



RUTGERS-NEW BRUNSWICK
School of Arts and Sciences
Honors Program

2024

SCHOOL OF ARTS AND SCIENCES

INTERDISCIPLINARY RESEARCH CONFERENCE



SHOWCASING

Interdisciplinary Honors Theses
The Interdisciplinary Research Teams
SASHP Career Lab Capstone Projects



10:00 AM - 3:00 PM

APRIL

19th

2024

Livingston Student Center
Rutgers University-New Brunswick

For more information, please contact honors@sas.rutgers.edu

School of Arts and Sciences Interdisciplinary Research Conference

Friday, April 19, 2024 | Livingston Student Center

REGISTRATION & BREAKFAST

9:30 am – 10:30 am

LSC Gathering Lounge

MORNING SESSIONS

10:30 am – 12:00 pm

Interdisciplinary Honors Theses: Panel A
LSC 202BC

LUNCH BREAK

12:00 pm – 1:00 pm

LSC Gathering Lounge

AFTERNOON SESSIONS

1:00 - 2:00 pm

Interdisciplinary Honors Theses: Panel B
LSC 202BC

1:00 pm – 3:00 pm

SASHP Career Lab Presentations
LSC 201AB

Interdisciplinary Research Teams
LSC Collaborative Learning Center

Interdisciplinary Honors Theses

10:30 am – 12:00 pm

Panel A: Humanities and Social Sciences | Chair:

Kathleen Sadowsky, Assistant Dean, SAS Honors Program

Mia B. Prowisor, *Peer-guided Social Emotional Learning for Special Education Students in Art Education*

Advisors: Maurice Elias (Psychology) and Susan Golbeck (Education)

Alexandria M. Minetti, *The Syntactic-Semantic Interface and Russian Verbal Aspect*

Advisors: Troy Messick (Linguistics) and Cori Anderson (Russian and East European Languages and Literatures)

Olivia Cardile, *Prostitution: Where Policy Meets Psychology*

Advisors: Maurice Elias (Psychology) and Heather Pierce (Political Science)

Interdisciplinary Honors Theses

1:00 pm – 2:00 pm

Panel B: Mental Health and Social Issues | Chair: Jennifer

Kim-Lee, Assistant Dean, SAS Honors Program

Nithin Ravikumar, *Examining the Relationship Between Physical Activity and Active Suicidal Ideation: A Longitudinal Study of Early Adolescents*

Advisors: Jessica L. Hamilton (Psychology) and Brandon Alderman (Kinesiology and Health)

Shalini Gossain, *Gun Violence Exposure on social media: Understanding its Impact on Adolescent Depression and Sleep*

Advisors: Jessica L. Hamilton (Psychology) and Andrea Spaeth (Kinesiology and Health)

SASHP Career Lab

1:00 – 3:00 pm

Capstone Presentations | Chair: Chuck Keeton, Academic Dean, SAS Honors Program

Arya Massand, *A Revolution: Generative AI in Corporate Spaces*

Internship Site: Johnson & Johnson

Advisor: Guang Ma (Accounting, Information Systems)

Anjali Amin, *Success in Sustainability: The Effect of ESG Claims in Consumer Purchase Considerations*

Internship Site: Johnson & Johnson

Advisor: Can Uslay (Marketing, Supply Chain Management)

Nicole Hsieh, *Exploring the Impact of Supplier Diversity Programs Through the Lens of Suppliers, Companies and Communities*

Internship Site: Johnson & Johnson

Advisor: Joseph Agresta (Supply Chain Management)

Interdisciplinary Research Teams

1:00 – 3:00 pm

Session One: | Chair: Jenevieve DeLosSantos, Director of Special Pedagogic Projects, SAS Office of Undergraduate Education

The Impact and Ethics on the Usage of Artificial Intelligence

Advisor: Christine Cahill (Political Science)

Team: Yuvrajsinh Chavda, Victoria He, Drishti Kanakia, and Faith Wilson

Hidden Social Cues- Hidden No More Through AI

Advisor: Mimi Phan (Psychology)

Team: Sarah Benedicto, Edward Bershad, Amie Choe, and Samika Mehra

Characterizing Nanoplastic Interactions with Biological Materials

Advisor: Cassandra Nelson (Exercise and Sport Science)

Team: Emaan Abdelmeguid, Rena Chen, and Dhruv Patel

Break: 5 minutes

Session Two: | Chair: Jenevieve DeLosSantos, Director of Special Pedagogic Projects, SAS Office of Undergraduate Education

STaT3D - Smart Tactical at point-of-injury Trauma 3D printing Device

Advisors: Kim-Phuong Le (Chemistry and Chemical Biology) and Sangya S. Varma (Mathematical and Physical Sciences)

Team: Hallie Gordon, Venus Ikinagbon, Adam Moskowitz, and Abhinav Ramidi

Creating an Organic Chemistry PAL: A Personalized Aide for Student Learning

Advisors: Kim-Phuong Le (Chemistry and Chemical Biology) and Lawrence Williams (Chemistry and Chemical Biology)

Team: Dima Bischoff-Hashem, Anand Kuchibhatla, Rohit Manjunath, Shreya Pandey, Senuri Rupasinghe, and Antony Shenouda

Conference Participants

Emaan Abdelmeguid (IRT) is a 19-year-old senior majoring in biological sciences. After obtaining her bachelor's degree, Emaan plans to acquire her PhD in biology or genetics and later become a college professor. As hobbies, Emaan enjoys spending time with her family, but she can also be found reading, watching Netflix, or learning a new language. Emaan is bilingual in Arabic and English and is currently learning French and Korean, as she believes learning languages to be a vital way of increasing human connections. Finding the research aspect of science to be very intriguing, Emaan is also very excited to be a part of an interdisciplinary research team. Emaan is working with Dr. Cassie Nelson and researching micro/nano plastic particles to better understand them and their effects on the human body.

Anjali Amin (SASHP Career Lab) is a graduating student in the School of Arts and Sciences Honors Program, majoring in marketing and minoring in architectural studies. She was involved in Rutgers Circle K International as a large-scale programs chair and editor. She was also involved in Rutgers Beta Gamma Sigma, serving as a mentor to other undergraduate students and designing apparel for various Rutgers student organizations. Her professional internships include merchandising at Macy's and L'Occitane en Provence, as well as procurement at Johnson & Johnson; the latter experience supported the completion of her capstone project. After graduation, she hopes to land a full-time role where she can elevate her technical and creative skills and eventually go to graduate school.

Sarah Benedicto (IRT) is a sophomore pursuing a double major in computer science and cognitive science. After completing her undergraduate studies, she is interested in either undertaking a career as a front-end software engineer or continuing her education in AI and machine learning. Sarah is an involved member and the recruitment and retention chair for Rutgers Circle K International, the largest collegiate student-led

community service organization in the world. She also holds the positions of philanthropy chair and fundraising chair for Rutgers Kappa Phi Lambda. Sarah completed a machine learning research internship at Rutgers WINLAB this summer, and she currently works as a learning assistant. In her free time, Sarah is passionate about her hobbies which include baking, reading, crocheting, and playing instruments.

Edward Bershad (IRT) is a second-year student in the School of Arts and Sciences; his major is biology, and his minor is music. His goal is to go to medical school and pursue a career as a practitioner in the field. He has completed research for Aresty's summer science research program and is currently involved in one of Rutgers' pre-med organizations, Alpha Epsilon Delta. As an avid researcher with interests in biology, psychology, and audio technology, Edward's involvement in IRT has allowed him to explore his interests and develop his skills in conducting and presenting research while working collaboratively with his team.

Dima Bischoff-Hashem (IRT) is a junior at Rutgers pursuing a double major in computer science and public health, with a minor in data science. She hopes to gain more experience in software engineering and data science, aspiring to leverage data science to analyze health-related policies and address health disparities in her career. During the summer of 2022, Dima interned at the Institute for Advanced Study in Princeton, New Jersey. Here, she conducted quality control checks on the network server system and configured computers for use by renowned researchers at the institute. Currently, she is interning at Acenda Integrated Health in Glassboro, New Jersey, contributing to the establishment of the Public Health Institute of New Jersey. Dima identifies grant funding opportunities for the institute and is spearheading a priority project for the 2023-2024 year, grounded in health disparity and public health infrastructure data. Beyond her academic interests, Dima enjoys crocheting, embroidery, and listening to music.

Olivia Cardile (IHT) is a cognitive science major on the neuroscience track, with minors in psychology and political science. Throughout her time at Rutgers, she has been a member of the Rutgers Mock Trial team and a seminar instructor of the FIGS course “Law and Leadership”. Olivia currently works as a paralegal at a NYC law firm, where she will continue to work during her gap year before attending law school. Olivia was recently accepted to the Teach for America Fellowship, which will begin in September. In her free time, she enjoys baking, working out, and spending time with her friends and family.

Yuvraj Chavda (IRT) is a junior majoring in information technology and informatics, with a minor in political science. Yuvraj has been closely watching the developments of generative AI in 2022 and 2023. While amazed at the power, Yuvraj raised concerns regarding data security/privacy issues. Yuvraj has accepted an offer from Morgan Stanley for an internship in Summer 2024, and currently volunteers at a nonprofit organization to help underprivileged students. Recently, Yuvraj finished an externship with PricewaterhouseCoopers (PwC) in nonprofit consulting and a summer fellowship with Bank of America in financial technology. Yuvraj has also been extended internship offers from Bank of America, Boeing, and Deloitte, which taught them how companies are integrating artificial intelligence into their workplace during the recruiting process. Yuvraj is also part of a team that won a consulting case competition involving sustainability and creativity at Accenture, a consulting firm at the New York office. Post-graduation, Yuvraj plans to go into the consulting industry to assist federal and commercial clients with data privacy/ethics and help clients form strategies to continue innovating. Aside from academics and careers, Yuvraj loves to fly and travel and knows a lot about commercial airplanes and tips/tricks of traveling (maybe too much!).

Rena Chen (IRT) is a senior at Rutgers University majoring in biological sciences and minoring in psychology. Rena hopes to attend medical school, complete residency, and become a

physician. When she has free time, she likes to spend time with her friends and family, play video games, and watch TV. Rena is currently working on a team characterizing the effects of nanoplastic interaction with biological materials.

Amie Choe (IRT) is a junior majoring in cognitive science with a minor in computer Science. With a passion for exploring the intersection of human cognition and technology, Amie aspires to pursue post-graduation opportunities in the fields of technology in healthcare, possible research in AI, and computational neuroscience. Beyond her academic pursuits, Amie enjoys a diverse range of hobbies, including golf, reading, cooking, traveling, and playing musical instruments. She studied abroad this past summer at Yonsei University in Seoul, South Korea, along with traveling to Barcelona, Spain with her family. Amie engages in several clubs, which include Women in Computer Science, Cognitive Science, and Korean Christian Fellowship (KCF). Within KCF, she and the other leaders take on leadership responsibilities, organizing discipleship and fellowship activities to support and bring together a community of Christian students. With a strong commitment to both academic excellence and community engagement, Amie desires to make a meaningful impact in the field of cognitive science and technology.

Hallie Gordon (IRT) is a junior studying mechanical engineering at Rutgers. She hopes to use her engineering education to help others once she graduates; she is considering a career in medical devices. When she's not busy with school, Hallie enjoys spending time outdoors, innovating and creating, and hanging out with friends. Hallie is also very involved in the Rutgers Jewish community and serves as education chair on the Rutgers Hillel Mesorah board.

Shalini Gossain (IHT) is a senior majoring in cell biology and neuroscience and minoring in religion. She currently works as a research assistant for the Hamilton Lab and as a medical assistant at an outpatient clinic. Shalini is passionate in learning about research and scientific communication. She went on three study

abroad programs during her time at Rutgers. During her free time, Shalini likes to bake, work out, and do yoga. After graduation, she hopes to go into medicine.

Victoria He (IRT) is double majoring in political science and English and minoring in mathematics; after graduation, she hopes to pursue a JD in either criminal justice or corporate law. She has a deep interest in conducting research and is currently involved in projects about business communications and AI bias. When she is not designing graphics on the HC media team or looking after grade-school kids at RU Pilot Me, she enjoys playing volleyball, drawing, and reading—but most importantly, fawning over her dog, Kermie.

Nicole Hsieh (SASHP Career Lab) is a dynamic individual with a passion for technology and diversity, pursuing a major in computer science at Rutgers University. Throughout her academic journey, she has actively engaged in various co-curricular activities, holding leadership positions such as outreach director for Women in Computer Science and campus director for the Percentage Project. Additionally, she has served as treasurer for the Organization of Luso-Americans at Rutgers and works as an iLab assistant at the CAVE. Nicole's dedication and contributions have been recognized through awards like the Anita B Scholar (2023) and SAS Excellence Award (2021-2024). Beyond her academic pursuits, Nicole is an advocate for diversity, equity, and inclusion (DEI), a fervent world traveler who has explored 22 countries, and a language enthusiast who has lived in Brazil, China, and the US. After graduating, Nicole plans to embark on a career in technology sales at Vivint before returning to school to pursue an MBA.

Venus Ikinagbon (IRT) is a dedicated biology major with a minor in women's gender studies. She is passionately pursuing a career in medicine and currently on the pre-med track. Beyond the classroom, she finds solace in reading and expressing her creativity through painting. As a DEI (diversity, equity, and inclusion) ambassador, Venus is committed to fostering a more

inclusive campus environment. In addition, she generously volunteers at Robert Wood Johnson Hospital, where her passion for healthcare and patient care shines through. With a blend of academic excellence, artistic flair, and a strong commitment to community service, Venus is poised to make a meaningful impact in the field of medicine and beyond.

Drishti Kanakia (IRT) is a dedicated and driven student currently pursuing a major in finance with a minor in political science at Rutgers University. With a passion for law, business, AI, cryptocurrency, and contracts, she aspires to significantly impact the legal industry post-graduation. Alongside academics, Drishti actively participates in pre-law societies. She has gained practical experience through internships at law firms, one in corporate, and one in family law. In her free time, she enjoys playing golf, meeting new people, and reading. She also values personal growth through exploring new interests. Drishti's post-graduation plans involve attending law school and taking the bar exam.

Sai (Anand) Kuchibhatla (IRT) is a senior at Rutgers University majoring in computer science with minors in data science and statistics. He has interned at Guardian Life Insurance as a solutions architect intern and is currently a frontend engineering director at an organization at Rutgers called Hack4Impact. Sai aims to further his education in a master's program from a well-reputed institution directly after graduating with his bachelor's degree. He enjoys watching tv shows, listening to music, and automating tasks using code.

Rohit Manjunath (IRT) is a rising senior majoring in computer science with minors in data science and statistics. This past summer, he wrapped up his internship as a front-end developer at Oracle, NYC, where he hopes to secure a full-time job post-graduation. In parallel, he seeks to continue his education by pursuing graduate studies in Computer Science.

Arya Massand (SASHP Career Lab) is a senior from Edison, NJ, graduating from the School of Arts & Science Honors Program

(SASHP) this May with a Bachelor of Arts in mathematics and a minor in quantitative economics. Arya joined the SASHP his sophomore year, drawn by its reputation of academic excellence and innovative interdisciplinary approach. He is an active part of the beloved Rutgers community through his current leadership as an assistant director of finance for Rutgers University Dance Marathon and a resident assistant at the Livingston apartments. Following his Enterprise Process & Technology internship at J&J through the Career Lab program in Fall 2023, he transitioned into a new role as a R&D Procurement Co-Op at J&J Innovative Medicine. He has been a mentor in the Rutgers community teaching a First-Year Interest Group Seminar (FIGS) in Exploring Education, working as a learning assistant for Calculus I Math & Physics, and serving as a math coach for the SAS Educational Opportunity Fund (EOF) Summer Institute. Arya was also a part of the inaugural cohort of the Rutgers Summer Service Internship (RSSI) program in the summer of 2022, working with underserved youth through a non-profit organization called Grades4Life. He earned a Chancellor-Provost Student Leadership Award in Spring 2023 as a Champion of Teaching and Learning. In his free time, Arya enjoys spending time with family and friends, reading, singing, and watching the sunrise on the beach. Arya is looking forward to working full-time in industry post-graduation and hopes to pursue a master's in economics in the future, so he can adjunct part-time at a university in undergraduate economics.

Samika Mehra (IRT) is a sophomore majoring in biology. She is thrilled to be part of IRT and conduct research with songbirds in the lab. She hopes to gain many valuable skills and put them to good use in the future. Samika is in the process of figuring out her future career plans but hopes to get her master's and ultimately work in a health profession. She loves children and works as a behavioral therapist for kids with ASD. She loves to read murder mystery and thriller books in her free time. She also loves to travel, and her favorite country is Spain.

Alexandria M Minetti (IHT) will be graduating in May with a degree in linguistics with minors in Italian and Russian. During her

time at Rutgers, she has also worked as a research assistant at Robert Wood Johnson Hospital through the department of pediatrics and in the Rutgers applied phonetics group through the Aresty research center. Outside of her research, she also served as a First Year Interest Group seminar instructor in the Fall 2023 semester he taught “exploring linguistics and world language”. After graduation, she intends to continue her education and research.

Adam Moskowitz (IRT) is a class of 2025 mechanical engineering major. He has worked with Metro Analytics through the Rutgers Externship Exchange Program and has worked with Rutgers student entrepreneurs in the Innovation Design and Entrepreneurship Academy. Outside of school he is a member of the New Market Fire Company.

Shreya Pandey (IRT) a rising junior at Rutgers University, is pursuing a double major in computer engineering and computer science. Her journey in engineering ignited during high school when she participated in FIRST robotics, fostering a love for problem-solving through creative coding. As a dedicated member of on-campus organizations like SWE and IEEE, she serves as the president of Rutgers IEEE, and continues her passion for robotics through IGVC. Shreya's competitive and creative nature, coupled with extensive knowledge in SQL databases, C#, Java, and Python, have driven her to explore diverse avenues in engineering. She has actively engaged in research, particularly in virtual reality and signal processing; she is now eager to delve into machine learning and full-stack development. Committed to fostering diversity and empowering women in STEM, Shreya aims to further develop her technical skills and tackle complex challenges, drawing from the strong work ethic instilled by her academic journey.

Dhruv Patel (IRT) is a senior majoring in exercise science who is currently participating in the interdisciplinary research program. He intends to apply to medical school in pursuit of a career as a physician. After graduating from Rutgers University in May, he plans on entering his gap year as he concurrently applies to

medical schools. Dhruv enjoys reading and playing sports in his free time, with *The Alchemist* being his favorite book and football being his favorite sport. He is currently interning at EyeCare Consultants of NJ, gaining valuable experience in the field of ophthalmology and patient interaction. He has also worked in patient care, more specifically with geriatric patients who require aid in their daily activities. He is extremely passionate about healthcare and spends most of his time learning about the human body in his classes, while actively planning free medical camps for his organization Project Meducate. He is involved in many clubs at Rutgers, including Kier's Kidz and AMSA, where he strives to impact those who are less fortunate-- volunteering to feed the homeless and providing comfort to kids with cancer. In this research, he aims to uncover the correlation between microplastics and biological tissue, a topic that could have meaningful implications for health and disease.

Mia B Prowisor (IHT) is an undergraduate student at Rutgers University majoring in psychology with a minor in Spanish and a basic proficiency certificate in French. She is a member of the School of Arts and Sciences Honors Program, Phi Beta Kappa (Academic Honor Society), and Psi Chi (Psychology Honor Society). At Rutgers, Mia co-founded the RU Krav Maga Club, in which she instructed university students in self-defense. She has also acted as a peer mentor for the honors peer mentor program and psychological alliance. To further her experience within the field of psychology, Mia acted as a supervisory research assistant in two separate psychology labs and volunteered as a teacher's assistant in forensic psychology. In her time at Rutgers, Mia interned at Rutgers University Behavioral Health Care, the Rutgers Psychology Child Development Center, JCC Camps at Medford, and Good Grief. These opportunities assisted Mia in pursuing her passion of working with youth in a mental health capacity, ultimately reinforcing her desire to enter the field of clinical therapy for children and adolescents. After graduating from Rutgers University this upcoming May, Mia will proceed to obtain her master's degree in social work from Columbia University.

Abhinav Ramidi (IRT) is a Rutgers Honors College sophomore double majoring in biomedical engineering and computer science. He is a member of the Rutgers Taekwondo Club, Rutgers Chess Club, and RU Makers. In his free time, he enjoys walking, bicycling, reading sci-fi, playing chess, and playing videogames. He plans to pursue a career adjacent to pharmaceutical research and development, working on the cutting edge of healthcare technology.

Nithin Ravikumar (IHT) is a senior at Rutgers University, and a biology major and psychology minor. He works as an emergency department technician at Saint Peter's University Hospital, a research assistant at the Hamilton Lab, and a crisis text line counselor. He is passionate about fitness and exercise and is a member of the Rutgers Club Wrestling team. His plan is to go to medical school and become an emergency medicine physician in the US military.

Senuri Rupasinghe (IRT) is a computer science major in her senior year of study at Rutgers University. In her free time, Senuri loves to go on long runs, listen to music, and spend time in nature. After graduation she hopes to gain experience in industry as a software engineer, and later pursue a PhD in machine learning. At Rutgers she has been involved in ground-breaking research projects such as the IRT Organic Chemistry PAL project, student organizations such as USACS, and various hackathons hosted at Rutgers. She has also been a teaching intern for general chemistry at Rutgers which allowed her to become interested in pedagogy and ultimately led to her involvement in the IRT PAL project, an initiative that she hopes will change the way students learn.

Antony Shenouda (IRT) is a junior majoring in cell biology and neuroscience with a minor in computer science. He wants to go to medical school to become a surgeon but also wants to do research in bioinformatics. He is a volunteer emergency medical technician in his hometown. He is also currently a general biology supplemental instructor for ODASIS (Office for Diversity and

Academic Success in the Sciences) students. In his free time, he enjoys playing and watching soccer and basketball.

Faith Wilson (IRT) is a senior studying journalism and media and minoring in women's and gender studies. She aspires to become a corporate attorney and legal scholar by enrolling in a JD/PhD dual-degree program at a top law school next fall. Wilson is the vice-president and founding member of BIPOC@MGSA, the first BIPOC organization in Mason Gross School of the Arts (MGSA) history. Her professional experience includes positions at Luther Pendragon, the Rutgers SC&I, and Callahan & Fusco, LLC. Wilson is presently leading a study funded by the Rutgers Institute for Women's Leadership on dual discrimination faced by Black women attorneys in Big Law. In her free time, Wilson participates in the Rutgers Table Tennis Club and the West Indian Student Organization Dance Troupe.



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Thank You

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- SAS Office of Undergraduate Education

WEBSITES

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