RESEARCH RECRUITS PROGRAM


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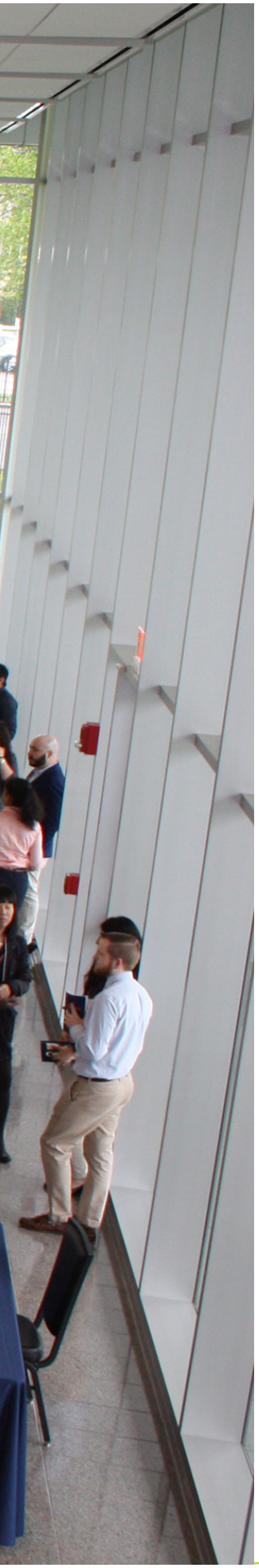


RESEARCH RECRUITS PROGRAM

In 2017, the Office of Research and Sponsored Program introduced the Research Recruits Program (RRP), a campus-wide undergraduate research program to enhance student experiential learning. RRP is a two-semester undergraduate research or creative experience mentored by a Kean faculty member. The program helps Kean faculty involve undergraduate students from all disciplines in their ongoing research and creative projects. RRP provides an opportunity for students to learn about research at the discovery and inquiry level by joining a faculty-student research team. Students receive research training under the guidance of faculty mentors and continuous support from experienced peer advisors. RRP can be a stepping stone to more advanced research projects on campus, summer research experiences and internships, conference presentations and even national fellowships. It is an entry-level position, with no prior research experience required. Interested sophomores and juniors and new transfer students are encouraged to apply. Students selected will receive a monetary stipend for participating in this program. Students admitted will be paired with a faculty member in their field of interest and peer advisor (Undergraduate Senior) with significant research experience.

ELIGIBILITY REQUIREMENTS

Research Recruits must be...

- A sophomore or a junior Kean student
- Minimum GPA of 2.75
- Committed to 5 -10 hours of research work per week
- Committed to participate in the program for two consecutive semesters (fall and spring)
- Strongly committed to a declared major
- Possess good written and oral communication skills

RESEARCH RECRUITS FOR ACADEMIC YEAR 2018-2019

Alyssa Antoine
BIOLOGY, 2022

Moises Azcona
ATHLETIC TRAINING, 2021

Prayie Carbone
BIOLOGY, 2023

Jessie Coronel
MARKETING, 2019

Prince Flomo
COMPUTER SCIENCE, 2022

Joseph Garrastazu
ENVIRONMENTAL BIOLOGY, 2019

Yazmine Graham
ARCHITECTURE, 2021

Jeremy Johnson
SUSTAINABILITY SCIENCE & ENVIRONMENTAL BIOLOGY, 2019

Robert Kulesza
COMPUTER SCIENCE, 2020

Evelyn Moran
INFORMATION TECHNOLOGY, 2019

May Thuzar Oo
POLITICAL SCIENCE & ASIAN STUDIES, 2019

Jianna Pisa
PSYCHOLOGY, 2020

Nicole Skalenko
HISTORY, 2020

Matthew Seesselberg
COMPUTER SCIENCE, 2019

Jazmine Torres
PUBLIC ADMINISTRATION, 2020

Abdurrahim Vardar
BIOLOGY, 2020

MEET THE RRP PEER ADVISORS

FOR ACADEMIC YEAR 2018-2019

Peer Advisors play a primary role in the Research Recruits Program and are the first point of contact for incoming student researchers. Peer advisors are upperclassmen with a proven academic record of accomplishment, significant research experience and strong leadership skills. Peer advisors provide the perspective of an experienced student researcher and assist new researchers to find a balance between academics and research work. They share strategies for academic success and provide information about on campus and off-campus educational opportunities. Peer advisors connect the students to campus resources and help them build a strong network.

Ijeoma Bernadette Akpu
ENVIRONMENTAL BIOLOGY, 2019

Orella Chichester
COMMUNICATIONS & ENGLISH, 2019

Shivani Sankar
ENVIRONMENTAL BIOLOGY, 2019

Jason Wang
SUSTAINABILITY SCIENCE, 2019

Ijeoma Bernadette Akpu is a senior at Kean University majoring in Environmental Biology. She began her college journey at Union County College in 2014 where she experienced her first research project. She transferred from Union County College to Kean University in Fall 2017, where she continued her research journey. So far, she worked in New Jersey City University on Protein/DNA Extraction research, tested soil from the New Jersey Pine Barrens to see which method of restoration was most effective and traveled to China to collect soil samples for her current research project. She is currently a student ambassador and secretary of the Earth Science club. She is also a member of Tri-beta Honor Society, STEMpact research program, LSAMP research program and the McNair Scholars program. Her short term goal is graduate from Kean with a 3.85 GPA and to get into a PhD program (for Neuroscience). Her long term goal is to obtain her PhD and then apply for medical school to become a pediatric neurologist. She aspires to apply her neurological research from her PhD program to pediatric patients all around the world to ease the lives of people suffering from neurological disorders. Ijeoma is also a CURF Peer Adviser and mentors 4 young researchers. She hopes to inspire and motivate them to reach for the stars and never give up on their passions.

Orella Chichester is a senior at Kean University, majoring in both Communication and English. She is an adept writer with experience in both online writing and content creating. During the 2017-2018 academic year, Orella served as a research recruit and conducted research on colorism in Harlem Renaissance fiction. Her familiarity with the program helps her to better assist current research recruits with their research needs. Upon the completion of her undergraduate degrees, Orella plans to attend graduate school to pursue a degree in either Communication or Writing Studies.

Shivani Sankar is a senior at Kean University who achieved her Associate's Degree in Biology at Ocean County College under the Kean-Ocean program. She is now pursuing a B.S. in Environmental Biology. She plans on continuing on to graduate school in which she aspires to achieve both a Masters and Ph.D. degree concentrated in Environmental and Marine Biology studies. From a young age, she has always known she wanted to have a career in field research and her undergraduate years spent at Kean have helped guide her toward achieving her goals. She involves herself in campus life as being a member of the Earth Science Club, as well as being a CURF Peer Advisor who mentors a team of five Kean undergraduate researchers. Shivani is part of the Ronald E. McNair Scholars program. It was through this program that she was able to begin her undergraduate research project; conducted with her mentor Dr. Daniela Shebitz (Ph.D.) on studying fire adapted plant diversity in the Pine Barrens and Red Hill areas of NJ. She looks forward to continuing expanding her research experience as a part of the LSAMP program during her last year at Kean and hopes to provide her team of mentees with insightful research tips, tricks, support and knowledge gained throughout her experiences as an undergraduate researcher alike.

Jason Wang is a senior at Kean University majoring in Sustainability Science with a minor in Economics. He aims to obtain a Master's degree in his major which will help him along his journey to better the world's understanding of the environment. He has done research with Dr. Mu on the sustainability of liquid vs bar soap and on the benefits of compost which was funded through SpF. Currently, Jason is working as a CURF peer adviser and mentors a handful of young Kean researchers helping them to develop their own understanding and responsibility of research. When asked about the position, he replied "I wish I had a research veteran guiding me through my research, as it can be a bit overwhelming. I just hope I can be of some help to my fellow students." During his free time he enjoys going outdoors, music, and hanging with friends; especially when all three are combined. He likes to go with the flow and see how things turn out; just because he knows life doesn't always go your way. He is eager to learn more and apply his knowledge in future projects as well as pass on his experiences.

MEET THE RESEARCH RECRUITS
FOR ACADEMIC YEAR 2018-2019

Alyssa Antoine
BIOLOGY, 2022

Dr. Consuelo Bonillas
& Omara Cardoza
RESEARCH FACULTY MENTORS

Moises Azcona
ATHLETIC TRAINING, 2021

Ijeoma Bernadette Akpu
PEER ADVISOR

New Jersey Personal Responsibility Education Program Evaluation on Decreasing Pregnancy and Sexually Transmitted Infections in Teens

This research study evaluated the longitudinal effectiveness of the program "Reducing the Risk-Building Skills to Prevent Pregnancy, STDs, and HIV", an evidence-based program designed to decrease adolescent pregnancy and sexually transmitted infections in two New Jersey State identified high-risk municipalities. The Year 7 findings of the program will be presented. During the 2017-2018 academic year, the Reducing the Risk curriculum was implemented in high school health classes. The study was conducted in three high schools in New Jersey with high rates of adolescent pregnancy. A cohort of 463 9th and 10th grade students participated in the program. Participants completed baseline, post- and 3- month follow-up surveys. Ultimately, the Reducing the Risk program was effective in reducing the risk of adolescent pregnancy, and protecting against HIV and other STIs by increasing participants' intentions to abstain or use a condom during sexual activity.

Prayie Carbone
BIOLOGY, 2023

Measuring Climate Change Through Seasonal Variation In Stomata

Stomatal pores are microscopic structures on the epidermis of leaves formed by two specialized guard cells and they control the exchange of water vapor and CO2 between plants and the atmosphere. We observed the changes in the stomatal counts in various types of tree leaves in order to understand plant responses to different seasonal climate conditions. Furthermore, we compared our data collected in urban campus areas in NJ, USA to the ones in Wuhan, China to elucidate the impact of air pollution on plant physical responses. Our results will provide a quantitative scientific evidence on how plants response to different air quality and pollution levels.

Dr. Juyoung Ha
RESEARCH FACULTY MENTOR

Ijeoma Bernadette Akpu
PEER ADVISOR

Jessie Coronel
MARKETING, 2019

It's not you, it is me: Focused on Consumers' Body Satisfaction and Purchasing Decision

Despite numerous prior research regarding body satisfaction and clothing choices, studies focusing on consumers' body satisfaction and its impact on purchasing decision in the event of service failure are limited. This research study tries to shed light on the relationship between body satisfaction and service satisfaction. The objective of this study is to identify whether service failure or wrong size clothing recommendation may have an impact on a consumer's purchasing decision. To sum up, this study result will help marketing practitioners by providing evidence sales training and assessment of consumers attitudes and general perception of one's body.

Dr. Min-Chung Han
RESEARCH FACULTY MENTOR

Orella Chichester
PEER ADVISOR

Prince Flomo
COMPUTER SCIENCE, 2022

Automatic Measurement of Idea Novelty

More and more companies use crowdsourcing to solicit creative ideas to supply their innovation pipelines. While crowdsourcing is quite efficient in collecting many ideas fast, the task of screening through large amount of ideas to select best ones can be highly challenging. I plan to team up with a computer science student to test and further develop automatic approaches to evaluate the novelty of ideas. The expected outcome is an accurate and efficient approach to assess the novelty of large amount of ideas, which can be very useful for innovation managers who plan to benefit from crowdsourcing innovation.

Dr. Kai Wang
RESEARCH FACULTY MENTOR

Jason Wang
PEER ADVISOR

Joseph Garrastazu
ENVIRONMENTAL BIOLOGY, 2019

Life Cycle Assessment of Pyrolysis and Hydrothermal Liquefaction

As the biosolids from wastewater treatment facilities keep on challenging the current waste management infrastructure across the US, technologies such as pyrolysis and hydrothermal liquefaction have been proposed to convert biosolids into transportation fuels, which could create another source of renewable energy. The goal of this research was to assess and compare the environmental impacts of two technologies in terms of producing bio-oil from biosolids by conducting a life cycle assessment. The environmental impact of each technology was determined by a number of measurements, including the ozone depletion, global warming potential, smog, acidification, eutrophication, carcinogens produced, non-carcinogens produced, respiratory effects, ecotoxicity, and fossil fuel depletion.

Dr. Dongyan Mu
RESEARCH FACULTY MENTOR

Jason Wang
PEER ADVISOR

Yazmine Graham
ARCHITECTURE, 2021

Preservation of Destruction

Preservation of Destruction Description: The Preservation of Destruction is a publication that will provide insight by way of research and case studies to define historic preservation. This research will focus on when and how humanity preserves acts of urban destruction and their role in shaping urban memory. By assisting in research for the publication I will provide information on where, how and why Building New but with a Memorial as a way of preserving destruction affects society. The memorials I will use to explain my research are the Bath School Massacre in Bath Township Michigan, African American Burial Ground in New York and the 9/11 Memorial and Museum.

Professor Craig Konyk
RESEARCH FACULTY MENTOR

Orella Chichester
PEER ADVISOR

MEET THE RESEARCH RECRUITS
FOR ACADEMIC YEAR 2018-2019

Jeremy Johnson
SUSTAINABILITY SCIENCE &
ENVIRONMENTAL BIOLOGY, 2019

Biodiversity Assessment of Ants in the Northern Lowlands of Costa Rica

Ants (Hymenoptera: Formicidae) are among the most abundant insects in the world and are of great importance to species interactions, nutrient cycling, and other ecological processes. Epigaeic (surface-dwelling) ants were studied on the grounds of Laguna del Lagarto Lodge in the Maquenque Ecoregion (Alajuela Province, Costa Rica). The ant fauna was sampled using baited, pitfall and pan traps, in addition to hand collecting and Winkler funnel litter sampling. Forty-five species, distributed among six subfamilies, were collected. This is the first detailed assessment of any component of the Maquenque ant fauna.

Dr. Sylvio Codella
RESEARCH FACULTY MENTOR

Jason Wang
PEER ADVISOR

Robert Kulesza
COMPUTER SCIENCE, 2020

Investigation Of A New Machine Learning Algorithm

In this study, we are investigating a new machine learning algorithm. Previous work in deep learning involved scanning images in chunks and feeding the chunks into a neural network in order to train the network to recognize the images. In doing this, the neural network is loaded with chunks from one file at a time. After a file runs out of data to load into the neural network, the next input data begins to be processed. Instead of processing data one file at a time, it may be better to process the corresponding chunks of each input file. This may improve the accuracy of image recognition because the corresponding areas of an image are more likely to be similar. As the corresponding regions of several input images are scanned, new neural networks could be created to represent those areas. We will implement this new method and compare its results with that of the original method. If this new method proves to be better, then it could have a large impact on the development of autonomous cars which depend so heavily on fast, accurate image recognition capabilities.

Dr. Juan Jenny Li
RESEARCH FACULTY MENTOR

Shivani Sankar
PEER ADVISOR

Evelyn Moran
INFORMATION TECHNOLOGY, 2019

A Novel Web-based Interactive Visualization Flow Chart for Academic Course Planning

Course planning and registration to fulfill requirements for graduation without encountering delays and ensuring courses are taken in the correct order is vital to student success. It is a challenging task for both the student and academic advisors as there are numerous factors to consider. There are existing solutions and recommended course sequence plans to make course planning easier. In this research, we developed a novel web-based interactive visualization flow chart for course planning where students can easily plan courses by moving shapes that represent courses which are connected by arrows that represent prerequisites to ensure courses are taking in order.

Dr. Daehan Kwak
RESEARCH FACULTY MENTOR

Shivani Sankar
PEER ADVISOR

May Thuzar Oo
POLITICAL SCIENCE & ASIAN STUDIES, 2019

The Influence of Political and Economic Transition on the Development of Entrepreneurship in Myanmar (Burma)

With the recent political and economic reforms, Myanmar has entered a new era of liberalization. The people in Myanmar are ready to seize the opportunity to develop the country, enjoy their liberty and re-engage with the international communities. There is an unrealized potential of entrepreneurship in Myanmar that has been hindered by the military cronies for decades. This research explores how the political and economic transition facilitates the development of entrepreneurship in Myanmar. The country shows exponential growth mainly in internet access and mobile phone usage. The research focuses on the growth potential of e-commerce and the challenges the country faces.

Dr. Kihwan Kim
RESEARCH FACULTY MENTOR

Jason Wang
PEER ADVISOR

Jianna Pisa
PSYCHOLOGY, 2020

Psychopathy, Cerebral Laterality, and Executive Functions

This research study will examine the measure of psychopathy, executive functioning, and handedness in a non-clinical population using the Levenson Self-Report Psychopathy Scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995), the Handedness Questionnaire (HQ; Flowers & Hudson, 2013), and the Behavior Rating of Executive Function-Adult (BRIEF-A; Gioia, Isquith, Guy & Kenworthy, 2000). Previous research measuring psychopathy, handedness and executive functioning have produced inconsistent findings. It is hypothesized that higher levels of primary psychopathy will demonstrate lower levels of executive functioning. As well as, the more non-right handed and the higher level of primary psychopathy, the lower the level of demonstrated executive functioning. All participants were treated in accordance with the Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 2016) and Kean Institutional Review Board (IRB) guidelines.

Dr. Richard Conti
RESEARCH FACULTY MENTOR

Jason Wang
PEER ADVISOR

Nicole Skalenko
HISTORY, 2020

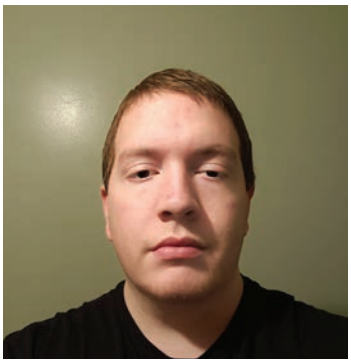
William Livingston's Revolutionary Propaganda: A 1778- 1779 Timeline

William Livingston was considered the most prominent and effective propagandist on the colonial side throughout the Revolutionary War. Prior to the establishment of New Jersey's own newspaper, the colony was influenced by publications in Philadelphia and New York. In October 1777, William Livingston recognized the urgency of providing New Jerseyans with a newspaper that was published and printed in New Jersey. The majority of newspapers that circulated within the colony were largely Tory influenced. He proposed to the Assembly that the state needed to immediately subsidize the establishment of a weekly newspaper. William Livingston's efforts were successful, the legislature responded by ordering a committee to take up the proposal with the state's public printer, Isaac Collins. On December 5, 1777, Collins issued the first publication of the New Jersey Gazette. Focusing on the years 1778- 1779, the research conducted examines William Livingston's propaganda against a timeline of the Revolutionary War and explores its impact.

Dr. Elizabeth Hyde
RESEARCH FACULTY MENTOR

Orella Chichester
PEER ADVISOR

MEET THE RESEARCH RECRUITS
FOR ACADEMIC YEAR 2018-2019



Matthew Seesselberg
COMPUTER SCIENCE, 2019

Do People Take the Fastest Route? An Empirical Study

Intelligent Transportation Systems provides numerous solutions to mitigate traffic congestion. Among them, the most prominent is real-time GPS navigation apps which recommend the fastest route. The pervasiveness and effectiveness for such services dominantly rely on the users' compliance (i.e. decision to follow the recommendation). However, transportation behavior literature reported that commuters tend to neglect such recommendations. In this research study, we conducted an empirical study to assess the compliance of real users' route choices. To reveal the users' actual chosen route, we developed an Android tracking application where the driven route is segmented into an array of waypoints and polylines which is compared segment-by-segment to the recommended fastest route.

Dr. Daehan Kwak
RESEARCH FACULTY MENTOR

Shivani Sankar
PEER ADVISOR

Jazmine Torres
PUBLIC RELATIONS, 2020

Exporting American Higher Education Overseas: A Look at China

The demand for American higher education is a global phenomenon. Since President Nixon's historic meetings with Chairman Mao Zedong in 1972, Sino-US relations have evolved considerably. Productive collaborative exchanges have included sports, culture, science and technology, women's issues, health, and education. Chinese students have shown a dramatic increase in the demand for American higher education, with more than 250,000 students currently studying in the US. This study examines the establishment and operations of Sino-US collaborative Universities as an example of an innovative approach to meeting this need. We compare the recruitment, application and acceptance practices of Sino-US collaborative Universities, focusing on five public and private institutions. The implications for global higher education will be discussed.

Dr. Jeffrey Toney, Dr. Craig Donavan, & Dr. Bok Jeong
RESEARCH FACULTY MENTOR

Shivani Sankar
PEER ADVISOR

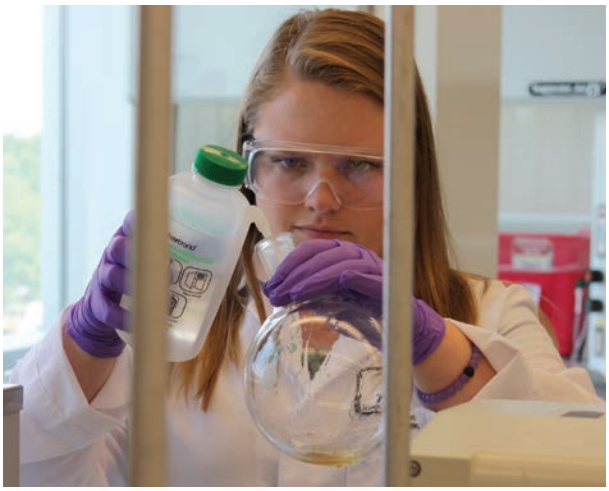
Abdurrahim Vardar
BIOLOGY, 2020

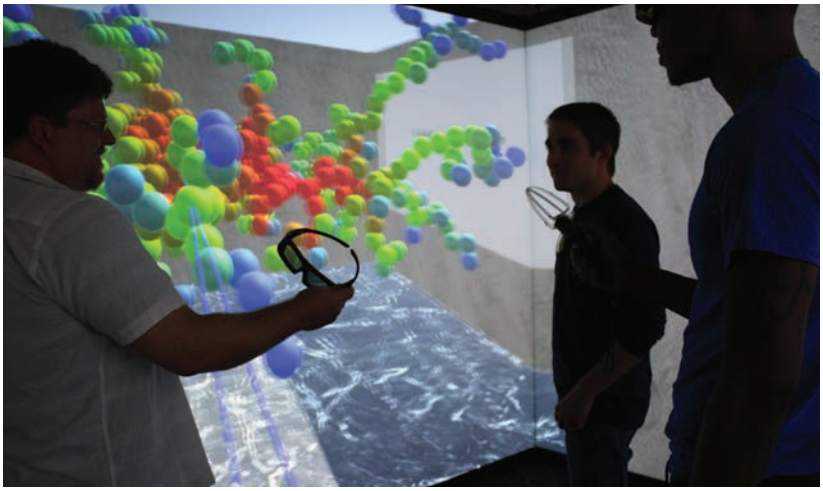
DNA-Barcoding as a method to identify Fungal species in environmental samples

Dead wood is a substantial component of forests which provides habitats for organisms and stores essential elements. Dead wood inhabiting fungi are cryptic species that decompose wood making it available for others to consume. Our project involves identification of such fungi in order to assess richness of their species in parks and reserves and produce a database of dead wood fungi for New Jersey. In order to do it, fungal DNA is extracted, ITS barcode amplified by PCR, sequenced and compared to NCBI database using BLAST. Identified species are deposited into Kean University collection and information is shared online at www.inaturalist.org.

Dr. Maria Shumskaya
RESEARCH FACULTY MENTOR

Ijeoma Bernadette Akpu
PEER ADVISOR





The goal of the Research Recruits Program (RRP) is to promote, develop, support and celebrate undergraduate student-faculty research with the overall aim of enhancing the undergraduate education experience and preparing students for careers in all areas.

RRP can help you make a difference in your Kean University experience.

1

We help develop partnerships between Kean faculty and students through the Research Recruits program.

2

We advise undergraduate students who are interested in pursuing national fellowships.

3

We celebrate student and university research Days every April.

"Research" is not limited to science. It includes writing, artistry, and design. Research is any inquiry or investigation that makes an original intellectual or creative contribution to the discipline.

KEAN

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Reenat Munshi, Assistant Director of ORSP

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