

CATHOLIC UNIVERSITY
RESEARCH DAY



April 17, 2024

research-day.catholic.edu

#CUatResearchDay

THE CATHOLIC
UNIVERSITY
OF AMERICA



CATHOLIC UNIVERSITY RESEARCH DAY 2024 PROGRAM

Instructions for the in-person and online presentations:

1. Using the Table of Contents, you can navigate to the section of your choice.
2. To attend presentations in-person, refer to the room assignment in the program.
3. To view presentations online, click on the title of the presentation you would like to view. This will open a folder with one or more files. Click on the poster or presentation file to open and view it.
4. If you have a question for the presenter, online comments are accepted from everyone. Those who are not signed in with an @cua.edu account may be moderated.

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Welcome to University Research Day 2024

Welcome to Catholic University's Research Day 2024! This year, you'll be able to explore an extraordinary array of research being conducted by students, faculty, and staff of The Catholic University of America. The hallmarks of this research are its innovation, diversity, and global nature. This year's ninth annual University Research Day is both an in-person and virtual event, making it an exciting day on campus while also reaching out to a global audience.

This event, which has become part of the culture of Catholic University, began in 2016 with the inspiration and hard work of NCSSES professor Melissa Grady, and the support of former Provost Andrew Abela. Since the success of that first University Research Day, subsequent annual events have grown and introduced new additions, such as performances, interactive demonstrations, and online presentations.

This year, we are excited to offer a full day of research in-person and online, beginning with introductory remarks by President Kilpatrick, address by Provost Dominguez, and keynote by Professor Jeffrey Herrmann (St. Abbo of Fleury Chair of Engineering). Audiences can then explore presentations of research topics on campus or online, including over 50 oral presentations, more than 100 poster presentations, many musical performances and a number of research organizations on campus. The event will culminate with a live awards ceremony in which the Provost will announce and speak with the winners.

Understandably, this event has taken many hands to put together. We want to thank Provost Dominguez for his strong support for research and the University Research Day 2024 Planning Committee, and the University's Web Services team for their work to present an inspiring day of research!

Most importantly, we are also grateful to you, the presenters, University community, and our family and friends, for your enthusiasm and excitement about this day. Enjoy!

Christopher Raub & Gregory Miller
URD 2024 Co-Chairs

University Research Day 2024 Planning Committee

Christopher Raub, Co-Chair - School of Engineering (Biomedical Engineering)
Gregory Miller, Co-Chair – School of Arts and Sciences (Chemistry)
Ralph Albano – Office of the Provost
Glenn Østen Anderson - School of Arts & Sciences (Media Studies)
Reiko Asano - Conway School of Nursing
Victor David – Residence Life
Duilia de Mello – Office of the Provost
Daniel Drummond, Associate VP for Communications
Michaela Farber – National Catholic School of Social Service
Stephen Gorbos – Rome School of Music, Drama, and Art
Maria Mazzenga, Curator, American Catholic History Collections
Sonnya Morales, Director of Corporate Partnerships
Emily Sobieski, Associate Director for Special Events
Jack Yoest - Busch School of Business
Kristin L. Reavey—Artistic liaison, Communications

University Research Day 2024 Schedule

April 17, 2024

- 9:00-9:10 am Welcome and Remarks by President Peter Kilpatrick
9:10-9:30 am State of Research by Provost Aaron Dominguez
9:30-10:20 am
 "Thinking about Thinking: Metareasoning by Humans and Robots" by Keynote Speaker Jeffrey Herrmann
 Della Ratta Auditorium, Maloney Hall
- 10:30 am
 Oral Presentation Sessions (A-E, #1-5)
 Assigned rooms, as below
- 11:45 am
 Oral Presentation Sessions (A-E, #6-9)
 Assigned rooms, as below
- 12:35 pm Lunch Break
12:35 pm - 2:00 pm
 Live Musical Performances, Pryzbyla Center, 3rd floor
 Film Festival, Pryzbyla Center, 321/323
- 2:00 pm - 3:30 pm
 Poster Session, Pryzbyla Center
- 3:30 pm
 Break
- 4:00 pm
 Research Day Awards Ceremony
 Heritage Hall, Father O'Connell Hall
 Faculty Awards
 First Year Experience Essay Prize Award
 Student Oral and Poster Presentation Awards

Online

The Provost and Keynote Speaker will be livestreamed and recordings available to view afterwards at research-day.catholic.edu.
Visit online oral and poster presentations, musical performances and the film festival at anytime research-day.catholic.edu.

Keynote Speech by Jeffrey Herrmann

Jeffrey W. Herrmann's research, service, and teaching activities have established him as a leader in the following areas: (1) developing novel mathematical models to improve public health preparedness, (2) describing and modeling engineering design decision-making processes, and (3) using risk-based techniques to improve path planning for autonomous systems.

Professor Herrmann has published over 100 journal papers and refereed conference papers and fifteen book chapters, co-authored an engineering design textbook, edited two handbooks, authored a textbook on engineering decision making and risk management, and written a book on metareasoning for robots.

Before joining the Catholic University of America, Professor Herrmann taught at the University of Maryland, College Park, where he had a joint appointment in the Department of Mechanical Engineering and the Institute for Systems Research. In 2016, his textbook *Engineering Decision Making and Risk Management* won the IIE/Joint Publishers Book of the Year award. He is a member of the Society of Catholic Scientists, IISE, ASME, and the Design Society.

Campus Research Organizations

Catholic University's commitment to research is demonstrated in a variety of ways - engaging undergraduate and graduate students in research projects, faculty and student research presentations at national and international academic events, numerous published articles and books by our faculty, and through the work of the thirty-five research facilities on campus.

The following campus research organizations have contributed special presentations for Research Day 2024. Please visit them at the tables in the ground (second) floor of the Pryzbyla Center.

Center for Academic and Career Success
Christian Oriental Research (ICOR)
CUA Press
Institute for Human Ecology (IHE)
Graduate Student Association
Institute for Latin American and Iberian Studies (ILAIS)
Inventio
National Catholic School of Social Service
Oliveria Lima Library
Special Collections, Mullen Library
University Libraries

Oral Presentations

Presentations 1-5: 10:30 A.M. – 11:30 A.M.

Presentations 6-10: 11:45 A.M. – 12:45 P.M.

Session 1 - Della Ratta Auditorium/Maloney

Chairperson: Duilia De Mello

1	<p><u>The Centennial of the Oliveira Lima Library - what is new?</u></p> <ul style="list-style-type: none"> • Duilia de Mello, Arts & Science (Physics), Faculty
2	<p><u>Psychopathology Symptoms and Quality of Life in CUA Undergraduates Before, During, and “After” Covid-19</u></p> <ul style="list-style-type: none"> • Natalie Volpicelli, Arts & Science (Psychology), PhD student • Collaborators: Marcie Goeke-Morey, Ph.D. • Advisor: Marcie Goeke-Morey, Ph.D.
3	<p><u>Designing for Renewable Harvesting: The Ruby Geodesic Project</u></p> <ul style="list-style-type: none"> • David Stephen, Architecture and Planning, Masters student • Collaborator: Tonya Ohnstad
4	<p><u>Ruthenium Catalyzed Photoconjugation of Bioactive Compounds to a Peptide Hydrogel</u></p> <ul style="list-style-type: none"> • Elijah Feret, Engineering (Biomedical Engineering), Undergraduate • Advisor: Christopher Raub, Ph.D.
5	<p><u>Standardized Testing and Student Pressure Culture as Portrayed in Chinese Films: Exploring the portrayal of bullying and suicide in the guise of studying for a college entrance exam, comparing Chinese GaoKao and American SAT/ACT</u></p> <ul style="list-style-type: none"> • Francesca Ramos, Arts & Science (Asian Studies), Undergraduate • Collaborators: Francesca Ramos, Leyton Ramos-Platt, John Benavides, Therun Solangaarachchi • Advisor: Professor Yung-Yung Chang
6	<p><u>Saints, Criminals, Spies, and Martyrs: Uncovering the History of Mexico's Catholic Resistance, 1920-1945</u></p> <ul style="list-style-type: none"> • Julia Young Young, Arts & Science (History), Faculty
7	<p><u>Concurrent Delay Analysis via Cooperative Game Theory</u></p> <ul style="list-style-type: none"> • Raha Hajjashrafi, Engineering (Civil Engineering), PhD student • Collaborator: Dr. Gunnar Lucko and Dr Mohamed S. Eid • Advisor: Dr. Gunnar Lucko
8	<p><u>Potentially Poisonous Prescriptions</u></p> <ul style="list-style-type: none"> • Benjamin Rees, Arts & Science (Biology), Undergraduate

	<ul style="list-style-type: none"> • Collaborator: Mariliz Colon • Advisor: Dr. John Choy
9	<p><u>Fibromyalgia</u></p> <ul style="list-style-type: none"> • Johana Marquez Pineda, Nursing, Undergraduate • Collaborator: Joana Antwi

Session 2 - Koubek Auditorium/Crough

Chairperson: Maria Mazzenga

1	<p><u>“Filling the Voids: A Classical Afrofuturist Approach to Bygone Confederate Monuments”</u></p> <ul style="list-style-type: none"> • Christopher Howard, Architecture and Planning, Faculty • Collaborator: Nathaniel Walker
2	<p><u>Evidence of metabolic burden in staphylococcus aureus strain BAA-44</u></p> <ul style="list-style-type: none"> • Adesuwa Osagie, Arts & Science (Biology), Undergraduate • Collaborator: Drs. Javier Seravalli and Frank Portugal • Advisor: Dr. Frank Portugal
3	<p><u>Machine Learning Approach to Predicting Electric Vehicle Adoption Rates at the County Level in the United States</u></p> <ul style="list-style-type: none"> • Michael Graham-Cornell, Engineering (Electrical and Computer Science), Masters student • Advisor: Dr. Lin-Ching Chang
4	<p><u>Development and Validation of the Frustrating AX-Continuous Performance Task (FAX-CPT)</u></p> <ul style="list-style-type: none"> • Justin Popoola, Arts & Science (Psychology), Undergraduate • Collaborators: Justine Trudeau, Shannon Shaughnessy, Anna Chiappetta, Lauren Meier, Spencer Evans • Advisor: Elise Cardinale Ph.D.
5	<p><u>Never Forgotten: Repatriation in the Ancient and Medieval Worlds</u></p> <ul style="list-style-type: none"> • Carl Caragine, Arts & Science (Greek & Latin), Undergraduate • Collaborators: James T. Hollahan, Nathaniel Erb, and Dr. David Clark
6	<p><u>The Closest Thing to Real Life: An Interpretation of Simulation Studies Conducted with Undergraduate Nursing Students</u></p> <ul style="list-style-type: none"> • Sandra O'Brien, Nursing (Nursing), Faculty • Collaborators: David Want, DNP, FNP
7	<p><u>Bretton Woods Prep- Collegiate Placement</u></p> <ul style="list-style-type: none"> • Bradford Wood, Engineering, Undergraduate • Collaborators: Christian Attorri '23, Lucas Frassrand

8	<p><u>Hepatocellular carcinoma progression mechanisms and potential treatment strategies</u></p> <ul style="list-style-type: none"> ● Sanyia Davis, Arts & Science (Biology), PhD student ● Collaborator: Joeffrey Chahine ● Advisor: Dr. Pamela Tuma
9	<p><u>It's do or dye: Investigating the ability for spinel metal oxide nanocrystals containing cobalt to degrade pollutant dyes through photocatalysis</u></p> <ul style="list-style-type: none"> ● Madeline Wahl, Arts & Science (Chemistry), Undergraduate ● Collaborators: James L. Stair, Revathy Rajan, and Kathryn E. Knowles ● Advisor: Kathryn Knowles

Session 3 - Hannan 106

Chairperson: Jack Yoest

1	<p><u>RAPUF: A Novel Integration of Reversible Logic and Arbiter Physical Unclonable Functions for Enhancing IoT Security</u></p> <ul style="list-style-type: none"> ● Dominick Rizk, Engineering (Electrical Engineering), Faculty
2	<p><u>Designing a Bacteriophage-based, Universal Flu Vaccine by CRISPR Engineering</u></p> <ul style="list-style-type: none"> ● Ayobami Awe, Arts & Science (Biology), PhD student ● Collaborators: Jarin Taslem-Mourosi, Jingen Zhu and Venigalla B Rao ● Advisor: Venigalla B Rao
3	<p><u>Mary and the Head of Her Enemy</u></p> <ul style="list-style-type: none"> ● Sr. Theresa Joseph Nguyen, Theology and Religious Studies (Biblical Studies), Masters student ● Advisor: Dr. Bradley Gregory
4	<p><u>Advanced Hybrid Polymer/Ceramic PEO-SnF₂ Protective Mechanism for Sodium Metal Anodes</u></p> <ul style="list-style-type: none"> ● Roya Damircheli, Engineering (Mechanical), PhD student ● Advisor: Dr. Chuan-Fu Lin
5	<p><u>The PRC's Internazionale Milano: Chinese Business Dynamics in International Football Investments</u></p> <ul style="list-style-type: none"> ● Mikaela Culp, Arts & Science (Modern Languages), Undergraduate ● Collaborators: Chloe Masaitis, Marco Di Pietro ● Advisor: Yung Yung Chang
6	<p><u>Runic Writing in Early Medieval Northern England: Notes from Two Field Runologists</u></p> <ul style="list-style-type: none"> ● Lila Kopar, Arts & Science (English), Faculty ● Collaborator: S. Beth Newman Ooi
7	<p><u>Investigating cusp plasma filaments</u></p>

	<ul style="list-style-type: none"> • Nitya Agarwala, Arts & Science (Physics), PhD student • Advisor: Gangkai Poh
8	<p><u>Reconciliation of Existentialism and Christian Metaphysics: Analysis of Albert Camus's absurdism through St. Augustine's writing</u></p> <ul style="list-style-type: none"> • Marta Bystrowska, Arts & Science (Politics), Undergraduate • Advisor: Thomas Holman
9	<p><u>Authenticity in the Inauthentic: Theming in Theme Parks and other Location Based Experiences</u></p> <ul style="list-style-type: none"> • Luke Neely, Architecture and Urban Planning (Architecture and Urban Planning), Undergraduate • Collaborator: James Campione
10	<p><u>Archaeological Macrobotanic Collection System</u></p> <ul style="list-style-type: none"> • Ethan Kerr, Engineering (Engineering), Undergraduate • Collaborators: Julia Snyder, Gabriella Villaplana, KeyRy Marquez • Advisor: Dr. Jandro Abot

Session 4 - Gowan Auditorium/Gowan

Chairperson: Reiko Asano

1	<p><u>Impact of Financial Regulatory Changes on the UAE Financial Institutions</u></p> <ul style="list-style-type: none"> • Reza Saidi, Business, Faculty • Collaborator: Pantos & Blinder
2	<p><u>Emotional Profiles Among College Students Experiencing Suicidal Ideation: A Latent Profile Analysis</u></p> <ul style="list-style-type: none"> • Ethan Graure, Arts & Science (Psychology), PhD student • Collaborators: René M. Lento, PhD; Josephine S. Au, PhD; & David A. Jobes, PhD • Advisor: Dr. David Jobes
3	<p><u>TiO₂-induced calcium phosphate and monosodium urate crystal formation dynamics and cellular effect in physiological conditions using artificial human synovial fluid</u></p> <ul style="list-style-type: none"> • Samuel Shin, Engineering (Biomedical Engineering), PhD student • Collaborators: Seth Baffoe, Reindolf Addai-Mensah, Christopher B Raub, Bidhan C. Bandyopadhyay • Advisor: Bidhan C. Bandyopadhyay
4	<p><u>Michelangelo In a Different Light: Illuminating Samuel Bak, Remediation, and Creation</u></p> <ul style="list-style-type: none"> • Katie Coyle, Music, Drama and Art (Art History), Undergraduate • Advisor: Dr. Tiffany Hunt
5	<p><u>Opioid Tapering in Older Adults</u></p> <ul style="list-style-type: none"> • Carolyn Concia, Nursing, PhD student

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6	•
7	<p><u>Spinal Suspension System for Prosthetic Arm</u></p> <ul style="list-style-type: none"> • Daniel Zhao, Engineering (Biomedical Engineering), Undergraduate • Collaborators: Louis Nwuha, Abigail Post, Maria Hargrave, Nathan Ford, Sean Farrelly • Advisor: Alessandro Vato
8	<p><u>Climate Change and Displacement</u></p> <ul style="list-style-type: none"> • Olivia DiMattio, Architecture and Urban planning, Undergraduate • Collaborator: Anne Pierce • Advisor: Patricia Andrasik
9	<p><u>Machine Learning-Based Task Scheduling for Enhanced Mobile Edge Computing Efficiency</u></p> <ul style="list-style-type: none"> • Cheng-Ying Wu, Engineering (Electrical Engineering and Computer Science), PhD student • Advisor: Hang Liu
10	<p><u>Enhancing Waste Management with Deep Learning:A Focus on Garbage Detection and Classification</u></p> <ul style="list-style-type: none"> • Blaise Trapani, Engineering (Computer Science), Masters student • Advisor: Dr. Sun

Session 5 - Keane Auditorium/McGivney Hall

Chairperson: Christopher Raub

1	<p><u>Cortical activity during gait motor imagery combined with action observation</u></p> <ul style="list-style-type: none"> • Alessandro Vato, Engineering (Biomedical Engineering), Faculty • Collaborators: Helia Mojtabavi, Jodi Brangaccio, Spenser Interlicchio, Shubhada Joshi, Theresa M. Vaughan, and Jonathan R. Wolpaw
2	<p><u>Theological Keys: The Introductory Words of Certain Liturgical Books</u></p> <ul style="list-style-type: none"> • Fr. Lorenzo Penalosa, Theology and Religious Studies (Liturgical Studies), PhD student • Advisor: Fr. Dominic Serra, SLD
3	<p><u>Fabrication of polymerized “acrylonitrile” on Li metal to extend 6x lifetime for Li-metal battery</u></p> <ul style="list-style-type: none"> • Binh Hoang, Engineering (Mechanical Engineering), PhD student • Collaborators: Roya Damircheli, Madison Brausch • Advisor: Chuan-Fu Lin
4	<p><u>Reason and Liberalism According to Thomas Hobbes and John Rawls</u></p> <ul style="list-style-type: none"> • Thomas Holman, Arts & Science (Politics), PhD student
5	<p><u>Western Media and the Middle East: Effects of the 1860 Mount Lebanon Conflict</u></p>

	<ul style="list-style-type: none"> • Liam Farrell, Arts & Science (History), Undergraduate • Advisor: Dr. von Klimo, Dr. Weitz
6	<p><u>Implementation and Effectiveness of CatholicU Autism Spectrum Program (CASP)</u></p> <ul style="list-style-type: none"> • Jamie Kleiner, Arts & Science (Psychology), PhD student • Advisor: Brendan Rich, PhD
7	<p><u>Brain Tumor Detection: A Hybrid Transformer-Based Approach</u></p> <ul style="list-style-type: none"> • Sandeep Shiraskar, Engineering (Electrical Engineering), Masters student • Collaborators: Sandeep Shiraskar, Dr. Dominic Rizk, Alireza Omid • Advisor: Dr. Dominic Rizk
8	<p><u>AI in the Economic Arena: Unveiling Behavior in Public Goods Games</u></p> <ul style="list-style-type: none"> • Gavin Lewis, Business, Undergraduate • Collaborators: Matthew Blomgren, David Fritz, Stephen Thompson • Advisor: Dr. Gallenstein
9	<p><u>Distal electrofabrication, a new manufacturing paradigm</u></p> <ul style="list-style-type: none"> • Maria Erquiaga, Engineering (Mechanical Engineering), Undergraduate • Collaborators: Claire Wang, Priscilla Ye, Emma Wallace, Long Duong, and Xiaolong Luo • Advisor: Dr. Xiaolong Luo
10	<p><u>Unveiling the White Paper Movement: A Study on the Perspectives of Young Chinese Nationals in the Pro-Democracy Movement</u></p> <ul style="list-style-type: none"> • Leyton Ramos-Platt, Arts & Science (Communications and Media Studies), Undergraduate • Collaborators: Rory O'Connor, Joseph Loel • Advisor: Yung-Yung Chang

Poster Presentations

ALL SESSIONS: 2:00 P.M. – 3:45 P.M.

Pryzbla Great Room

1	<p><u>Radiation length of the CMS's Silicon Tracker</u></p> <ul style="list-style-type: none"> • Shivam Raj, School of Arts and Sciences (Physics), PhD Student • Advisor: Dr. Rachel Bartek, Prof. Aaron Dominguez
2	<p><u>Public Perception of the War of the Currents and its Legacy</u></p> <ul style="list-style-type: none"> • Alexander Crawford, School of Arts and Sciences (History), Undergraduate Student

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	<ul style="list-style-type: none"> • Advisor: Stephen A. West
3	<p><u>A Systematic Review of the Virtual Hope Box Mobile Application</u></p> <ul style="list-style-type: none"> • Jessica Gerner, School of Arts and Sciences (Psychology), PhD Student • Collaborators: Raymond P. Tucker, Emma H. Moscardini, Courtney L. Bagge, David A. Jobes, and Mark A. Reger • Advisor: Dr. David Jobes
4	<p><u>CRISPR Engineering of Bacteriophage T4 Nanoparticle as a Next-Generation Flavivirus Vaccine Design Platform</u></p> <ul style="list-style-type: none"> • Jarin Taslem Mouroso, School of Arts and Sciences (Biology), PhD Student • Advisor: Venigalla B Rao
5	<p><u>Microchip Neurons: Repairing and Mimicking Neural Pathways with a Biomimetic SNN-ANN Hybrid Model</u></p> <ul style="list-style-type: none"> • Tommaso Marena, School of Arts and Sciences (Biology), Undergraduate Student
6	<p><u>CRISPR Engineering of gp17 to elucidate the structure and mechanism of the T4 DNA packaging machine</u></p> <ul style="list-style-type: none"> • Narbada Upreti, School of Arts and Sciences (Biology), PhD Student • Advisor: Dr. Venigalla B. Rao
7	<p><u>Levothyroxin's Chemical Pathway to Treat Hashimoto Thyroiditis</u></p> <ul style="list-style-type: none"> • Milena Colaianni, Conway School of Nursing (Chemistry), Undergraduate Student • Advisor: Gregory Miller
8	<p><u>The Eudaimonia Center - A Sustainable Sanctuary for New Life</u></p> <ul style="list-style-type: none"> • Olivia DiMattio, School of Architecture and Planning, Undergraduate Student • Advisor: Patricia Andrasik
9	<p><u>EMG-based Continuous Estimation of Hand Movements by Modeling Finger Intersegmental Dynamics</u></p> <ul style="list-style-type: none"> • Trenton Gilstrap, School of Engineering (Biomedical Engineering), PhD Student • Collaborator: Mada Alghamdi Thanh Phan • Advisor: Dr. Sang Wok Lee
10	<p><u>The Neurology of Adult ADHD and its Impact on the Writing Process</u></p> <ul style="list-style-type: none"> • Kayla Thuel, School of Arts and Sciences, Undergraduate Student • Advisor: Dr. Taryn Okuma
11	<p><u>The Association between Inhibitory Control Processes and Risk Taking Behaviors in College Students</u></p> <ul style="list-style-type: none"> • Kelly Schoener, School of Arts and Sciences (Psychology), Undergraduate Student • Collaborators: Kelly Schoener, Jennifer Meigs, Ena Sullivan, Kyunghun Lee, Reut Naim, Melissa A Brotman, & Elise Cardinale • Advisor: Dr. Elise Cardinale

12	<p><u>Exploring the Impact of Episodic Future Thinking on Anxiety Symptoms in College Students with ADHD</u></p> <ul style="list-style-type: none"> ● Giannina Combe, School of Arts and Sciences (Psychology), Master's Student ● Advisor: Brendan Rich
13	<p><u>Self esteem and the experience of period poverty</u></p> <ul style="list-style-type: none"> ● Lauren Bahr, National Catholic School of Social Service, PhD Student
14	<p><u>Microfluidic Device Fabricated with Chitosan</u></p> <ul style="list-style-type: none"> ● Louis Nwuha, School of Engineering (Department of Biomedical Engineering), Undergraduate Student ● Collaborator: Long Doung ● Advisor: Dr. Xiaolong Luo
15	<p><u>Voxelator: Preventing Red Blood Cell Sickling</u></p> <ul style="list-style-type: none"> ● John Osagie, Conway School of Nursing, Undergraduate Student ● Collaborator: Colin Peterson ● Advisor: Dr. Gregory Miller
16	<p><u>Alchemy and Thaumaturgy in 'The Unicorn Tapestries'</u></p> <ul style="list-style-type: none"> ● Moira McCoy, Benjamin T. Rome School of Music, Drama, and Art (Department of Art and Art History), Undergraduate Student ● Advisor: Dr. Tiffany Hunt
17	<p><u>Confidential Compassion: The Role of the Confessional in Frontline Suicide Prevention</u></p> <ul style="list-style-type: none"> ● John Paul Ryan, School of Arts and Sciences (Psychology), PhD Student ● Collaborator: Luis Garcia Abundis; Kate Janczyk ● Advisor: David Jobes
18	<p><u>Electromechanical Properties of Distal Electrofabricated Chitosan Membrane crosslinked with Cu²⁺</u></p> <ul style="list-style-type: none"> ● Maria Erquiaga, School of Engineering (Mechanical Engineering), Undergraduate Student ● Collaborators: Emma Wallace, Iriana Garcia-Guerra, Binh Hoang, Claire Wang (UMD), Priscilla Ye (Cornell University), Long Duong, Dr. Jandro Abot, Dr. Chuan-Fu Lin, Dr. Xiaolong Luo ● Advisor: Dr. Xiaolong Luo
19	<p><u>"Eliminate the Epidemic: A new way to think about the ongoing epidemic of school violence"</u></p> <ul style="list-style-type: none"> ● Aisling Finnegan, School of Theology and Religious Studies, Undergraduate Student ● Advisor: Bob McCarty
20	<p><u>Assessing Psychological Pain among College Students with a History of Suicidal Ideation</u></p> <ul style="list-style-type: none"> ● Tintumol Joseph, School of Arts and Sciences (Psychology), Master's Student ● Collaborators: Emily Mitchell B.A , Emily Winslow ● Advisor: Dr. Abby Adler Mandel PhD

21	<p><u>Competition between Cellular Messengers Controls Cancer Signaling</u></p> <ul style="list-style-type: none"> • Katarina Bauer, School of Arts and Sciences (Department of Chemistry), Undergraduate Student • Advisor: Dr. Gregory Miller
22	<p><u>UAV Supply Mission</u></p> <ul style="list-style-type: none"> • Lauren Cerda, School of Engineering (Mechanical Engineering), Undergraduate Student • Collaborators: Chizua Agupusi, Nicholas DeLucia, Joseph Gabris, Olivia Rees • Advisor: Diego Turo
23	<p><u>Posturography for Non-Ambulatory Individuals</u></p> <ul style="list-style-type: none"> • Elizabeth Caufield, School of Engineering, Undergraduate Student • Collaborators: Maria Huerta, Zachary Antonucci, Alexander Pietrangelo • Advisor: Dr. Christopher Raub
24	<p><u>Financial Risk Taking and Testosterone (FRTT)</u></p> <ul style="list-style-type: none"> • Robert Gahl Jr, Tim and Steph Busch School of Business (Finance / Church Management), Faculty • Collaborator: Gavin Lewis and David Fritz • Advisor: Robert Gahl Jr.
25	<p><u>Bench Model of a Prosthetic Hand with Temperature and Pressure Sensing Capabilities</u></p> <ul style="list-style-type: none"> • Madison Hughes, School of Engineering (Biomedical Engineering), Undergraduate Student • Collaborator: Presley Hays Elijah Feret Maria Erquiaga Nicholas Pakaluk • Advisor: Dr. Abot, Dr. Lum
26	<p><u>You Think You Can't Write? SEW(S) WAT?</u></p> <ul style="list-style-type: none"> • Bridget Farrell, School of Arts and Sciences (English), Undergraduate Student • Advisor: Dr. Kevin Rulo
27	<p><u>Upper East Side Survey New York</u></p> <ul style="list-style-type: none"> • Ane Djadou, School of Architecture and Planning (Urban Design), Master's Student • Advisor: Jason Montgomery
28	<p><u>Effects of Chlorine and Chlorine Monoxide on Stratospheric Ozone</u></p> <ul style="list-style-type: none"> • Laurie Wei, School of Engineering (Mechanical Engineering), PhD Student • Collaborators: Ibraheem Alelmi, PhD Candidate, Dr. Sen Nieh, Department of Mechanical Engineering • Advisor: Dr. Sen Nieh, Department of Mechanical Engineering
29	
30	<p><u>Comparing Italian and U.S. Approaches to Education</u></p> <ul style="list-style-type: none"> • Marc Sebrechts, School of Arts and Sciences (Psychology), Faculty • Collaborators: Maxine Bailey, Ciara Donegan, Ashleigh Meskill • Advisor: Marc Sebrechts, PhD

31	<p><u>Is Low Temperature Extrapolation of Stage III Glass Leaching Occurrence Valid?</u></p> <ul style="list-style-type: none"> • Avery Pilot, School of Arts and Sciences (Chemistry), Undergraduate Student • Collaborators: Isabelle Muller, Konstantin Gilbo • Advisor: Isabelle Muller
32	<p><u>How has the Papacy of the Catholic Church responded to its Care for Creation? An Analysis of the Three Recent Pontificates</u></p> <ul style="list-style-type: none"> • Matthew Cutrona, School of Theology and Religious Studies (Honors Program Course: Tradition and Renewal in Contemporary Catholicism), Undergraduate Student
33	<p><u>Sleep Duration and Cognitive Control: Associations Between Sleep Dependent Inhibitory Control, Irritability, and ADHD</u></p> <ul style="list-style-type: none"> • Ena Sullivan, School of Arts and Sciences (Psychology Department), Undergraduate Student • Collaborators: Jennifer Meigs, Kelly Schoener, Kyunghun Lee, Reut Naim, Melissa Brotman, Elise Cardinale • Advisor: Dr Elise Cardinale
34	<p><u>The Relationship Between Risk Taking and Alcohol Use for Students with ADHD Symptoms at the Catholic University of America.</u></p> <ul style="list-style-type: none"> • Madeline Case, School of Arts and Sciences (Psychology), Master's Student • Collaborators: Nicholas Brestle, Alexis Stokes, Anahi Collado, Brendan Rich • Advisor: Brendan Rich
35	<p><u>Coming of Age in the Red August: Youth Perspectives of the PRC's Cultural Revolution</u></p> <ul style="list-style-type: none"> • Chloe Masaitis, School of Arts and Sciences (Modern Languages), Undergraduate Student • Collaborator: Rory O'Connor • Advisor: Yung-Yung Chang
36	<p><u>The Negative Effects of Endocrine Disrupting Chemicals</u></p> <ul style="list-style-type: none"> • Abigail Warner, School of Arts and Sciences (Psychology), Undergraduate Student • Collaborators: David Jobes, PhD; Jennifer Crumlish, PhD; Francesca Fernandez, MA • Advisor: Francesca Fernandez
37	<p><u>Racism and Systemic Racism in Social Work</u></p> <ul style="list-style-type: none"> • Sumeeya Chishty Mujahid, National Catholic School of Social Service, PhD Student • Advisor: Dr. Eileen Dombo
38	<p><u>Snowflakes & Deplorables: The Effect of Political Tribalism on Social Judgements</u></p> <ul style="list-style-type: none"> • Rose Haley, School of Arts and Sciences (Psychology), Undergraduate Student • Collaborators: Francesca Orr-Yepes, Taylor Tristine, Ryan Eells, Ethan Donnelly • Advisor: Dr. Elise Cardinale
39	<p><u>PEPpermint: A Refreshing Take on Protein Folding Simulation</u></p> <ul style="list-style-type: none"> • Anastasia Rao, School of Engineering (Biomedical Engineering (student) and Computer Science & Electrical Engineering (advisor)), Undergraduate Student • Advisor: Dr. Hieu Bui

40	<p><u>The Ultimate Particle in a Box: Quantum Dots in Cancer Imaging</u></p> <ul style="list-style-type: none"> ● Benjamin Iannuzzi, School of Arts and Sciences (Chemistry), Undergraduate Student ● Advisor: Dr. Kesner
41	<p><u>An Accessible Yet Unsustainable Happiness: Epicurus' Outline for the Good Life</u></p> <ul style="list-style-type: none"> ● Isaac Krom, School of Philosophy, Undergraduate Student ● Advisor: Dr. Doina Cristina Ionescu
42	<p><u>In Her Own Words: The Life of Katharine Wright Haskell</u></p> <ul style="list-style-type: none"> ● Faith Dickerson, School of Arts and Sciences (History), Undergraduate Student ● Advisor: Thomas Cohen and Arpad von Klimo
43	<p><u>Evaluating Patient-Clinician Discrepancies in Suicide Risk Ratings</u></p> <ul style="list-style-type: none"> ● Amelia Boardman, School of Arts and Sciences (Psychology), Undergraduate Student ● Collaborators: Ethan Graure, MA ● Advisor: Dr. David Jobes, PhD.
44	<p><u>Moral Injury within Military Populations: An Overview and Its Implications in the Field of Psychology</u></p> <ul style="list-style-type: none"> ● Juliana Gahr, School of Arts and Sciences (Department of Psychology), Undergraduate Student ● Advisor: Dr. David Jobes
45	<p><u>Understanding Charge-Dependent Electrolyte Properties and Their Implications for Redox Electrochemistry</u></p> <ul style="list-style-type: none"> ● Hannah Greenberg, School of Arts and Sciences, Undergraduate Student ● Collaborators: Dr. Shuai Tan, Dr. Grant E. Johnson, and Dr. Venkateshkumar Prabhakaran ● Advisor: Dr. Venkateshkumar Prabhakaran
46	<p><u>Behavioral and Health Attributes</u></p> <ul style="list-style-type: none"> ● Poshan Belbase, School of Arts and Sciences (Department of Physics), PhD Student ● Advisor: Dr. Chaofan Sun
47	<p><u>Healthcare Disparities in the Latino Community</u></p> <ul style="list-style-type: none"> ● Luis Garcia Abundis, School of Arts and Sciences (Psychology Department), Undergraduate Student ● Advisor: Dr. David Jobes; John Paul Ryan
48	<p><u>Clergy's Comforts and Reservations on Mental Health Referral</u></p> <ul style="list-style-type: none"> ● Luis Garcia Abundis, School of Arts and Sciences (Psychology Department), Undergraduate Student ● Collaborator: Kate Janczyk; Francesca Fernandez; John Paul Ryan ● Advisor: John Paul Ryan; Dr. David Jobes
49	<p><u>Societal Impact through Catholic Social Thought</u></p> <ul style="list-style-type: none"> ● Anthony Cannizzaro, Tim and Steph Busch School of Business, Faculty

	<ul style="list-style-type: none"> • Collaborator: Abela; Pak
50	<p><u>The Dignity of the Worker Framework</u></p> <ul style="list-style-type: none"> • Anthony Cannizzaro, Tim and Steph Busch School of Business, Faculty • Collaborator: Phillips; Torres
51	<p><u>The Effects of the Strong Black Woman Schema on the Mental Health of Black Women</u></p> <ul style="list-style-type: none"> • Karla Abney, National Catholic School of Social Service (PhD Program), PhD Student • Advisor: Dr. Eileen Dombo
52	<p><u>The Evolution of the Modern Day GOP in Virginia</u></p> <ul style="list-style-type: none"> • Alexander Harvey, School of Arts and Sciences (Politics Department), Undergraduate Student • Advisor: Dr. John White
53	<p><u>Shining Light on Proton Beam Driven Solar Flares via UV Spectroscopy</u></p> <ul style="list-style-type: none"> • Graham Kerr, School of Arts and Sciences (Department of Physics), Staff
54	<p><u>Providing Identity Affirming Services to Transgender/Gender Diverse Autistic Adolescents through AFFIRM</u></p> <ul style="list-style-type: none"> • Julia Nessman, National Catholic School of Social Service, Master's Student • Advisor: Michaela Zajicek-Farber
55	<p><u>The Effects of Heating Temperature and Time on the Formation of Sulfur Concrete</u></p> <ul style="list-style-type: none"> • Elisabeth Walsh, School of Arts and Sciences (Chemistry), Undergraduate Student • Collaborators: Hannah Greenberg, Odalys Campos • Advisor: Dr. Aaron Barkatt
56	<p><u>Rotary Kite Wind Turbine</u></p> <ul style="list-style-type: none"> • Ethan Kerr, School of Engineering, Undergraduate Student
57	<p><u>Synthesis and Structure Characterization of Mononuclear Iron(II) Complexes</u></p> <ul style="list-style-type: none"> • Denisse Tavera, School of Arts and Sciences (Chemistry Department), Undergraduate Student
58	<p><u>Resilience and Emotion Regulation as Predictors of Internalizing Problems in Children with ADHD</u></p> <ul style="list-style-type: none"> • Elizabeth Gallego, School of Arts and Sciences (Psychology), Master's Student
59	<p><u>Effectiveness of the Kids Out Loud summer treatment camp for youth with Selective Mutism</u></p> <ul style="list-style-type: none"> • Elizabeth McGill, School of Arts and Sciences (Psychology), Undergraduate Student • Collaborator: Elizabeth Gallego
60	<p><u>Investigating the Effect of Mutations on Protein Functionality and Viral Fitness in COVID-19's NSP6 Gene</u></p>

	<ul style="list-style-type: none"> • Jane Gorman, School of Arts and Sciences (Biology), Undergraduate Student • Collaborators: John Choy, Neha Gautam, Natasha Tomaszewski, Hong Qin
61	<p><u>How Writing Tutors Can Empower Students</u></p> <ul style="list-style-type: none"> • David Moretti, School of Arts and Sciences (English), Undergraduate Student
62	<p><u>Multi-Scale Simulation of Red Blood Cell Damage Induced by Prosthetic Heart Valves</u></p> <ul style="list-style-type: none"> • Santiago Solares, School of Engineering (Mechanical Engineering), Faculty • Collaborators: Hussein Ezzeldin, U.S. Food and Drug Administration; Marcos Vanella, National Institute of Standards and Technology; Elias Balaras, The George Washington University; Marco D. De Tullio, Politecnico di Bari
63	<p><u>Marketing as Mediator Between Product and Person: A Phenomenological Analysis</u></p> <ul style="list-style-type: none"> • Dean Robbins, Tim and Steph Busch School of Business, Undergraduate Student
64	<p><u>Continuous Glucose Monitor</u></p> <ul style="list-style-type: none"> • Pauline Oteyza, School of Engineering (Biomedical Engineering), Undergraduate Student • Collaborators: Mohammad Ali Alghamdi, Yassir Alqahtani, Anna Keyes, & Christian Urcia
65	<p><u>Utilizing Surface Charge and Hydrophobicity: Approaches for Removing Nanoplastics from Water</u></p> <ul style="list-style-type: none"> • Dakota S. Turnage, School of Arts and Sciences (Chemistry), Undergraduate Student • Advisor: Dr. Laura Kesner
66	<p><u>Integration of Wearable Sensors in Telerehabilitation to Monitor Health-Related Metrics to Predict Fitness Level</u></p> <ul style="list-style-type: none"> • Razan Bahabri, School of Engineering (Biomedical Engineering), PhD Student • Advisor: Dr. Chris Raub
67	<p><u>Golf Adaptation Device</u></p> <ul style="list-style-type: none"> • Ryan Walczak, School of Engineering, Undergraduate Student • Collaborators: Julia Shelepov, Margaret Brautigan, Oluwatosin Johnson, Adam Gleaton • Advisor: Dr. Gregory Behrmann
68	<p><u>The Role of Emotion Regulation in Anxious Youth</u></p> <ul style="list-style-type: none"> • Mary Fallon, School of Arts and Sciences (Psychology), Master's Student • Collaborator: Dr. Brendan Rich • Advisor: Dr. Brendan Rich
69	<p><u>Structural Health Monitoring for Naval Vessels: Integrated Damage Detection</u></p> <ul style="list-style-type: none"> • norah fitsimmons, School of Engineering (Mech), Undergraduate Student • Collaborators: Lorenzo Carletti, Michael Hanlon, Joseph Coviello • Advisor: Dr. Abot

70	<p><u>Promise of Polylactic Acid as Alternative Biodegradable Polymer</u></p> <ul style="list-style-type: none"> • Anna Hasker, School of Arts and Sciences (Chemistry), Undergraduate Student
71	<p><u>Aluminum Modular Gangway Design</u></p> <ul style="list-style-type: none"> • MaryJane Hughes, School of Engineering (Civil Engineering), Undergraduate Student • Collaborators: Ignacio Puig Irizarry, Isabella Bernard • Advisor: Gerard Carroll
72	<p><u>SynCOM and FORWARD: Creating a data-constrained image simulation framework for the PUNCH mission</u></p> <ul style="list-style-type: none"> • Valmir Moraes, School of Arts and Sciences (Physics department), PhD Student • Collaborators: Vadim Uritsky, Barbara Thompson, Craig DeForest, Sarah Gibson • Advisor: Vadim Uritsky
73	<p><u>Temporal Analysis of Cascade Size in Networks</u></p> <ul style="list-style-type: none"> • Maximilian O'Mara, School of Arts and Sciences (Mathematics), Undergraduate Student • Advisor: Kiran Bhutani
74	<p><u>Empathy for distress and inhibitory control as mediators of proactive and reactive aggression in young adults with varying levels of irritability and psychopathic traits</u></p> <ul style="list-style-type: none"> • Justine Trudeau, School of Arts and Sciences (Psychology), Undergraduate Student
75	<p><u>Understanding Cystic Fibrosis and the Role of Trikafta in Treatment</u></p> <ul style="list-style-type: none"> • Alyssa Soriano, Conway School of Nursing, Undergraduate Student • Collaborator: Kesi Chen • Advisor: Gregory Miller
76	<p><u>“ A Subtle Shift Does Not Displace the Dirt: The Move From Despair to Hope Amongst the Flux of Human Experience in Dry Salvages and Little Gidding In the Apophatic and Mystical Understanding of T.S Eliot</u></p> <ul style="list-style-type: none"> • Lauren McGinn, School of Philosophy, Undergraduate Student • Collaborator: Damiana Zaborowski (figure artist) • Advisor: Edward Clarke
77	<p><u>An Examination of Security through Graph Theory</u></p> <ul style="list-style-type: none"> • Nicholas Pakaluk, School of Arts and Sciences (Mathematics), Undergraduate Student • Advisor: Dr. Kiran Bhutani
78	<p><u>Hyperspectral Imaging Camera (HIC)</u></p> <ul style="list-style-type: none"> • Tan Dat Dao, School of Engineering (Electrical Engineering and Computer Science), Undergraduate Student • Collaborators: Adam Pettyjohn, Salvatore Soriano Jr., Surafel Tadesse • Advisor: Dr. George Nehmetallah
79	<p><u>Spirituality and Adversity in College Students: Moderating Effects of Spiritual Well-Being on Perceptions of a Good World Amidst Negative Life Events</u></p>

	<ul style="list-style-type: none"> • Sarah Hunt, School of Arts and Sciences (Psychology), Master's Student • Collaborators: Abby Adler Mandel PhD, Jill Capraro, Elly Beavers • Advisor: Abby Adler Mandel PhD
80	<p><u>Assessing Cognitive and Behavioral Functioning in Pediatric Cancer Survivors: A Multi-Rater Analysis of Concordance</u></p> <ul style="list-style-type: none"> • Sarah Hunt, School of Arts and Sciences (Psychology), Master's Student • Collaborator: Christina M. Sharkey PhD • Advisor: Christina M. Sharkey PhD
81	<p><u>2024 Steel Bridge Competition</u></p> <ul style="list-style-type: none"> • Patrick Dunphy, School of Engineering (Civil), Undergraduate Student • Collaborators: Aidan Long, Alex Ferrari, Miles Shealy, • Advisor: Dr. Jason Davidson
82	<p><u>Pasolini's "Scritti Corsari" Translated: Lessons for Consumer Culture</u></p> <ul style="list-style-type: none"> • Katherine Plunkett, School of Arts and Sciences (Italian), Undergraduate Student • Advisor: garino@cua.edu
83	<p><u>Evolution of Disorder in Rabies Viral Proteins</u></p> <ul style="list-style-type: none"> • Gina Verrengia, School of Arts and Sciences (Chemistry), Undergraduate Student • Collaborator: Goodness Odagbodo • Advisor: Dr. Gregory Miller
84	<p><u>A Confirmatory Factor Analysis of Hope and Hopelessness: Understanding Suicide Ideation from a Positive Perspective</u></p> <ul style="list-style-type: none"> • Marian Ruiz, School of Arts and Sciences (Psychology), PhD Student
85	<p><u>"Cut Away the Fruits of the Body" Ascetic Advice from The Letters of Saint Antony</u></p> <ul style="list-style-type: none"> • Meghan Howard, School of Arts and Sciences (Semitic and Egyptian Languages and Literatures), PhD Student
86	<p><u>Precision Hydrogel Surface Tester: Arduino-Controlled Micro-Indentation Device with Biomomentum Insights</u></p> <ul style="list-style-type: none"> • Daniel Zhao, School of Engineering, Undergraduate Student • Collaborators: Daniel Zhao, Sadeel Algesari, Iriana Garcia Guerra, Oluwatosin Johnson, Tim Tsai • Advisor: Christopher Raub, Jandro L. Abot
87	<ul style="list-style-type: none"> • , ,
88	<p><u>Individual characteristics differentiating positive and negative risk-taking in emerging adults</u></p> <ul style="list-style-type: none"> • Kathryn Degnan, School of Arts and Sciences (Psychology), Faculty • Collaborator: Members of the Positive Development Lab
89	<p><u>Childhood Opportunity and its Effects on the Relationship Between Perceived Discrimination and Depression Symptoms in Emerging Adults.</u></p>

	<ul style="list-style-type: none"> • Weseley Chambers, School of Arts and Sciences (Psychology), Master's Student • Collaborator: Sarah Hunt • Advisor: Christina M. Sharkey Ph.D., Catholic University of America
90	<p><u>Exploring Psychedelic-Assisted Psychotherapy as an Intervention for PTSD</u></p> <ul style="list-style-type: none"> • Elizabeth Berard, School of Arts and Sciences (Psychology), Undergraduate Student • Advisor: David Choi
91	<p><u>Perceptions of Crime versus Actual Crime Rates: The View from a Majority-Minority Community</u></p> <ul style="list-style-type: none"> • Madison Holtz, School of Arts and Sciences (Criminology), Undergraduate Student • Advisor: Laurie DeRose
92	<p><u>Value-Based and Evidence-Based Approaches to the Management of Acute Gastroenteritis in Children in Outpatient and Inpatient Settings</u></p> <ul style="list-style-type: none"> • Nicholas Comeau, Conway School of Nursing, PhD Student
93	<p><u>Examining nationally-representative experiences of maternal depressive symptoms and parenting practices as moderated by family connectedness among Migrant and Seasonal Head Start (MSHS) families</u></p> <ul style="list-style-type: none"> • Mariafernanda Macias, School of Arts and Sciences (Psychology), PhD Student • Advisor: Sandra Barrueco
94	<p><u>The Effects of Positive Priming on Body Image</u></p> <ul style="list-style-type: none"> • Brigid McGroarty, School of Arts and Sciences (Psychology), Master's Student • Collaborators: Maggie Dressman (BA student), Kaleigh McDonald (MA student) • Advisor: Kathryn Degnan, PhD
95	<p><u>The Effects of Moral Distress in ICU Nurse Practitioners</u></p> <ul style="list-style-type: none"> • Steven Bocchese, Conway School of Nursing, PhD Student • Advisor: Joyce Johnson
96	<p><u>Sharing an Emotional Memory with Mom in Childhood: Stressful or Cathartic?</u></p> <ul style="list-style-type: none"> • Elisabeth Harris, School of Arts and Sciences (Psychology), Master's Student • Collaborator: Melvin Elvira-Contreras • Advisor: Dr. Kathryn Degnan
97	<p><u>Structural Health Monitoring of Underwater Vessels: Monitoring of Water Pressure and Depth</u></p> <ul style="list-style-type: none"> • Mardi Dittmar, School of Engineering (CE), Undergraduate Student • Collaborators: Morgan Trechter, Hanai Alsharhan, Adrian Barbosa • Advisor: Dr. Jandro L Abot, PhD
98	<p><u>Facial Expression Recognition Using Convolutional Neural Networks</u></p> <ul style="list-style-type: none"> • Benjamin Davenport, School of Engineering (Computer Science), Undergraduate Student • Collaborators: Samuel Nwuha, Ben Riesett, Stekunda Henry, Eric Charley, Hoang Dao

	<ul style="list-style-type: none"> • Advisor: Dr. Rizk
99	<p><u>Individual Differences in Temperament Underlying Frustration and Effortful Control</u></p> <ul style="list-style-type: none"> • Louis Lyles, School of Arts and Sciences (Psychology), Master's student • Advisor: Dr. Elise Cardinale
100	<p><u>Certified Registered Nurse Anesthetists' (CRNA) Perceived Ease and Usefulness of Video Laryngoscopes for Endotracheal Intubation of Surgical Patients with Difficult Airways</u></p> <ul style="list-style-type: none"> • Uwe Klemm, Conway School of Nursing (Nursing), PhD Student • Advisor: Dr. Joyce Johnson (research chair)
101	<p><u>Calculation of Pyrolusite Raman Spectrum by using DFT (Density-functional theory)</u></p> <ul style="list-style-type: none"> • Luis Aguinaga Del Hierro, School of Arts and Sciences (Physics), PhD Student • Advisor: Nicholas Mecholsky
102	<p><u>Multifaceted Relations Among Personality, Physiology, and Emotion Regulation in Emerging Adulthood</u></p> <ul style="list-style-type: none"> • Mwela Lufumpa, School of Arts and Sciences (Department of Psychology), Master's Student • Collaborators: Judy McDonald, Anna Brutsche, Elisabeth Harris • Advisor: Kathryn Degnan

Recorded Musical Performances by Students and Faculty Members from The Rome School of Music, Drama and Art

Chairperson: Professor Stephen Gorbos

Faculty

[The Dance of Eternity](#), Dream Theater

Chris DeChiara, Lecturer in Percussion

[Bright Embrace](#), by Stephen Gorbos (Associate Professor of Music)

The Carnegie Mellon Wind Ensemble, conducted by Stephen Andrew Story. Kresge Recital Hall, Carnegie Mellon University, November 16, 2023.

[Mariwô](#), by Juan Megna, Lecturer in Music Theory

Tedd Baker, tenor sax

Davis Sacks: trombone

Shawn Purcell, guitar

José Luiz Martins, piano, keyboard

Leonardo Lucini, bass.

Juan Megna, percussion

Students

Violin Concerto, by Samuel Coleridge-Taylor

Stella Pedroza, violin (DMA Violin); Alexei Ulitin, piano

[Excerpt from movement 1](#)

[Excerpt from movement 2](#)

[Excerpt from movement 3](#)

[Silent Storm](#), DDP group. From their album *In with the new*, released Feb 2024.

James D'Ambrogia, saxophone

Max Pannella, bass/guitar

Michael DeMarco (MM composition), drums/synthesizer

Excerpts from the opera *L'elisir d'amore*, by Gaetano Donizetti, performed by the CUA Symphony Orchestra and the Vocal Performance Area, Spring 2024

1. [Venti scudi](#), performed by Samuel Thompson as Nemorino (BM Vocal Performance) and Gabriel Thompson, Belcore (BM Vocal Performance)
2. [Una furtiva lagrima](#), performed by Hyo-Chang An (DMA Vocal Performance).

[The Friendly Beasts](#), 13th C hymn by Pierre de Corbell, harmonized by Richard Redhead and Ralph Vaughn Williams. Part of the Welcoming Children in Worship program, CUA faculty members Jem Sullivan (TRS), Simeone Tartaglione (Rome), and Amy Zuberbueler (Rome), collaborators.

Noel Nascimento, Conductor (DMA Conducting)

Isabell O'Hagen, soprano (MM Vocal Performance)

Edwin Barreno Castillo, violin (AD)

Rizwan Jagani, viola (DMA Viola)

Lian Qiao, cello (DMA Cello)

Guillermo Olivares Cortes, double bass (AD)

[Concertino for Clarinet](#), by Aidan Feeney (BM Composition)

Christopher French, Clarinet in Bb

Ensemble CONCEPT/21, Casey Robards, conductor.

Sherwood Recital Hall, Columbia College Chicago, April 2, 2024.

FilmFest, by Students from the School of Arts & Sciences, Media Studies

Chairperson: Professor Glenn Østen Anderson

Master File of Films:

<https://vimeo.com/935044407?share=copy>

Narrative Short Film Script Scene Table Read
by Ava Corey
Produced for MDIA 302

Documentary Feature Treatment Table Read
by John Benavides
Produced for MDIA 312

Planet Crough
by Benjamin Rodriguez
Produced for MDIA 302

Earned
by Kathryn Phillips and Delaney Harty
Sports Media Production

ROTC
by Mariah Solis
Produced for MDIA 312

What makes a nurse
by MaryRose Hendricks
Produced for MDIA 312

Late
By Ellie Bixenman
Produced for MDIA 499

Feedback to University Research Day 2024

Thank you very much for participating in University Research Day 2024!

There are surely aspects we can learn from and improve, and we greatly appreciate your comments and suggestions for Research Day. Your feedback will help us as a community to improve University Research Day. Please email researchday@cua.edu with your comments.