Rowan University
Division of University Research

Rowan Research Days 2024

School of Graduate Studies
Graduate Student & Postdoctoral Scholar Poster Session

Faculty Research Day
March 26-27, 2024
Welcome to Rowan University’s Research Days. As we celebrate our Centennial, it is our great pleasure to host the School of Graduate Studies’ first graduate student and postdoctoral scholar poster session and our University-wide, seventh-annual Faculty Research Day. We are honored to support the innovation and creativity of our students, postdoctoral fellows and faculty from across disciplines and campuses. We are proud to be a part of this community as we reach for new heights in research awards, patents, invention disclosures, publications, books, creative activity, doctoral degrees conferred and postdoctoral scholars supported.

As the nation’s fourth fastest-growing public research university, it is clear we are thriving. We’re already classified by the Carnegie Foundation as an R2 (high research activity) institution and we’re pleased to say we are well on our way to R1 (very high research activity). With our growing number of institutions and centers, the launch of new colleges and schools, and our continued expansion, we are building the University of the Future. We deeply appreciate the vision and forward-thinking of our many partners in industry, government, academia and nonprofit organizations in New Jersey and beyond. Our advances in research are only possible with their support.

We sincerely appreciate the dedication of our faculty and students to Rowan’s continued success. Please enjoy this opportunity to celebrate our accomplishments and appreciate what is to come.

Sincerely,

Mei Wei, Ph.D.
Vice President for Research

Tabbetha Dobbins, Ph.D.
Dean, School of Graduate Studies

ROWAN RESEARCH

$433M in sponsored research and grants since FY13
17 NSF CAREER Awards
$34M DoD research grants awarded since 2012
14 National NSF I-Corps Awards since 2018
30+ Regional NSF I-Corps Awards
307 research proposals awarded in FY23
1 of 4 universities in the nation to grant both MD and DO degrees
100+ education, clinical and research sites across New Jersey
Top 50 undergraduate entrepreneurship program in United States
8 colleges and 7 schools
98 bachelor’s degree programs
58 master’s degree programs
3 professional degree programs
19 doctoral degree programs

Innovation and commercialization
25 new patents in the past five years
289 invention disclosures as of FY23
**MARCH 26**

School of Graduate Studies
Graduate Student & Postdoctoral Scholar Poster Session

**NOON**

WELCOME & AWARD PRESENTATION
Anthony Lowman
Provost and Sr. Vice President for Academic Affairs
Tabbetha Dobbins
Dean
School of Graduate Studies

**12:30 P.M.**

KEYNOTE ADDRESS
“Decarbonizing Sustainably: Where Collaboration and Innovation Intersect”
Chris Whitehead
Senior Environmental Justice Consultant
Worley Consulting

**1 P.M.**

POSTER SESSION
(see presenters list, p. 6-7)

**3 P.M.**

POSTER PRIZE PRESENTATION
Reception to follow

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**MARCH 27**

Faculty Research Day

**9 A.M.**

WELCOME BREAKFAST AND MORNING ADDRESS
John Manuel
Manager, Office of Research Development
Ali Houshmand
President
Anthony Lowman
Provost and Sr. Vice President for Academic Affairs
Mei Wei
Vice President for Research

**SPEAKER**
Judith Sheft
Executive Director
New Jersey Commission on Science, Innovation and Technology

**10 A.M.—12:30 P.M.**

RESEARCH SHOWCASE
(see faculty presenters list, page 10)

**10:30 A.M.—12:15 P.M.**

CONCURRENT BREAKOUT SESSIONS
(see panel topics and locations, page 11)

**12:30 P.M.**

LUNCH

**1 P.M.**

AFTERNOON ADDRESS AND RESEARCH AWARDS PRESENTATION

**SPEAKER**
Kenneth Lacovara
Founding Executive Director
Edelman Fossil Park & Museum

**AWARDS PRESENTATION**
Chris Whitehead has been an air quality specialist for nearly 20 years. His recent work has focused on environmental justice policies, climate impacts, risk analysis, renewables development and cumulative impacts assessment. Environmental justice work has become his passion as he strives to bring stakeholders to the table and objectively untangle the many nuanced impacts that have piled up to affect the health of people in overburdened communities. He is a senior environmental justice consultant for Worley Consulting.

Chris holds a Master of Science in environmental policy and management from American Public University and a sustainability management certificate from Massachusetts Institute of Technology. His most recent scholarly work centers on a cumulative impacts model that he developed in southern New Jersey and Philadelphia. Chris lives in Burlington Township with his wife and two young children.
Three-Minute Thesis Awards

2023

Master’s Award
Anahita Kakhani
M.S. in Civil & Environmental Engineering

Doctoral Award
Susanth Revelli
Ph.D. in Civil & Environmental Engineering

People’s Choice Award
Deep Patel
Ph.D. in Civil & Environmental Engineering

2022

Master’s Award
Ruqaya Alfaris
M.S. in Civil & Environmental Engineering

Doctoral Award
Giuseppina Carannante
Ph.D. in Electrical & Computer Engineering

People’s Choice Award
Marium Waqar
M.A. in Higher Education

Award for Excellence in Graduate Research

Kazi Zahir Uddin
Doctoral Candidate
Mechanical Engineering
Henry M. Rowan College of Engineering

Nominated by
Behrad Koohbor
Assistant Professor
Mechanical Engineering
Henry M. Rowan College of Engineering

Travel Awards
April 2023-January 2024

For a complete list of names please scan or visit:
https://sites.google.com/rowan.edu/travelgrants24
College of Education
1. Allison Gainer
2. Madeline Boehning
3. Jennifer Balbuena
4. Danelle Sheply, collaborators: Tijani Bullock, Emily Hinlicky
5. Rachel Hill-Pizzo, collaborators: Nicole Dudek, Aiyahna McCoy

College of Humanities & Social Sciences
6. Kayla Maharaj
7. Colin Stiles, collaborator: Elizabeth Rantuccio

College of Sciences & Mathematics
8. Hadarou Sare
9. Shreha Banerjee
10. Nicholas Paradis
11. Rohit Nambari, collaborator: Pintu Miah
12. Autumn Vossler
13. Lauren Staman, collaborator: Julianna Alimenti
14. Elias Elias
15. Katie Beck-Felts
16. Priya Aryal
17. Alexandra Nicoletti
18. Janine Mazahreh
19. Faith Shank
20. Cody Soper
21. Khushi Jain
22. Jacob Zangaro
23. Nakoa Webber
24. Nadia Afrin
25. Lilliana De Salas

26. Daniel Arango-Cardona, collaborator: Grace Bonnell
27. Gabrielle Salvatore*
28. Adriann Lai
29. Alicia Petrany
30. Jamie Clapp
31. Kasmier Vicosio
32. Ariel Zhang
33. Annie Tran
34. Julia Gabriel, collaborator: Jesse Na
35. Bamidele Towolawi
36. Rosalind Moore
37. Sravani Malasani
38. Mohammad Alkhatib
39. Kevin Daus
40. Robyn Himelstein
41. Erin McKenney
42. Khanh Pham
43. Sravani Malasani
44. Pintu Miah
45. Shakil Ahmed
46. Okikiola Agbabiaka
47. Adarsh Kumar

Henry M. Rowan College of Engineering
48. Atik Faysal
49. Mohammad Rostami
50. Taha Bouhsine
51. Giuseppina Carannante*
52. Arunkumar Goli*
53. Gali Lakshamana Ravi Raj
54. Barnabas Gao
55. Leeza Duller
56. Garrett Williams
57. Austin Lehr
58. Anil Kumar Baditha*

*Postdoctoral Fellow
**Laboratory Technician
59. Ibrahim Joel
60. Shaini Aluthgun Hewage*
61. Mohit Chaudhary*
62. Anil Kumar Baditha; collaborator: Ayyaz Fareed
63. Nicole Hinds

Rowan-Virtua School of Translational Biomedical Engineering & Sciences
63. Mohamad Keblawi
64. Cristina Padovani
65. Quy Nguyen
66. Liza Guner
67. Brittany Friedson
68. Jibran Imitiaz
69. Tamaraty Robinson, collaborator: Ayesha Gurnani
70. Stacy Love*
71. Victoria Wong Murray, collaborator: Courtney Liam
72. Vanessa Pizutelli
73. Fayez Alruwaili
74. James Kennedy
75. Morgan Antisell, collaborator: Hoi Yan Yu
76. Navya Sree Devaguptapu
77. Emily Kopchick
78. Narangerel Gantumur
79. Erin Wannen, collaborator: Claire M. Corbett
80. Haven Predale
81. Camila Vardar, collaborator: Giavanna Trojan
82. Rachel Young
83. Antonio Abbondandolo
84. Umu J aloh
85. Samuel Hofbauer
86. Matthias Recktenwald

87. Shahab Edalatian Zakeri
88. Enosh Lim, collaborator: Antonia DeBastiani
89. Myranda Sims
90. Dipon Roy
91. Evan Hutt
92. Daniel Ball
93. Nicole Hinds

Rowan-Virtua School of Osteopathic Medicine
94. Oyku Dinckol Perni*
95. Noah Wenger**
96. Mahdie Kerdari*
97. Mahdie Kerdari*

School of Earth & Environment
98. Benjamin Jelen*

Shreiber School of Veterinary Medicine
99. Jose de Jesus Argueta Donohue*
100. Pavan Goud Juluri, collaborator: Jacob Matthew Mara

For complete listing of poster titles, abstracts and advisers, please scan or visit the following website:
https://sites.google.com/rowan.edu/gspd24

Special thanks to the Graduate Student & Postdoctoral Scholar Poster Session Organizing Committee: Omar Al-Odat, Anudeep Deevi, Elias Elias, Christina Newlands, Matthew Pekora, Shaileen Woods and Rachel Young. Thanks also to the Graduate Student Government Association for hosting the event reception.
Judith Sheft is executive director of the New Jersey Commission of Science, Innovation and Technology. The commission’s mission is to accelerate economic development in New Jersey through science, innovation and technology, including stimulating academic-industrial collaboration and supporting entrepreneurs and inventors.

Previously, Judith was involved with regional economic and cluster development at the New Jersey Innovation Institute at New Jersey Institute of Technology (NJIT) for the HealthIT Connections program, the NJIT I-Corps Site and the Procurement Technical Assistance Center. She advised external startups at NJIT’s high technology/life sciences business accelerator/incubator and worked with faculty and students to create startup companies and establish licensing relationships.

She serves on the boards of the Greater Newark Enterprise Corporation, NJIT Murray Women’s Center, StartUp Newark, Women’s Center for Entrepreneurship Corporation, Einstein’s Alley and SheTek. In 2017, she co-chaired Gov. Murphy’s transition advisory committee for Technology Government and Innovation.

Judith received a Master of Business Administration from the Wharton School of the University of Pennsylvania; a Bachelor of Science and Master of Science from the University of Illinois; and an honorary doctorate from the Universidad Inca Garcilaso de la Vega in Lima, Peru.

Kenneth Lacovara has unearthed some of the largest dinosaurs ever to walk the earth, including the massive 65-ton Dreadnoughtus, which appeared in the film “Jurassic World Dominion.” He is a recipient of The Explorers Club Medal, the highest honor in exploration, previously awarded to pioneers such as Sir Edmund Hillary, Jane Goodall and Neil Armstrong. His TED Talk has been viewed by more than 5 million people, and his book, “Why Dinosaurs Matter,” published by Simon & Schuster, is a winner of the Nautilus Book Prize.

Ken’s discoveries have been featured three times in Discover magazine’s “100 Top Science Stories of the Year,” and he has appeared in more than 20 television documentaries.

Ken was the founding dean of Rowan’s School of Earth & Environment and is now the founding director of the new Edelman Fossil Park & Museum of Rowan University, described by Smithsonian Magazine as “one of the most anticipated museums in the world.”

Since 2022, he has served on the board of Colossal Biotechnology, a CRISPR-based company endeavoring to resurrect the woolly mammoth and recently extinct species.
Award recipients

Faculty Research Achievement Award
Gerard Capellades
Assistant Professor
Chemical Engineering
Henry M. Rowan College of Engineering

NOMINATED BY
Kenneth Lau
Professor and Department Head
Chemical Engineering
Henry M. Rowan College of Engineering
and
Giuseppe Palmese
Dean
Henry M. Rowan College of Engineering

Breakthrough Research Award
Andra Garner
Assistant Professor
Environmental Science
School of Earth & Environment

NOMINATED BY
Beth Christensen
Professor and Founding Chair
Environmental Science
School of Earth & Environment
and
Patrick Crumrine
Associate Professor
Environmental Science
School of Earth & Environment
Biological & Biomedical Sciences
College of Science & Mathematics

Award for Excellence in Graduate Research
Kazi Zahir Uddin
Doctoral Candidate
Mechanical Engineering
Henry M. Rowan College of Engineering

NOMINATED BY
Behrad Koohbor
Assistant Professor
Mechanical Engineering
Henry M. Rowan College of Engineering

Award for Excellence in Undergraduate Research
Jacqueline Ganter
Triple Major:
Geographic Information Science and Geography
School of Earth & Environment
and
Biological Sciences
College of Science & Mathematics

NOMINATED BY
Zachary Christman
Associate Professor
Environmental Science
School of Earth & Environment
MARCH 27 PROGRAM

Presenters

College of Education
Cori Brown
Robert Wieman

College of Humanities & Social Sciences
Kimberly Houser
Jennifer J anofsky
Sandra Joy
Christine Saum
J ohn Shjarback
Evan Sorg

College of Performing Arts
Davide Ceriani
Elisabeth Hostetter

College of Science & Mathematics
Yong Chen
Tabbetha Dobbins
Dongmei Dong
J ason Heindl
Helga Huntley
Thomas Keck
Melissa Manners
Rohit Nambar
Trevor Smith

Cooper Medical School of Rowan University
Kevin Currie

Henry M. Rowan College of Engineering
Mohammad Moghimi
Fahmida Rahman
Yashwant Sinha
Sebastián Vega
Andrea Vernengo

Machine & Artificial Intelligence Virtual Reality Center
Amanda Almon
Leeza Duller
George Lecakes Jr.
Garrett Williams

Ric Edelman College of Communication & Creative Arts
Amanda Almon
Keith Brand
Gracemarie Fillenwarth
Dianne Garyantes
Ai Guo Han
Sam Horowitz
Kristine Johnson
Jennifer Kitson
Heather Lanier
Krystle Lemonias
Jonathan Mason
Emily Nolan
Alison Novak
Nancy Ohanian
Julia Richmond
Rui Shi
Donna Sweigart
Olga Vilceanu

William G. Rohrer College of Business
Tejinder Billing
Andrea Farro
Nina Krey
Shih-Hui Hsiao
Tony Lin
Michael Milovich
Dilip Mirchandani
Melissa Montalbo-Lomboy
Shuang Wu

Rowan-Virtua School of Translational Biomedical Engineering & Sciences
Michael Anikin
Daniel Chandler
Ying Chen
Ronald Ellis
Michael Henry
Patrick Hwang
Renee Demarest
David Devilbiss
Gary Goldberg
Minwook Kim
Jessica Loweth
Daniel Manvich
Rachel Navarra
Sophia Orbach
Sebastián Vega
Elizabeth West

School of Earth & Environment
Beth Christensen
Andra Garner
Qian He
Charles Schutte
Corianne Tatariw

Shreiber School of Veterinary Medicine
Omar Tliba

Rowan Research Days 2024
Session One
10:30 a.m.–11:15 a.m.
ROOM # SUBJECT
 144  Emerging Trends in Artificial Intelligence and Machine Learning: Applications Across Disciplines
ROOM # SUBJECT
 221  Cultural Competence: Bridging Education, Humanities, Communication and Business

Session Two
11:30 a.m.–12:15 p.m.
ROOM # SUBJECT
 144  Medical/Community Health
ROOM # SUBJECT
 221  Sustainability