Feigenbaum Center for Visual Arts

5:00 - 6:30 p.m. Steinmetz Symposium Reception

Cash bar and light refreshments for presenters, their families, alumni, guests and faculty sponsors.

HULL PLAZA (BETWEEN SCHAFFER LIBRARY AND NOTT MEMORIAL)

8:00 p.m. Union College Jazz Ensemble

Professor Tim Olsen, director

EMERSON AUDITORIUM, TAYLOR MUSIC CENTER

Saturday, May 14 Prize Day

1:00 p.m. Presentation of Prizes and Recognition

PROCESSIONAL/RECESSIONAL: "Moving through Rhythm (Yanvalou)"
PERFORMERS: The African Dance Club and Zakuro-Daiko, the Japanese Drumming and Global Fusion Band

MEMORIAL CHAPEL

SPRING TERM COVID VISITOR POLICY

- All campus visitors are required to be fully vaccinated against COVID-19 or have a negative COVID test result (PCR or rapid test is acceptable) within 72 hours of arrival. While there will be no formal verification, we respectfully request this requirement is honored to keep our campus community healthy. Masks are encouraged for indoor settings.
- · Visitors are not permitted in the residence halls.
- Frequent hand washing is recommended and encouraged during your visit.
- Please do not visit campus if you feel unwell or have COVID-related symptoms.

The visitor policy is subject to change based on guidance from local, state and federal health officials.

2 $_{\mbox{\scriptsize |}}$ THE CHARLES PROTEUS STEINMETZ SYMPOSIUM 2022

Friday, May 13

9:00 a.m. - 4:30 p.m. Art Exhibits 4

Session I Oral Presentations 6 8:40 – 10:40 a.m.

Session II Oral Presentations 9 10:50 a.m. – 12:30 p.m.

Session III Poster Presentations 12 12:30 – 1:50 p.m.

Session IV Oral Presentations 16 1:50 – 3:30 p.m.

Session V Oral Presentations 19 3:40 – 5:20 p.m.

Steinmetz Dance Performance Viniar Athletic Center 22 4:00 p.m.

Steinmetz Concert Emerson Auditorium, 24 Union College Jazz Ensemble Taylor Music Center 8:00 p.m. Sunday, closed

The Nott Memorial is closed for maintenance.

SCHAFFER LIBRARY WILL BE OPEN:

THE BOOKSTORE WILL BE OPEN: Friday, 8:45 a.m. – 5 p.m. Saturday, 10 a.m. – 3 p.m.

Friday, 8 a.m. – midnight Saturday, 10 a.m – midnight Sunday, 10 a.m. – 2 a.m.

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THE 2022 ANNUAL STEINMETZ SYMPOSIUM STUDENT ART EXHIBITION

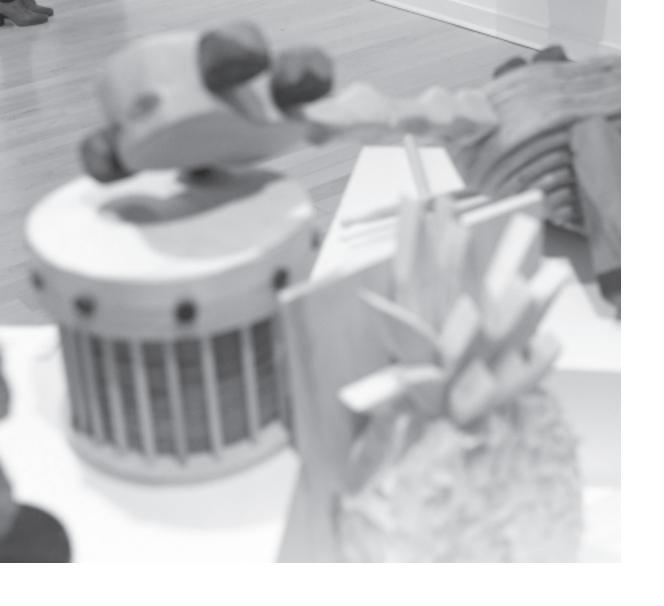
9:00 A.M. - 4:30 P.M. / CROWELL AND WEST GALLERIES IN THE FEIGENBAUM CENTER FOR VISUAL ARTS

Artists' reception, May 13, 4:30 – 6 p.m. Exhibition runs through May 15

The Visual Arts Department is delighted to present our 2022 Steinmetz Symposium Student Art Exhibition, an annual highlight of student work selected by our studio fine arts faculty. The breadth and diversity of this exhibition showcases the range of courses students are actively engaging in as well as those who push the boundaries between different materials. This selection of work includes students in various class years,

majors and minors in our program, as well as students taking visual art courses as an elective. In 2022 we are so pleased to be back in person in studios and the gallery. We are proud of our students' achievements, and hope that you will enjoy seeing all of their hard work.

LORRAINE MORALES COX / ASSOCIATE PROFESSOR AND DEPARTMENT CHAIR



SESSION I

8:40 - 10:40 A.M. / CONCURRENT ORAL PRESENTATIONS

RACE, POWER AND PRIVILEGE 1: HEALTHCARE AND THE PANDEMIC

MODERATOR: CONOR O'DEA

8:40 / ADENIKE HICKSON

The Impact of COVID-19 Blame on Asian Americans' Sense of Belonging

9:00 / BRIANNE FORMAN

Did COVID-19 and the Black Lives Matter Movement Cause an Increase in Homicides?

9:20 / DANA D'ONOFRIO

Pandemic Unemployment Assistance as an Asymmetric Incentive Among Gender-Racial Demographics

9:40 / DHARA SHUKLA

The Patient Narrative and the Impositions of Implicit Biases in Health Care

10:00 / AINSLEY BARLOW

Health Disparities in the Hispanic Population Due to the Lack of Translational Services in Health Care Settings: Call to Action

NEUROSCIENCE

MODERATOR: CHAD ROGERS

8:40 / KARTIK NATH

The Interactive Physical and Cognitive Exercise System (iPACES v3): Neuro-exergaming for Parkinson's Disease

9:00 / MAC KENZIE FRANK

Improving an SSVEP-Based BCI Speller for Pediatric Use

9:20 / ISABELA ALBUJA

Exploring Bilingualism as a Protective Factor for Cognitive Decline

9:40 / ALLY ATKINS

Determining Optimal Stimulation Frequency for Brain Computer Interface (BCI) Based Color Vision Assessment

denotes

10:00 / HANNAH SOLIMAN

Dad and BOMB or Atomic MOM? Assessing the Role of Outgroup Bias on Audiovisual Speech Perception

10:20 / KAROLYN BEDORE

An Exploration of Equine-Assisted Activities/Learning

GOVERNING, HEALTH AND ECONOMIC OUTCOMES OF THE COVID-19 PANDEMIC

MODERATOR: ZOE OXLEY

8:40 / HANNAH HOYT

Governing During COVID-19: Did Male and Female Governors Respond Differently?

9:00 / WILLIAM CARPENTER

COVID-19 and the Corporate Bond Trading by the Hartford Insurance Group

9:20 / EMMA GRAY

Migraine and Anxiety in the Context of the COVID-19 Pandemic

9:40 / MARGARET HAYES

Changes in Work Hours During the COVID-19

Pandemic by Sex, Marital Status and Parental Status

10:00 / ALISON SOMMERS

Finance and Fear: Sentiment, Media and Financial Markets During the COVID-19 Pandemic

RENEWABLE ENERGY AND SUSTAINABILITY

MODERATOR: ASHRAF GHALY

8:40 / OLIVIA SALVADOR

The Impact of Solar Related State-Level Renewable Policies on CO² Emissions Overtime

9:00 / JOSHUA SHRESTHA

Effects of Charging Infrastructure on Electric Vehicle Market Share for European Countries

6 $_{\parallel}$ THE CHARLES PROTEUS STEINMETZ SYMPOSIUM 2022

SESSION I

8:40 - 10:40 A.M. / CONCURRENT ORAL PRESENTATIONS

9:20 / ANDREW WOOLSTON

The Impact of Financial Renewable Energy Policy Incentives vs. Government Renewable Energy Regulatory Policies on CO2 Emissions and Employment in U.S. States

9:40 / ELIJAH SIEGEL

Evaluating Recommendations in the Electric Vehicle Industry

10:00 / ANNA KENNEDY

From Rags to Riches: The History of Sustainability and Regenerated Carded Wool in Prato, Italy

10:20 / PHILIP FACEY

Bottle Recycling on a College Campus: An Application to Union College

MACROECONOMICS AND FINANCE: PAST, PRESENT AND FUTURE

MODERATOR: CARL (DONG) CHENG

8:40 / JOHANSEN ALVAREZ FLORES

The Impact of Government Policies on the Housing Market

9:00 / SAI LYON HO

Using Cryptocurrency to Help Venezuelan Refugees in Colombia

9:20 / OWEN DONOVAN

Social Media Influencers and the Cryptocurrency Market: Investigating How Elon Musk's and Mark Cuban's Tweets Impact Cryptocurrency Prices

9:40 / JASON GOLDSTEIN

COVID-19 and International Trade: The Effect of the Pandemic on Global Transport Prices

10:20 / ROBERT HERMANN

Century

Has the Chinese Housing Boom Truly Impacted the U.S. Stock Market? Investigating the Potential Relationship Between China's Housing Price Dynamics and the U.S. Stock Market

The Impact of Plant Size on Productivity in the U.S. During the First Half of the Twentieth

FIRE AND ICE—GEOSCIENCES FROM VOLCANOES TO ANTARCTICA

MODERATOR: HOLLI FREY

8:40 / IAN PLUMMER

Peruvian Speleothem Record of Climate and Hydrologic Variability during MIS 6

9:00 / GRACE O'HARA

The Hydroclimate in South America During the Penultimate Glacial Period Determined by Stable Isotope Analysis of a Peruvian Stalagmite

9:20 / ALEXANDER DIEDRICH

Using Peruvian Speleothems to Depict Natural Climate Variation

9:40 / EMMA PUHALSKI

Holocene Paleoclimate of McMurdo Sound, Antarctica Reconstructed from Growth Striations and d13C, d18O, and. d15N Values in Shells of the Antarctic Scallop Adamussium colbecki

10:00 / SYDNEY WALTERS

Characterization of the Initial Explosive Phases of the 2021 La Soufriere Eruption, St. Vincent

10:20 / DANIEL DICKSON

An Investigation of the Igneous-Plutonic Setting of Poway, Calif.

10:00 / QIYUE ZHANG

CHEMISTRY

MODERATOR: COLLEEN CONNOLLY

8:40 / CAMILLE PARKER

Diisopinocampheylborane Trifluoromethanesulfonate Mediated Aldol Reactions Using an Aldehyde and an Amide

9:00 / EMMA DEVANEY

Small Molecules Ligands for G-quadruplex Stabilization in Pre-miRNA

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SESSION I

8:40 - 10:40 A.M. / CONCURRENT ORAL PRESENTATIONS

Development of Quantitative Methods to Study PFAS Using Proton Induced Gamma-Ray Emission

9:20 / MISTY ZACZYK

Synthesis of Uniform Gold Nanoparticle Embedded Peptoid Nanosheets

9:40 / LILLIAN WOODS, EMILY STEIN,

BEATRICE OGDEN

Synthesis and Reactivity of Pyridine-Backbone Ligands with Copper and Nickel Containing Complexes and the Antibacterial Properties of Produced Metal Complexes

10:00 / ALESANDRA CAMPEDELLI

Dual-End Fluorescent Labeling of Pre-miR-92b to Investigate Important Structural Conformations

10:20 / WALTER O'CONNOR

Regular Dispersion of Gold Nanoparticles in a Peptoid Nanosheet

MEASUREMENTS AND MODELING IN THE PHYSICAL SCIENCES

MODERATOR: JON MARR

8:40 / JOSHUA DAROSA

Flow measurements over Heterogeneous Canopies Resembling River Vegetation

9:00 / RYAN GALLARY

Volumetric Time-Resolved Flow Measurements of Rough-Wall Turbulent Boundary Layers with Flow Injection

10:00 / ZHEBIN YIN

Impact of Movements on Facial Expression Recognition

9:20 / ADAM GINSBERG

Using Mathematical Functions to Express Harmonic Progression

9:40 / CHRISTOS KAKOGIANNIS

Statistical Effects of Synthetic Template Mismatch with Model DEIMOS Observations

10:20 / COLIN LANGTON

denotes

EVO-DEVO 1 (EVOLUTIONARY DEVELOPMENTAL BIOLOGY)

MODERATOR: SCOTT KIRKTON

8:40 / GRACE HEITING

Hypoxia Decreases Jump Rate and Increases Lactate Production in Late-Stage Grasshoppers

9:00 / ANDREW SHEAHAN

Decreasing Tracheal System Volume During Intermolt Development in Grasshoppers.

9:20 / CAITLIN WILLIAMS

Utilizing Captive-Bred Bearded Dragons to Study Sensory and Cognitive Capacity in Lizards

9:40 / TIMOTHY FAGAN

The Influence of Body Temperature on Motion Patterns in Anolis Lizard Visual Display

ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING

MODERATOR: LUKE DOSIEK

8:40 / VICTORIA MULLEN, MADELYN CAGNASSOLA Moist

Heated Massage Gun

9:00 / SEAN MILLER

Motion Controlled Robotic Hand to Mimic Human Gestures

9:20 / LILAH KELLY, EDWIN GARCIA-FLORES

Automated Watering and Heating System for the Schenectady ARC Using RF Modules

9:40 / YUEYIN SU

Human Facial Emotion Recognition on a Real-Time Platform

10:00 / ALI KHAN

An iOS Application for Visually Impaired Individuals to Assist with Crossing Roads (Friendly Walk)

10:20 / COLIN PENNOCK

Evaluating Energy Storage Methods for the Stabilization of Rural Microgrids

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SESSION II

10:50 - 12:30 P.M. / CONCURRENT ORAL PRESENTATIONS

A Brief History of Breast Cancer from Antiquity to Modern Times

12:10 / NOA RASKIN

Sexual Objectification of Women: What Can Ancient Rome and Modern Psychology Teach Us?

RACE, POWER AND PRIVILEGE 2: THE ARTS

MODERATOR: DEIDRE HILL BUTLER

10:50 / ELENA MONTOYA

Black and Chicana Feminist Art Perspectives: Fostering Change through Art and Community Building

11:10 / ERICK MIRON

Latinx Portrayal on the American Stage

11:30 / MARY MELO

Music and Social Movements: Role of Rap and Hip-Hop on the Black Lives Matter Movement

11:50 / ROCHELLE-LEAH NUQUI

"Ang kuwento ng araw at buwan"—The Story of the Sun and Moon and What it Means to Be Filipino-American

12:10 / OWEN FOLEY

Possession vs. Progression: The Relationship Between Hip-Hop and Copyright Law

SEX AND POWER 1

MODERATOR: KRISANNA SCHEITER

10:50 / CRYSTAL FLAX

Preventing Violence Against Women by Targeting the Development of Hostile Masculinity in Boys

11:10 / ALINA WHITESIDE

The Interaction of Masculine Honor Beliefs and Empathy for Bullied Children

11:30 / MOLLY MCLEOD

Weaving in Mythology: Portrayals of Women's Agency and Character in Greek and Roman Literature

11:50 / SITARA BAGNULO

PERFORMING ARTS

MODERATOR: DAN VENNING

10:50 / INGRID BURKE

The Spectacular History of Aerial Silks

11:20 / MIA VILLENEUVE

Absurdism as Social Commentary in "Rhinoceros" and Other Plays

11:40 / UNGLID PAUL

La Fille de la Révolution

ENGLISH 1—LITERARY WORLDS OF CREATIVE IMAGINATION

MODERATOR: CLAIRE BRACKEN

10:50 / KALEIGH CONTE

Fantastic Lies

11:10 / FRANK CACCIOPPOLI

Strangers on Earth: A Creative Short Fiction Collection

11:30 / MADELINE SCHAEFFER

What I Knew Then, and What I Know Now

ECONOMICS, POLICIES AND ATTITUDES IN NON-U.S. COUNTRIES

MODERATOR: TOMAS DVORAK

10:50 / ANNA TRANCOZO

Another World is Possible: Democratic Innovations in Latin America

11:10 / WILLIAM MARTIN

U.S. Monetary Policy as a Hegemonic Tool In Emerging Markets

10:50 - 12:30 P.M. / CONCURRENT ORAL PRESENTATIONS

11:30 / WILLIAM PIERONI

On Non-Life Insurance and Economic Activity in Developing Countries: An Analysis of Select LAC Countries

11:50 / CAROLINA MISSURA SALEM

Patience as a Determinant of Environmental Attitudes in Europe

STUDENT CONFERENCE ON U.S. FOREIGN POLICY AT WEST POINT PROCEEDINGS

(one hour-session)

MODERATOR: TOM LOBE

10:50 / MELANIE BOYLE, SOPHIA ANDERSON, DANIEL GREENMAN

Disruptive Technology and American Influence in the Coming Decade

ENVIRONMENTAL CONTAMINATION AND WATER QUALITY IN UPSTATE N.Y.

MODERATOR: ANOUK VERHEYDEN-GILLIKIN

10:50 / JOANNA WRIGHT

Sewage Contamination and Pathogens in Urban Streams in Schenectady and Impact on the Mohawk River

11:10 / MICHAEL CONNOLLY

Implications of Antimicrobial Drug and Bacteriophage Resistance in Environmental Isolates of E. Coli Bacteria

11:30 / NOAH REIDY

Use of Cathodoluminescence on Blueback Herring Otoliths to Better Understand Population Dynamics in the Mohawk River

11:50 / CAMRYN RAGLAND

Failing Infrastructure and Stressors on Water Quality in Streams within the Alplaus Watershed in Upstate N.Y.

denotes

EFFECTS OF CORTISOL ON OBESITY AND DEPRESSION

MODERATOR: BRIAN COHEN

11:10 / RYAN SIDORSKI

The Effect of Single Nucleotide Polymorphisms Related to Cortisol Activity in Obesity

11:30 / CASSIDY MICHALICKA

The Effect of Cortisol Hypersensitivity Polymorphisms on Cortisol Activity in Obesity

11:50 / MICHELA MICHIELLI

Cortisol Receptor Sensitivity as a Risk Factor for Depression

12:10 / LINDSEY NASSIMOS

Relationship Between Cortisol Responsiveness and Depression

CANCER—COVID—HIV: QUANTITATIVE STUDIES OF SERIOUS DISEASE

MODERATOR: JUE WANG

10:50 / XINCHEN HUANG

Survival Analysis on Patients with Hepatocellular Carcinoma by Different Demographic and Tumor Characteristics

11:10 / ZHEBIN YIN

Diagnosing and Categorizing Lung Cancer Using Deep Learning

11:30 / ZEKAI HU

Building Computational Models to Predict Survival Rate of Heart Failure Patients with COVID-19

11:50 / SOPHIE DANZIGER

Synthesis of a Fatty Acid Synthase Inhibitor Enzyme to Aid In the Treatment of Cancer

12:10 / GARYFALLIA RALLI

Blocking the Entry of HIV into Host Cells Through

10 $_{\parallel}$ THE CHARLES PROTEUS STEINMETZ SYMPOSIUM 2022

SESSION II

10:50 - 12:30 P.M. / CONCURRENT ORAL PRESENTATIONS

EVO-DEVO 2 (EVOLUTIONARY DEVELOPMENTAL BIOLOGY)

MODERATOR: ROMAN YUKILEVICH

10:50 / TESS GALLAGHER

Skin Deep with Diplodocus: Small Polygonal Scales from Diplodocus Sp. Were Porous, and May Have Played a Role in Thermoregulation Via Water Absorption and Evaporative Cooling

11:10 / MARCY FORTI

Differentiation of Smooth Muscle in the Developing Spiral Intestine of L. Erinacea

11:30 / WU LAUNH

Investigating Embryonic Flexure and Torsion Using Finite Element Analysis (FEA)

11:50 / GABRIELA BASIL

Widespread Evidence of Reinforcement in Male Courtship Discrimination Driven by Pheromones in Drosophila

APPLICATIONS OF SILICA SOL-GEL MATERIALS

MODERATOR: MARY CARROLL '86

10:50 / MARGEAUX CAPRON

Fabrication and Characterization of TEOS-based Silica Aerogels for Window Applications

11:10 / STEFAN BRECHER, LUKAS BAKER

AeroCel Solar Thermal Collector

11:30 / ISAAC NEUSTADT

Using Aerogel-Based Insulation to Reduce Liquid Hydrogen Boil-Off

11:50 / JACOB BOWSER

Development of Silica-Xerogel-based Optical Humidity Sensors

12:10 / ANNELISE LOBO

Hydrophobic Aerogel Films





12:30 P.M. - 1:50 P.M. / POSTER SESSIONS

NATURAL SCIENCES AND ENGINEERING 1

NANDINI AGRAWAL

Chaotic Oscillator for Dual Functional Radar Communication Operation

CALEB BASHANT

Laser Reduced Graphene Oxide for Sensor Applications

EVA BLASHKEVICH

The Research and Development of Clean and Efficient Biomass Cookstoves

BETHANY COSTELLO

An Investigation of Impacts of Shading on PV Module Temperature and Performance

AKRITI DHASMANA

Mapping Power: Hierarchical Social Network Analysis of Short Fictional Text

MARIAM DOBOSZ

Heat Recovery from Photovoltaic Modules Enhanced with Sustainable Phase Change Materials

QUINLAN GODDARD

Latent Heat Storage System for Domestic Hot Water Heating Using Phase Change Materials

HYOJIN HAN

Exploring the Morphologies and Behaviors of Soft Silicone Robots

REBECCA LAVENTURE, BAILEY DECOCCO Medical Imaging Applications of Chaotic Waveforms

HARPER LYON

Tracking Immigration Discourse on Twitter Using NLP

ZOE LYON

Development of WS2-based Electrochemical Sensor for VOCs Detection

denotes

JOHN MASCI, KIARA BECKHAM, WILLIAM DUPREY, SARAH WORT

Weight Measurement System for Emergency Pediatric Transports

JULIA NICOLESCU, AUDREY GOON, RAYA PETROVA, FIONA ZIMMERMAN

HeartFinder: An Innovative Ultrasound Fixation Device for Intermittent Cardiac Assessment

NICHOLAS O'TOOLE

Examining the Wording of Digital Synthesizer Presets to Help Novice Music Producers

LINDSEY PODLASKI

Permeability and Stability Analysis on Graphene Oxide (GO) and Aluminum Graphene Oxide (AGO) Membranes

HAYDEN QUALLS

Fabrication of Graphene Based Humidity Sensors

DIEP VU

Gender Bias in Artificial Intelligence: Exploring the Impacts of Stereotypes on English-Vietnamese Machine Translation

DERECK WANG

Does Cell Proliferation Affect Embryonic Flexure and Torsion?

NEILA WATSON

Enhancing Bifacial PV Efficiency with the Addition of a Rear Side Reflector

NATURAL SCIENCES AND ENGINEERING 2

MILES ACKERMAN

Re-building an Optical Tweezers Setup Incorporating an AOM

AQEEL AHMED

Single Photon Experiments using Type-I and Type-II Spontaneous Parametric Downconversion

12:30 P.M. - 1:50 P.M. / POSTER SESSIONS

DEVIN BATHEJA

Synthesizing Potential Metacaspase Inhibitors

MANAV BILAKHIA

Searching for Hybrid Mesons $\pi 1(1600)$ in $\gamma p ~\eta^{\prime}\Pi^{0}p$ With GlueX Data

MELANIE BOYLE

The Freezing and Melting Points of Solute Compositions as they Relate to Europa

JAMES BROUDER

Visualizing Soft Bodied Robotics Simulations with Modern Rendering Techniques

AVERY CLAVEL, HAILEY STOLTENBERG

Tropical Paleoclimate Reconstruction of Heinrich Event 4 and Monsoon Cycles Using Peruvian Speleothem Isotope Records

JASON D'AMICO

A Medial Axis-based Compactness Measure vs. the Eye Test for Detecting Gerrymandering

JANA DAVIS

Determining the Visual Acuity Threshold of Crayfish (Faxonius virilis and Orconectes rusticus)

KATHRYN EFNER

Studying Food Web Relationships Using Carbon and Nitrogen Stable Isotopes

STEPHANY HEIBERGER

CRISPR/Cas9 Gene Knockout Experiment Targeting the Tea1 Gene in the Mushroom-Producing Fungus Pleurotus Ostreatus

BROMBERG, JAYSON, ZUHAIR ALMASSRI, MINH MGUYEN, LOUIS BEAUCHAINE

Lightcurve for the Main Belt Asteroid (1363) Herberta

CELIA LANE

A Tiny House for Big Change: Bridging Communities to Promote Wellness Together

ELISE LIEBOW

Electron-Positron Annihilation Lifetime Spectroscopy of MgO

TALIA MARC

Examining a Conserved Function for GDE6-Related Proteins in Neural Development

MEGHAN MCVAIGH

Disruption of the Transcriptional Regulator Ust1 in Pleurotus ostreatus utilizing CRISPR/Cas 9 Genomic Editing

PHOENIX MULGREW

Corrective Feedback Timing in Kanji Writing Instruction Apps

GRACE NICOL

The Identification of hFSHR Interacting Proteins

ELIAS OTTENS

External Beam Alignment System for Quantitative Proton Induced Gamma-ray Emissions (PIGE) Spectroscopy

ARIS RASSIAS, ANDY CAHALY, AXTON PULLIAM

Baja SAE Racing Team Display (Wold Lower Level)

SAMANTHA ROSENFELD

Investigating the Thermodynamics and Seismic Profile of the European Hydrosphere through Pure-Water Modeling and Saltwater Experiments

KATHERINE SONNTAG

Determining PFAS Contamination from Firefighting Foam Using PIGE and PIXE

LEA STEINBERG, TIMOTHY FAGAN

Analyzing the Distinct Motion Patterns of Anolis Visual Displays as a Function of Honest Signaling

BRIANNA TURNER-DOUGLAS

Sonic Hedgehog's Role in the Developing Skate Spiral Intestine

MIA VILLENEUVE

PIXE Analysis of Heavy Metal in Soil Along the East River

SCARLETT JIA WEI

Searching for Hybrid Mesons $\Pi 1 (1600)$ in $\gamma p ~ \eta ' \Pi^0 p$ With GlueX Data

MAGGIE WEICHERT

Genetic and Evolutionary Changes in the SARS-CoV-2 Spike Protein

12:30 P.M. - 1:50 P.M. / POSTER SESSIONS

MINERVA FELLOWS **PRESENTATIONS**

YAN BO

Minerva Exploration Grant: Spanish Theater and Music

PAOLA GARCIA

Learning How to Play Guitar for Mental Wellness

CYNTHIA PAZ

Equity for Women in Academia and Careers

ANNA TRANCOZO

Minerva Exploration Grant: Brazilian Portuguese

VERONICA TUREK

Knitting and Sewing: A Generational Tradition

HUMANITIES, SOCIAL SCIENCES AND PSYCHOLOGY

SERINA BEEBE

Analysis of the Efficiencies and Sustainability of ICCAT Policies on Atlantic Bluefin Tuna Stocks

SAMUEL BYRNE

Do Industries with High Workplace Flexibility See Lower Job Losses Due to COVID-19 Than Ones with Less Flexibility During the 'Great Resignation?'

ALEXIS CANDIDO

Medea: How Translation Affects Understanding in Euripides' Medea

DANIEL DEBONIS

Consequences of Repeated Critical Versus Neutral Body Checking in Men with High Shape or Weight Concern

LEONARDO FERRISI

AVIAN: A Versatile Interface for Applications in Neurofeedback—Using Open-Source Technologies for Low-cost Alternatives to Neurofeedback

TESSA FOUNTAIN

Orpheus and Eurydice: Why Ancient Myths are Reinterpreted for the Stage

KELCI GILOT

Exploring Allocation Schemes for Distributing Global Climate Mitigation and Adaptation Funds

NATALIE GIORDANO

The Latin American Psyche: How Political Instability Affects Mental and Emotional Health in Bolivia

GENESIS GONZALEZ VILLATORO

The Science Behind Cosmetics: A Deeper Look into the Chemistry of Makeup in Theatre

ARUNDHATI GORE

Exploring Sources of Heavy Metals in a 19th-Century Privy in the Oliver Residence in Albany, NY

AARON ISENSTIN

Examining How the Changes in Monetary Variables Have Affected Asset Prices

HALLIE KATZMAN

Masculine Honor Beliefs and Perceptions of Intimate Partner Violence to Reestablish a Perceived Loss of Masculinity

GRACE LEVINS

Women, Water and Climate Change: How the Changing Climate is Affecting Women and Water Sources in Four Case Studies

ZIHE LI

Analysis of Impact of Sino-U.S. Trade Frictions: Case Study of Huawei

JAKE MILLER

The Angels of Warsaw: The Warsaw Ghetto Story

MADISON NATHAN

Quality of Mental Health Management and Resources for Adolescents in High School

SALIHA NAZIR. SADIE HILL

Lead White and Red Lead in 15th and 16th Century Europe

12:30 P.M. - 1:50 P.M. / POSTER SESSIONS

MOLLY RUSGROVE

Real Men of Genius: The Effects of Masculine Honor Beliefs and Mortality Salience on Risky Behaviors

RYAN SIDORSKI

The Effect of Due Diligence Reports on Robinhood Stock Ownership During 2019?

REBECCA TEGIACCHI

Music to Your Ears- Effects of Musical Experience on Prosody in Sentence Production

MIYA WALTO

COVID-19 and Social Isolation: Predicting
Psychological Distress in High vs. Low Self-Monitors







SESSION IV

1:50 P.M. - 3:30 P.M. / CONCURRENT ORAL PRESENTATIONS

RACE, POWER AND PRIVILEGE 3: NORTH AMERICA PAST, PRESENT AND FUTURE

MODERATOR: ARSALAN KHAN

1:50 / ALYSSA HARRYNANAN

Diversity in the Adirondacks: Past, Present, and Future

2:10 / LYDIA HOGAN

Canyon in Context: Power Dynamics and Erasure in the Construction of Native American Narratives at Grand Canyon National Park

2:30 / ALYSSA HARRYNANAN

A Comparative Analysis of FEMA Housing Recovery Efforts after Hurricane Katrina and Ida

2:50 / ROGER YACINTHE

Your Roots: An Examination of Community Within La Regla de Ocha in New York City and American Society

SEX AND POWER 2

MODERATOR: JENNIFER MITCHELL

1:50 / GRACE ATHANAS

Clinical Implications of Body Exclusivity in Childhood and Adolescence

2:10 / SIQI JIA

Does Patriarchal Culture Shape Women's Preferences?

2:30 / LYDIA MCELROY, CAROLINE KISER, OWEN WHITE

Implementing More GSW Courses at Union College

2:50 / ELAINE FRYER, GRACE ATHANAS, AVA BOWEN

College Level Sex Ed: SEX-101-01: U & Me, Understanding Our Bodies

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ART FOR HEALING

MODERATOR: TIMOTHY STABLEIN

1:50 / EMMA CALARCO

Identity Through Art: Art Therapy Program Proposal to Address Internalized Homophobia in Queer Youth

2:10 / CRYSTAL FLAX

Poetry as Healing: Shedding Light on Overshadowed Female Poets in France

2:30 / MICHELLE MOINA

A Growing Familiarity with Death Through Art

2:50 / SARAH BRESETT

Obenzinger Project: After-School Program for At-Risk Youth of Albany

ENGLISH 2: INTERDISCIPLINARY WORLDS AND THE MATTER(S) OF WRITING AND REPRESENTATION

MODERATOR: CLAIRE BRACKEN

3:40 / AKRITI DHASMANA

Mapping Power: Hierarchical Social Network Analysis of Short Fictional Text

4:00 / COZETTE BLUMENFELD

Women Are More Likely to Use Tentative Language, I Think: A Literary and Statistical Analysis of Ulysses by James Joyce and Debate Speech

4:20 / MICHAELA WOOD

"Meatheads" Redefined: An Analysis of the Union College Football Team

FINANCE 1

MODERATOR: TOMAS DVORAK

1:50 / GRACE SNYDER

The Effect of Board of Director Characteristics and Share holder Activism on ESG Ratings.

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SESSION IV

1:50 P.M. - 3:30 P.M. / CONCURRENT ORAL PRESENTATIONS

2:10 / RAGHAV NARRAVULA

An Analysis of Price Variability Between Albany Medical Center and New York Presbyterian Hospital

2:30 / JOSEPH FERREIRA

The Effect of Preferential Trade Agreements with Intellectual Property Right Provisions on Multinational Production

2:50 / MICHAEL RYAN

The Economics of Leveraged Buyouts

INEQUALITY IN AMERICA— HEALTH, WEALTH AND FOOD

MODERATOR: CIGDEM CIDAM

1:50 / ISABELLE RIKER

Income Inequality in Tourism-Dependent Counties in the United States

2:10 / SOPHIA ANDERSON

The Flawed Thinking of Pulling One Up by Their Bootstraps: Food Insecurity in America

2:30 / PATRICK MORRISON

The Effects of Recreational Marijuana Dispensaries on Local Opioid Mortality

2:50 / DERECK WANG

Mental Health is Wealth Too: Did the Affordable Care Act Medicaid Expansion Improve Mental Health Outcomes?

3:10 / ANNA LEHR

Patterns In Adoption of State Food Waste Policies in The United States

PERSPECTIVES ON EAST ASIA

MODERATOR: ESHRAGH MOTAHAR

1:50 / SEBASTIAN KANIA

Patronage, Power and Ideology: Political Actors and Buddhism and Confucianism in China from the Tang to the Ming

2:10 / DANIEL WILCOX

Convergence and Hegemony: the United States and China in the 21st Century

2:30 / DANIEL WILCOX

Perceptions of China

2:50 / SADHIKA THAPA

Understanding the Factors Behind China's Economic Growth and their Impact on Growth Trends in the Future

3:10 / SANGAM DHOJ KARKI

Determinants of Singapore's Economic Growth, 1965-2021

SOCIAL AND EMOTIONAL DEVELOPMENT OF EMERGING ADULTS 1

MODERATOR: LINDA STANHOPE

1:50 / MADISON NATHAN

The Impact of Parenting and the Evolution of Anxiety and Risky Behaviors Throughout College

2:10 / HALEY NEWMAN

Helicopter Parenting: Does Parental Control Relate to Children Losing Control?

2:30 / BRIANNA WEISSEL

The Role of the Sibling Relationship During Stressful Life Events

2:50 / JILLIAN GOLDABER

Stress in Young Parents and Societal Response

3:10 / GRACE HUEBSCHMANN

Exploring Barriers to Detecting Emotional Child Abuse in Pediatric Primary Care: A Qualitative Study

BIOCHEMISTRY—HUMAN FOLLICLE STIMULATING HORMONE

MODERATOR: BRIAN COHEN

1:50 / RACHEL GODEK

Lipid Raft Disruption Alters Human Follicle Stimulating Hormone Receptor Signaling

2:10 / TATYANA LYNN

Investigating the Role of CRAC in FSH Receptor Function and Structure

2:30 / KATARINA ZAHEDI

Mutations in Caveolin Binding Motif Alter Human Follicle Stimulating Hormone Receptor Signaling

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SESSION IV

1:50 P.M. - 3:30 P.M. / CONCURRENT ORAL PRESENTATIONS

ENVIRONMENTAL CHEMISTRY

MODERATOR: LAURA MACMANUS-SPENCER

1:50 / AMBER BIRT

Measuring Concentrations of Acrylamide in Brewed Coffee

2:10 / SABRINA RUFRANO

Investigating Interactions of Per- and Polyfluoroalkyl Acids with Human Serum Albumin Using an Equilibrium Dialysis Method

2:30 / MICHAEL CONTE

Investigating the Mitigation of Lead Contamination and Its Consequences in Roman Pipes Using Experimental Models

2:50 / MADISON DIMAURO, WILLIAM DUPREY Cytotoxic Effects of Octyldimethyl Para-Aminobenzoic Acid (OD-PABA) and its Photoproducts

3:20 / LUKAS BAKER

Experimental and Theoretical Study of Large Amplitude Motions in Methoxypyridine, Methoxyfuran and Methoxythiophene





AEROGELS FOR AUTOMOTIVE POLLUTION MITIGATION

MODERATOR: ANN ANDERSON

1:50 / PATRICK BARRY

Mixed-Metal Aerogels for Catalytic Converter Applications: A Closer Look

2:10 / ETHAN LAMPERT

Union Catalytic Aerogel Testbed (UCAT) Particulate and Moisture Filtering System

2:30 / TARAN EVANS-MORAN

Rebuilding and Refining a Testbed for Aerogel-based Diesel Particulate Filters

2:50 / ANDREW CAHALY

Simulating Flow Through Aerogel Materials for Catalytic Converter Applications

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SESSION V

3:40 P.M. - 5:20 P.M. / CONCURRENT ORAL PRESENTATIONS

RACE, POWER AND PRIVILEGE 4: **CULTURAL POLITICS**

MODERATOR: ELENA MCGRATH

3:40 / MAIA MARTINEZ

21st Century Rise of Neofascism in the United States: How the Alt-Right Emerged and Why it Continues to Grow

4:00 / LAURA BETH MULLIGAN

The Normalization of Detention Centers in the United States

4:20 / HANNAH EPSTEIN

The Relationship Between Antisemitism and Belief in Conspiracy Theories

4:40 / RHYS MOGER

Betas, Bimbos and Beckys: Internet Memes and Contemporary U.S. Cultural Politics

5:00 / FLETCHER FINEMAN

Who's Confronting: An Examination of Motivations to Confront Prejudice and Their Effects on Personal

and Collective Esteem

MODERATOR: CLAIRE BRACKEN

1:50 / AMANDA BLAKEMAN

Fight Like a YA Girl: Fourth Wave Feminism, Defense and Weaponization Through the Lens of Object Relations

2:10 / AVA BOWEN

Screwed? Interactive Interpretations of Henry James' The Turn of the Screw

2:30 / UNGLID PAUL

Humanizing the Maternal Symbol in Toni Morrison's "Beloved," Buchi Emecheta's "Joys of Motherhood" and Edwidge Danticat's "Breath, Eyes, Memory"

FINANCE 2

MODERATOR: LEWIS DAVIS

3:40 / JOSEPH LIBRETTI

Do Presidential Approval Ratings Affect the Price of Bitcoin

4:00 / MATTHEW CERMINARO

The Effects of Sentiment on Stock Market Returns: Can Contrarian Investors Use Stock Market Sentiment to Profit From Short-Term Market Dislocations?

4:20 / CONNOR FITZGERALD

The Evolution of the Fiat System: Debasing Currency Through Inflation

ENGLISH 3: THEORETICAL WORLDS OF LITERARY REFLECTION AND CRITIQUE

INFORMATION, DELIBERATION AND REALIGNMENT: PERSPECTIVES FROM POLITICAL SCIENCE

MODERATOR: BRADLEY HAYS

3:40 / NATHANIEL HUTTON

Schenectady During the Depression: An Analysis Through Primary Sources

4:00 / PAXTON OUELLETTE

Importance of Newspapers in Establishing Early 19th Century American Political Parties

4:20 / KAITLYN PIECHNIK

Elite Audiences of the Court: The American Bar Association's Influence on Supreme Court **Decision-Making**

4:40 / JONATHAN CAREW

Appraising the Deliberative Assembly: The Prospects for Parliamentary Democracy in the Thought of Weber, Schmitt and Lukács

5:00 / NATHANIEL HUTTON

Examining Contemporaneous Suburban Realignment

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SESSION V

3:40 P.M. - 5:20 P.M. / CONCURRENT ORAL PRESENTATIONS

4:00 / TIMOTHY COYLE

Model for Calcium-Dependent Activation of a Type I Metacaspase from the Fungus Schizophyllum commune

4:20 / LUKE MIRANDA

Mutation of Schizophyllum Commune Metacaspase for Cleavage Site Identification

4:40 / MORGAN TRUESDELL

Purification denotes

Optimization of Metacaspase Protein

SOCIAL AND EMOTIONAL DEVELOPMENT OF EMERGING ADULTS 2

MODERATOR: LINDA STANHOPE

3:40 / CAROLINE TROOP

Social Media Use and Mental Health in College Students During the COVID-19 Pandemic

4:00 / HANA YOUNG

Mental Health Treatment and First-Year Adjustment to College

4:20 / ALEXIS CANDIDO

Social Media as a Mechanism for Violence: Cyberbullying and Cyber Dating Abuse Among Adolescents

4:40 / EMMA HOUSTON

The Moderating Effect of Emotion Regulation on Body Image, Sexual Self Schemas and Sexual Health Outcomes in Emerging Adult Women

5:00 / ETHAN FOSTER

Understanding the U.S. News & World Report College Rankings

BIOCHEMISTRY

MODERATOR: KRISTIN FOX 3:40 / KATHERINE SADAK

Expression of Type IIa Metacaspases from the Fungus Schizophyllum Commune

PSYCHOLOGY

MODERATOR: JOSHUA HART

3:40 / AUDREY PALMERI

Does Adult Attachment Predict Economic Risk-Taking?

4:00 / AMBER RAISNER

The Effects of Doubt and Checking on Memory Confidence and Accuracy

4:20 / KATHERINE ARNOLD

A Middle Way in Psychology

4:40 / KIRA KASCHA

Context-Dependent Memory Effects for Those With ADHD

Symptomatology

5:00 / MOLLY MCLEOD

Timing is Stressful: Do Listeners Combine Meaning and Rhythm to Predict Speech?

ECOLOGY AND ORGANISMAL BIOLOGY

MODERATOR: KATHLEEN LOGUIDICE

3:40 / JULIA CHAREST

Can Drought Frequency be Tracked by Stable Carbon Isotopes in Sphagnum Soluble Sugars?

4:00 / SASHA MILSKY

Assessing the Viability of Stable Isotope Analysis as a Method for Identification of Prior Ixodes Scapularis Hosts

4:20 / KHOA TRAN

How does the Abundance of Invasive Amur honeysuckle (Lonicera maackii) Increase Tick Density?

4:40 / SARAH WETTERGREEN

Feasibility of Stable Isotope Analysis as a Method for Prior Ixodes scapularis Host Identification

FRAGMENTS

CHOREOGRAPHED BY MIRYAM MOUTILLET

MUSIC BY JULIA KENT

Dancers: Maia Carty and Alexandra Nicolaus

SUSPENDED CONTACT

CHOREOGRAPHED BY LAURIE ZABELE CAWLEY

MUSIC BY DAN LEVY

Dancers: Quoc (Jordan) An, Emily Armlin, Rachel Bryan, Adrianna Lawton, Armanda Noel and Sage Stinson

THE PATH

CHOREOGRAPHED BY MIRYAM MOUTILLET

MUSIC BY DUSTIN O'HALLORAN

Dancer: Armanda Noel

FACULTY CHOREOGRAPHY

CONVERSATION

CHOREOGRAPHED BY LAURIE ZABELE CAWLEY

MUSIC BY J.S. BACH

Dancers: Rachel Bryan, Maia Carty, Eva Crowley, Sarah Dames, Alexandra Nicolaus and Haylee Snow STUDENT CHOREOGRAPHY

BLOOM

CHOREOGRAPHED AND PERFORMED

BY MARY MELO AND NOA RASKIN MUSIC BY FLORENCE AND THE MACHINE

MUSIC BY THE IRREPRESSIBLES

Dancers: Sofia Cresta, Caitlin Lesage, Julianna Lisi, Michela Michielli and Haylee Snow

THE SOUND OF SILENCE

CHOREOGRAPHED BY MARY MELO

MUSIC BY POPPY ACKROYD

Dancers: Maia Carty, Mary Melo and Alexandra Nicolaus

SENIORS

CHOREOGRAPHED AND PERFORMED BY LEIGH CAVANAUGH, LILLY KURKER, MARY MELO AND MICHELA MICHIELLI

STUDENT PIECE

CHOREOGRAPHED BY ZOE WATSON

Dancers: Grace Newcombe, Anabel Sollinger

and Zoe Watson

STUDENT SOLOS

CHOREOGRAPHED AND PERFORMED

BY ADENIKE HICKSON

CHOREOGRAPHED AND PERFORMED BY DHARSHINI SURESH

NEOSYNTHESIS

BREAKING POINT

MUSIC BY BILLIE EILLISH

CHOREOGRAPHED BY MICHELA MICHIELLI

Dancers: Leigh Cavanaugh, Sofia Cresta, Lilly Kurker, Michela Michielli and Lydia Singer

CHOREOGRAPHED BY LILLY KURKER

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AFRICAN DANCE CLUB

CHOREOGRAPHED AND PERFORMED BY
ISHIKA CHOURASIA, JO DOS SANTOS DIAS,
AIDA GIRMA, ADENIKE HICKSON, DEJA JENKINS,
DEANA PATTERSON AND JOCELYN POSTE

BHANGRA UNION

CHOREOGRAPHED BY ANERI PATEL AND ARJUN WALI Dancers: Nishtha Agarwal, Shriya Balaji, Sriya Baru, Juhi Bhuwalk, Ishika Chourasia, Lauren Dori, Komal Hombal, Sreehittha Manga, Shivani Modi, Vaishali Srinivasan, Athary Tekurker and Arjun Wali

HIP-HOP CLUB

CHOREOGRAPHED BY JANET FABODE, KEERTHI KONDA AND ISABELLA RUSSELL

Dancers: Nishtha Agarwal, Shriya Balaji, Samhita Bheemireddy, Athena Bo, Rachel Bryan, Alice Cheng, Bassem Darwish, Mahek Desai, Janet Fabode, Paige Kent, Keerthi Konda, Anna Langer, Arielle Lipnitsky, Shivani Modi, Natalie Shearing, Dhara Shukla and Vaishali Srinivasan

UNION COLLEGE DANCE TEAM

CHOREOGRAPHED BY LEIGH CAVANAUGH AND LILLY KURKER

Dancers: Maya Acampora, Maia Carty, Sofia Cresta,

Sarah Dames, Leigh Cavanaugh, Lilly Kurker, Caitlin Lesage, Michela Michielli, Abby Resnic, Lydia Singer, Anabel Sollinger, Abby Wilder and Zoe Watson

Miryam Moutillet, the Gustave L. Davis '59 and Susan S. Davis The Dance Program would like to thank: OUR SPONSORS

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FACULTY AND COLLABORATORS

Miryam Moutillet / Gustave L. Davis '59 and Susan S. Davis Director of Dance

Laurie Zabele Cawley / Dance Lecturer

Drew Bodd / Technical Director

Michael Ullrich / Learning Environments Coordinator Brittney Belz /

Costume Coordinator

Andy Iorio / Musical Director-Audio Editor Ryota Matsue /

Photographer-Filmmaker Greta Donato / Academic Affairs Brianne Brinker / Assistant Athletic Director, Facilities Jessica Storm / Special Events Victoria Rotondi and Carol Fortsch / Arts Administrators Jana Davis and



Armanda Noel / Work Study Students

Director of Dance, and a senior artist in residence, retires this June after more than two decades at Union. Moutillet created the minor in dance in 2005 and established a robust dance program that attracts students from all majors to the Henle Dance Pavilion. She will be celebrated with a reception in the Arts Courtyard on June 3 at 4 p.m.

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STEINMETZ CONCERT 2022

FRIDAY, MAY 13 / 8 P.M. / EMERSON AUDITORIUM IN THE TAYLOR MUSIC CENTER



PROGRAM

STOLEN MOMENTS

OLIVER NELSON

ZACH'S BLUES

ZACH PINE MAHER

OYE COMO VA

TITO PUENTE

BASIN STREET

BLUES SPENCER WILLIAMS

ARMANDO'S RHUMBA

CHICK COREA

A MILLION DREAMS

BENJ PASEK AND JUSTIN PAUL

9 TO 5

DOLLY PARTON

SHOFUKAN

MICHAEL LEAGUE



OUR LAND ACKNOWLEDGEMENT

We acknowledge that we live, work and study at Union College on the traditional homelands that were originally peopled by the Iroquois Confederacy, including the Cayuga, Mohawk, Oneida, Onondaga, Seneca, Haudenosaunee (the People of the Longhousel and other tribes. What we call Schenectady is a Dutch version of a Mohawk word skahnéhtati, meaning "The Place Beyond the Pines." As a College, we honor the land itself with gratitude and acknowledge the people who have stewarded the land throughout the ages.

UNION COLLEGE 807 UNION STREET, SCHENECTADY, NY 12308

