

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

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.

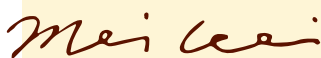
We are honored to support the innovation and creativity of our students, postdoctoral fellows and faculty from across disciplines and campuses. We are proud to be a part of this community as we reach for new heights in research awards, patents, invention disclosures, publications, books, creative activity, 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

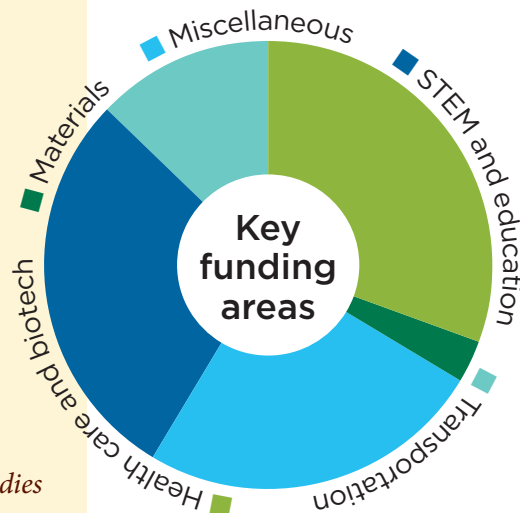
3 professional degree programs

19 doctoral degree programs

Innovation and commercialization

25 new patents in the past five years

289 invention disclosures as of FY23



Schedule

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*

Tabbatha 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

LIVE ART PERFORMANCE

Leeza Duller
Graduate Student
Engineering

1 P.M.

POSTER SESSION

(see presenters list, p. 6-7)

3 P.M.

POSTER PRIZE PRESENTATION

Reception to follow

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

Speaker



Chris Whitehead
*Senior Environmental
Justice Consultant
Worley Consulting*

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.

Awards

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

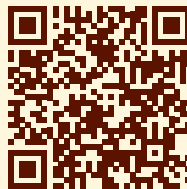
Kazi Zahir Uddin
Doctoral Candidate
Mechanical Engineering
Henry M. Rowan College
of Engineering

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>



Poster Presentations

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. Shrhea Banerjee
10. Nicholas Paradis
11. Rohit Nambiar, 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. Nakoia 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 Vicioso
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 Imtiaz
- 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 Wannan, collaborator:
Claire M. Corbett
- 80. Haven Predale
- 81. Camila Vardar, collaborator:
Giavanna Trojan
- 82. Rachel Young
- 83. Antonio Abbondandolo
- 84. Umu Jalloh
- 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.

Speakers



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

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
Explorer, Paleontologist, Author
Founding Executive Director
Edelman Fossil Park & Museum

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

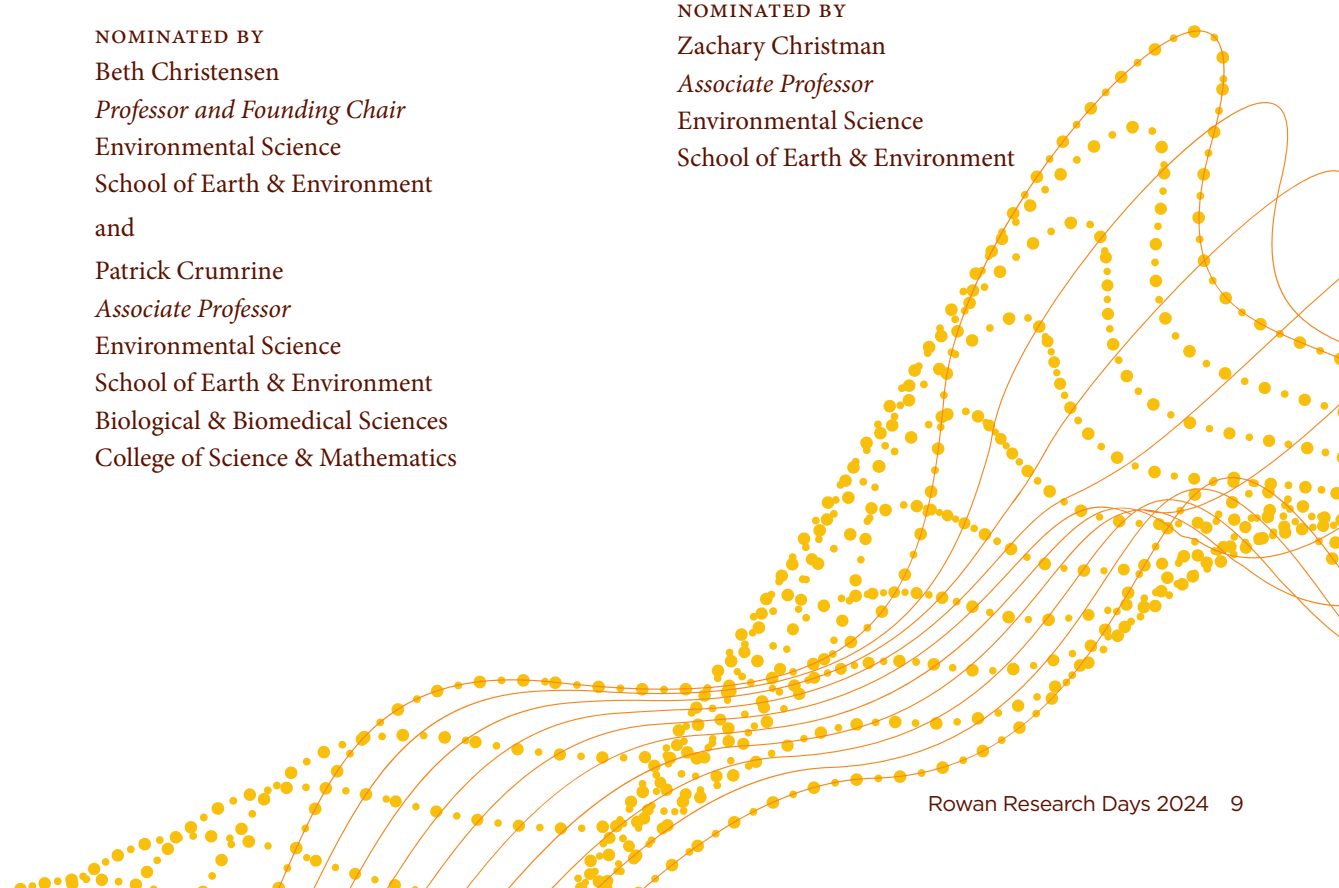
NOMINATED BY
 Behrad Koohbor
Assistant Professor
 Mechanical Engineering
 Henry M. Rowan College of Engineering

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



Presenters

College of Education

Cori Brown
Robert Wieman

College of Humanities & Social Sciences

Kimberly Houser
Jennifer Janofsky
Sandra Joy
Christine Saum
John Shjarback
Evan Sorg

College of Performing Arts

Davide Ceriani
Elisabeth Hostetter

College of Science & Mathematics

Yong Chen
Tabbatha Dobbins
Dongmei Dong
Jason Heindl
Helga Huntley
Thomas Keck
Melissa Manners
Rohit Nambiar
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 Rita & Larry Salva School of Nursing & Health Professions

JoAnne Bullard
SoJung Kim
Dylan Klein
Dara LoBuono
Jennifer Longo
Leslie Spencer

Rowan-Virtua School of Osteopathic Medicine

Dmitriy Markov
Kinjal Shah
Shawna Rotoli
Meagan Vermeulen

Rowan-Virtua School of Translational Biomedical Engineering & Sciences

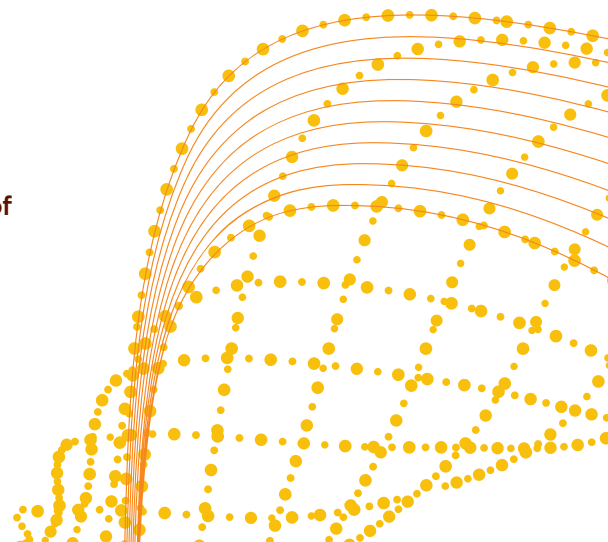
Michael Anikin
Daniel Chandler
Ying Chen
Ronald Ellis
Michael Henry
Patrick Hwang
Renee Demarest
David Devilbiss
Gary Goldberg
Minwook Kim
Jessica Loweth
Daniel Manvich
Rachel Navarra
Sophia Orbach
Sebastián Vega
Elizabeth West

School of Earth & Environment

Beth Christensen
Andra Garner
Qian He
Charles Schutte
Corianne Tatariw

Shreiber School of Veterinary Medicine

Omar Tliba



Breakout sessions

Session One

10:30 a.m.-11:15 a.m.

ROOM #	SUBJECT
144	Emerging Trends in Artificial Intelligence and Machine Learning: Applications Across Disciplines

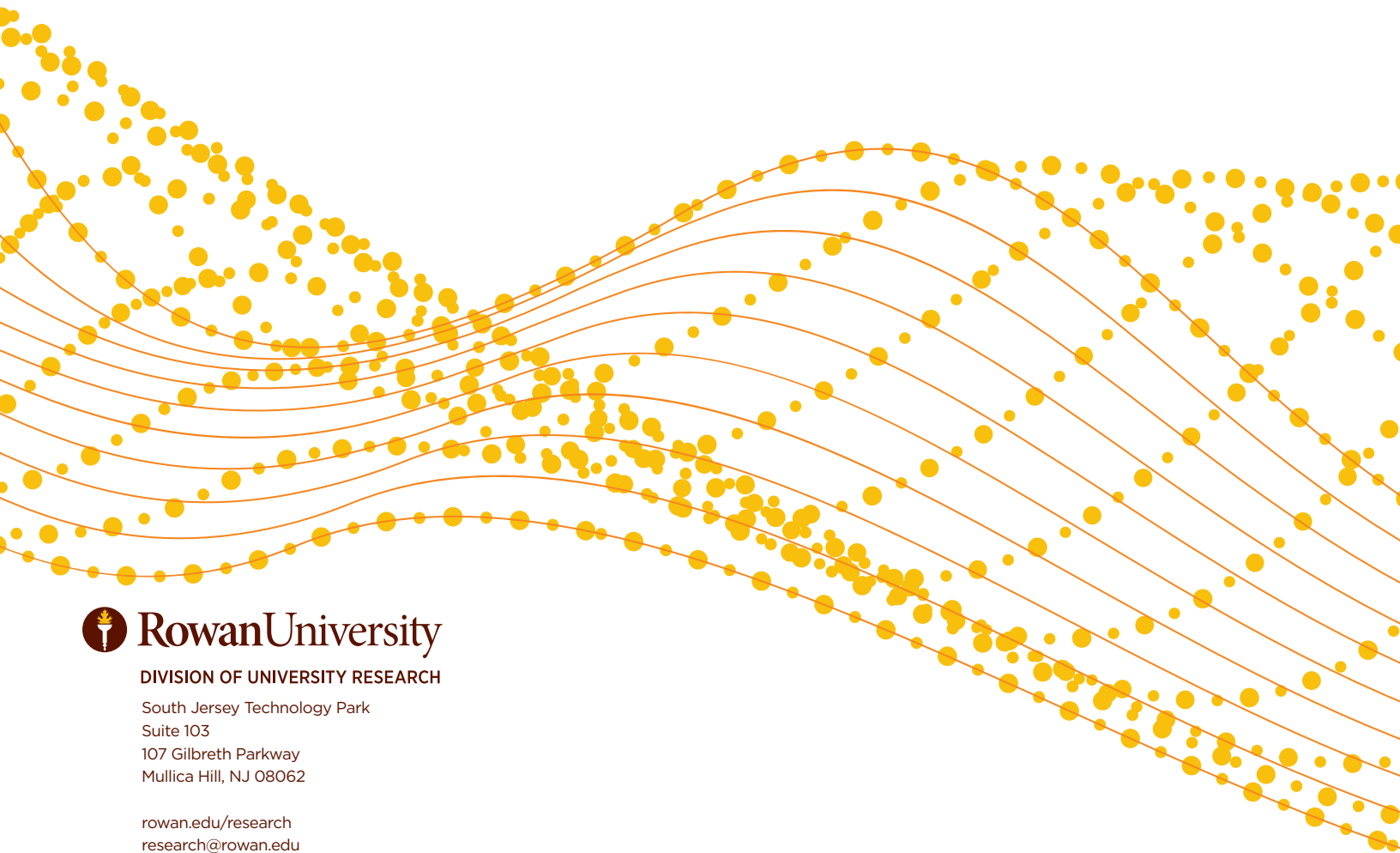
ROOM #	SUBJECT
221	Cultural Competence: Bridging Education, Humanities, Communication and Business

Session Two

11:30 a.m.-12:15 p.m.

ROOM #	SUBJECT
144	Medical/Community Health

ROOM #	SUBJECT
221	Sustainability



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