

Kimberly Palaguachi-Lopez

kp2809@cumc.columbia.edu | 347-893-5295 | [LinkedIn Profile](#)

EDUCATION

Columbia University, New York, NY

May 2026

Master of Science in Biostatistics, Health Data Science

Lehigh University – Bethlehem, PA

May 2024

Bachelor of Science in Population Health

- GPA: 3.72
- Relevant Undergraduate Coursework: Methods in Epidemiology, Population Health Data Science & Algorithms Labs, Spatial Epidemiology, Environmental Epidemiology, Outbreak Science & Disease Forecasting, Calculus 1 & 2, Survey of Linear Algebra

RESEARCH EXPERIENCE

Breakthrough T1D Research Foundation – New York, NY

June 2024 – August 2024

Improving Lives Research Intern

- Conducted comprehensive landscape analysis of drug research in cardiovascular disease and type 1 diabetes, identifying key biological pathways for future Breakthrough T1D funded drug targets in clinical trials.
- Investigated FDA-recognized biomarkers for cardiovascular endpoints, aiding clinical regulatory pathway development.
- Researched biomarker development for cardiovascular disease and heart failure, focusing on diabetes and type 1 diabetes to leverage clinical trial projects in early detection of cardiovascular complication in young T1D patients.
- Analyzed impact of biomarkers on clinical outcomes, enhancing understanding of disease mechanisms and treatment efficacy.

College of Health at Lehigh University – Bethlehem, PA

January 2024 – May 2024

Undergraduate Researcher

- Provided 5-10 hours per week of statistical and analytic support contributing to ongoing research projects pertaining to greenspace and health.
- Applied expertise in diverse statistical methods, encompassing univariate, bivariate, and multivariate analysis, as well as longitudinal analysis, ensuring robust data interpretation.
- Executed thorough data cleaning procedures, ensuring data quality and integrity, thereby enhancing the reliability of research outcomes.

STEM – Summer Institute at Lehigh University – Bethlehem, PA

June 2023 – August 2023

Undergraduate Researcher

- Trained a Susceptible, Exposed, Infectious, and Recovered (SEIR) model on historical influenza data, obtained from the CDC, to estimate parameter values used in the Agent Based Model (ABM) simulated on Net logo programming.
- Managed Mortality Morbidity Weekly Report Influenza for all counties in Pennsylvania from 2010 to 2023.
- Evaluated the effectiveness of the ABM for influenza disease forecasting and assisted in writing an academic paper.

College of Health at Lehigh University – Bethlehem, PA

September 2022 – December 2022

Co-Research Author

- Conducted extensive literature review research on the relationship between asthma and cold temperatures, analyzing a wide range of scientific literature to gather relevant information and data.
- Wrote the introduction section of an academic research paper focused on nasal malondialdehyde mediating the effects of cold air exposure on pediatric asthma symptoms.

Institute of Critical Race & Ethnic Studies at Lehigh University – Bethlehem, PA

February 2021 – May 2021

Undergraduate Data Analyst Assistant

- Attended weekly 3 hours of meetings with colleagues to review agendas and planning new projects.
- Gather 5,000+ participant's personal experiences into Google Sheets during the COVID-19 pandemic via social media, used to determine how the pandemic is affecting race and gender in data analysis.

WORK EXPERIENCE

Shift Hybrid Advising Co-op, Bill & Melinda Gates Foundation – Remote

November 2022 – December 2023

KIPP NYC Representative

- Engaged in strategic meetings with partner organizations to offer expert consultation on testing procedures, while also delivering valuable feedback to enhance their testing initiatives and improve high school student alumni support through college transition.
- Facilitated effective communication and collaboration between students, caregivers, and the KIPP NYC community, fostering a cohesive partnership within the hybrid advising co-op network.
- Actively participated in monthly advisory council meetings and co-op webinar calls to assess the outcomes of chatbot testing, ensuring that data-driven insights were leveraged for continuous improvement.

Village Care Max – Manhattan, NY

June 2023 – August 2023

Data Entry Intern

- Retrieved vaccination data from the Citywide Immunization Registry for Village Care patients across the broader New York City area.
- Systematically processed and incorporated new data into database systems, cross-referenced and validated against Village Care records.
- Proficiently managed, organized, and securely stored over 3,000 data entries within spreadsheets, consistently upholding strict HIPAA compliance standards.

Pathways To Trust – Remote

July 2022 – August 2022

Strategic Partnership Donor Development Intern

- Conducted comprehensive research to identify prospective donors and sponsors for Pathways To Trust, facilitating the organization's patient advocacy programs
- Collaborated with PTT partners to actively seek out suitable candidates for disease clinical trials, contributing to the expansion of the organization's participant network.
- Orchestrated effective communication and teamwork with a group of interns to proactively explore grant opportunities for PPT to ensure eligibility for future funding.

PUBLICATIONS

Nasal Malondialdehyde Mediating the Effects of Colder Air Exposure on Pediatric Asthma Symptoms

Submitted to American Chemical Society Publications

September 2023

23 Pages, Co- writers: He, Linchen; Norris, Christina ; Barkjohn, Karoline; Li, Zhen; Li, Feng; Zheng, Yinping; Black, Marilyn; Bergin, Michael; Zhang, Junfeng (Jim)

LEADERSHIP ACTIVITIES

The Braven Accelerator – Remote

August 2023 – December 2023

Fellow

- Developed workforce skills such as leadership, operating and managing, communicating & networking, working in teams, and problem solving by completing a 15-week leadership and professional development course.
- Designed a career plan by outlining 7 specific, short-term goals using the SMART goals method and identifying possible obstacles, strengths and support systems to help achieve each goal.
- Facilitated data collection as lead researcher in the capstone group project where we aim to increase United flight travel for non-frequent air traveler college students.

Southeast Asia at Lehigh (SEAL) – Bethlehem, PA

August 2022 – May 2024

Vice President

- Promoted from club secretary to club vice president based on a demonstrated commitment to the organization and my leadership contributions during a critical period of need.
- Facilitated and planned many Southeast Asian cultural events while creating an inclusive environment for students.
- Provided dynamic leadership and strategic vision for the SEAL club executive board and sub-committee by improving event logistics for maximum event efficiency contributing to being awarded Student Organization of 2023-2024.

HONORS & AWARDS

Dean's List– Lehigh University*Spring 2021- Spring 2024*

Recognized outstanding academic achievement who have earned a scholastic average of 3.6, or greater; and carry at least 12 hours of regularly graded courses.

Hispanic Scholarship Fund Scholar*June 2024*

Selected as one of 10,000 scholars from a competitive pool of over 100,000 applicants. The distinction recognizes academic excellence, hard work, and dedication.

Tri Alpha Honor Society Member– Lehigh University*March 2024*

The Alpha Alpha Alpha (Tri-Alpha) Epsilon Chapter at Lehigh recognizes the academic achievements of first-generation college students who have achieved an overall undergraduate GPA of at least 3.5 on a 4.0 scale.

TECHNICAL SKILLS

Programming Languages: Python (Numpy, Pandas, Matplotlib.pyplot, Math.pi, Spicy.stats), R (Pearson test, Hypothesis Testing (T-test), Linear Regression modeling, ANOVA)

Operating Systems: Windows, MacOS

Software: GitHub, Overleaf, Excel, ArcGIS Pro, Google Suite, Policy Mapping, Anaconda, Jupyter Lab, Microsoft suite

Technical skills: Data Manipulation and Analysis, Data Visualization, Correlation Data Analysis, Research