

Summary

- LaGuardia Community College (LAGCC) is a two year Hispanic-serving institution in Queens, NY and is the primary awardee. LAGCC is recognized by Excelencia for its leadership in serving Latinx and international students from 145 countries.
- Rutgers University is a 4-year, land grant, R1 institution and is the partner institution. Rutgers School of Environmental and Biological Sciences (SEBS) has a well-defined connection with USDA and its several agencies, such as APHIS, ARS, NRCS, CBP, and FSIS.

The ANSCId program was designed to create a structured pathway from NYC high schools (K-12) to LAGCC (2-year) and Rutgers University (4-year) for careers in Animal Science, with exposure to USDA professionals, careers and internships. This pipeline would help diversify the USDA workforce which is one of the key strategic goals of the USDA (Refer Fig. 1 to compare nation wide demographics to that of LAGCC)

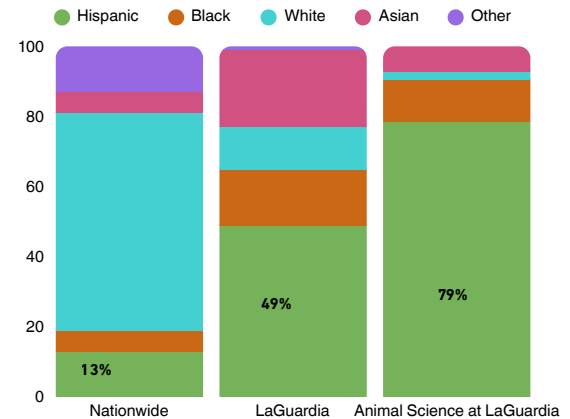


Fig. 1 - Comparison of demographics in student enrollment nation-wide (Source: FAES) within food and agriculture, compared to demographics within LAGCC and the Animal Science track within LAGCC.

Objectives

- Use the evidence-based **Guided Pathways model** to create articulation agreements with 4-year schools, Credit for Prior learning with high schools, high-impact first year seminars focused on animal science, high-tech media outreach, and USDA and Animal Science specific outreach events at LAGCC and Rutgers campuses.
- Create an immersive, Animal Science, **Summer Experiential Learning Program (SELP)** and Summer Undergraduate Research Experience (SURE) at Rutgers for LAGCC students. This would create an opportunity for students to experience a residential campus, in the form of an internship-based, credit-bearing residency.
- Establish a fully funded LAGCC-Rutgers Transfer **Scholarship** for students interested in pursuing a career in Animal Science with internships at USDA.
- Create a **peer mentorship program** at LAGCC and Rutgers campuses focused on social, emotional, academic and career readiness.



LAGCC Program Director at a College Now event in May 2024.



Project Coordinators, Omar Salas Lopez (left) and Terichi Bellinger (right)

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Impact

570
High school and A.S degree students attended 16 NEXTGEN events

53.48 %
increase in enrollment within the Animal Science program from 2023-24

7
4 tutors and 3 LAGCC ambassadors were hired for Fall 2023 and Spring 2024.

131
students were mentored over 366 tutoring hours

Year 1: Outcomes

- Created Career and Technical Education articulations and credit for prior learning with three Ag-focused high schools in NYC.
- Created a new LAGCC instagram account, with 204 followers, 291 following and 60 posts in the last 10 months.
- Enrollment in the Animal Science track from Fall I 2023 was 43 students, and in Spring I 2024 was 66 students; a 53.48% increase from '23 to '24.
- The 2-year retention rate for students is 50%
- 9 students attended the NEXTGEN student summit in May '24.
- Successfully employed 2 Program Coordinators, 4 academic tutors, 3 ambassadors, and 12 peer mentors.
- Students' learning experiences were supported by providing essential textbooks for the newly launched Animal Science curriculum. 26 students enrolled in the Animal Behavior and Integrative Physiology courses received their textbooks at no cost.



LAGCC Student Ambassadors at high school events promoting NextGen grants and 2+2 transfer scholarships.

Student Testimonials

"The summit reaffirmed the importance of networking and building relationships in public service. Interactions with leaders and peers have equipped me with a lot of knowledge as well as connections that will serve me well in my career progression.

My interests in fungal research, forest conservation, wild firefighting, and community outreach, have been deepened and I am excited to delve into them more deeply." Pawel Zyzanski, LAGCC Student

"Embarking at the NYS Ag Society conference felt like stepping into an agricultural adventure, where each twist and turn unveiled the multifaceted landscape of farming in New York State. The conference provided me with a multifaceted view of the challenges and opportunities within the agricultural sector. I learned about Ag-policy, Agrivoltaics, USDA grants, GIS implementation, and regenerative practices. The conference provided a pivotal academic experience in offering interaction with industry professionals in regenerative agriculture and renewable energy practices, which is my career focus as I pursue a B.S + M.S in Geospatial Information Systems and hope to work with Agrivoltaics in the future".

Shawn Blackman, LAGCC Student

"After attending the USDA NextGen conference, it opened my eyes to all the opportunities the government has to offer as an aspiring veterinarian and has solidified my interests to conduct research in the field."

Gilana Rincon, Rutgers Student & Peer Mentor



LAGCC Program director and USDA facilitators in USDA Panel event for LAGCC STEM Majors students. April 2024.

Summer Program Accomplishments

Summer Experiential Learning Program (SELP)

- 11 faculty and staff at Rutgers developed 30 experiential learning modules. The team worked to provide lessons that would encompass USDA mission-critical areas - Animal and Human Health, Food and Agriculture, Biomedical Research, and USDA Workforce Development. The modules are set to take place on the farm and in lab spaces.
- 43 applications were received: 34% were from Animal Science and 28% from STEM majors, representing a diverse group of applicants. Of the 48% acceptance rate, 15 will participate in SELP, gaining hands-on experience in fields like animal science, veterinary science, and environmental science, fostering a diverse pipeline of future professionals.

Summer Undergraduate Research Experience (SURE)

- A list of 12 PI's and grad students willing to take on SURE interns and their research was compiled in February 2024. We've narrowed down to 4 grad students who will mentor 6 LAGCC students in Microbiology, Plant Science, and Behavior and Endocrinology labs over the summer.

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LAGCC (left) and Rutgers (right) students attended the NEXTGEN Student Summit 2024, Washington D.C.

Survey Results from Events

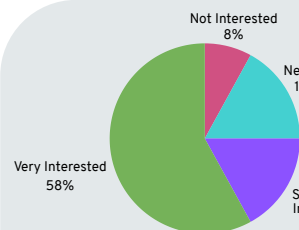


Fig. 2 - Student interest in transferring to Rutgers Career and Transfer Day events, for B.S

Our survey data at these events indicates 35 students in the Animal Science program at LAGCC had previously considered transferring to a four-year institution, but were unsure about financial possibilities. During the

they learned about the 2+2 Transfer Scholarship to Rutgers and how it could help them pursue a bachelor's degree in animal science. Of these, 23 students engaged in discussions with peers and faculty at the events helping them recognize the importance of continuing their education. Armed with this new knowledge, 15 of these students (42% of respondents) now see Rutgers as the ideal next step in their academic career, with the NEXTGEN grant financial support to make it a reality. They are now excited and motivated to apply for the scholarship and pursue their dream of a career in animal science.

Rutgers Peer Mentors



Peer Mentors & Program Coordinator Terichi Bellinger with Kendyl Barney & Carlos Ortiz (USDA) in Washington, D.C.

- Ten students were chosen to take the Leadership in Animal Science class in Spring 2024 as a prerequisite to serving as Peer Mentors for the Summer Residential Programs.
- Class topics included defining leadership, program planning, active listening, time management, and team building. They also completed a module about the Animal Science Curriculum, DEI, and Residential Life on campus.



LAGCC Students doing Soil Sciences and Animal Behavior demonstrations at a High School Event on Dec 6, 2023.