

Lehman Research and Scholarship Highlights



Principal Investigator: Herminio Martinez

Sponsor: U.S. Department of Education

Amount awarded: \$1,811,315

Award period: 7/01/2016 – 6/30/2021

Title: Title III - National Professional Development Program

Abstract: This award prepares 30 content area teachers each year for certification in ESL /ENL or an advanced certificate: bilingual extension. At the end of the 5 year grant cycle, 150 teachers will assist English Learners (ELs) with strategies to keep in school; gain academic content and literacy skills; and graduate high school and enter college. Goal 1 — Enhance Lehman’s capacity to train teachers to serve ELs; Goal 2 — Increase teacher effectiveness using evidence-based practices for ELs and in engaging parents of ELs ; and Goal 3—Improve academic outcomes of ELs.



Principal Investigator: Alison Behrman

Sponsor: American Speech-Language-Hearing Association

Amount awarded: \$50,000

Award period: 12/01/2016 – 11/30/2017

Title: The Clear Speech Benefit in Spanish-Accented Speakers of American English

Abstract: This award aims to examine the relationships among intelligibility, accentedness, ease of understanding, and acoustic metrics, in phrases produced in conversational and clear speech by adult Spanish-accented speakers of American English and native English speakers and to obtain preliminary data on the effect of clear speech in Spanish-accented speakers with Parkinson disease.



Principal Investigator: Prabodhika Mallikaratchy

Sponsor: Lauri Strauss Leukemia Foundation

Amount awarded: \$25,000

Award period: 3/1/2017 – 9/15/2017

Title: Design & Development of DNA Aptamer Based Immunotherapeutic

Abstract: This research program is aimed at generating new aptamers against biologically important cellular targets, and molecular engineering of multifunctional aptamer structures suitable for drug delivery in Cancer patients.



Principal Investigator: Brenda Williams-Gray and Carl Mazza

Sponsor: New York Community Trust

Amount awarded: \$52,000

Award period: 6/07/2016 – 12/31/2017

Title: Journal of Social Work in Urban Environments

Abstract: This award supports the development of the first Journal of Social Work in the Urban Environment (JSWUE) designed to reach educators, practitioners and policy makers who advocate for people in urban environments. Schools of social work and universities are poised to contribute to knowledge development to support urban communities framed from a culturally-informed perspective. In collaboration with Taylor & Francis Publishers, the premier academic journal publication house, Lehman College/CUNY & Morgan State University will initially publish two issues of the JSWUE annually. The Journal seeks scholarly works which aim to establish a forum for dialogue, debate, critical analysis and identification of cutting edge solutions for today's urban communities, responding to challenges and highlighting strengths.



Doctor Eleanore Wurtzel was recognized for her outstanding research contribution to the Journal of Science.

Dr. Eleanore T. Wurtzel of Lehman College's [Biological Sciences Department](#) and a member of the doctoral faculty at the [Graduate Center](#), CUNY is one of those scientists whose research is at the forefront of plant science. She, along with Dr. Toni M. Kutchan of the Donald Danforth Center in St. Louis, MO, was invited to contribute a paper for this issue, titled "Plant metabolism, the diverse chemistry set of the future." It is one of a collection of four articles highlighting a vision for plant biology and the potential impact on society. The paper presents recent examples of selected technologies that are transforming how we study plant metabolism and how we implement these discoveries to develop the plants and microbes of tomorrow. By decoding the plant genome, scientists are laying out the chemical pathway necessary to design novel chemicals, innovative disease-fighting drugs, new sources of energy, or create plants that can better manage their ecological environments.



Nursing Professor, Dr. Karen Roush, awarded Book of the Year Award - [A Nurse's Step-By-Step Guide to Writing Your Dissertation or Capstone](#)

Packed with practical steps and tools, this book helps students plan, document, organize, and write their dissertation or capstone, *A Nurse's Step-By-Step Guide to Writing Your Dissertation or Capstone*, is intentionally concise to allow readers to focus on finishing this often daunting task. Dr. Roush has published numerous articles in peer-reviewed journals, as well as books, essays, and poetry. She advocates against gender-based violence, writing and speaking on the topic. Her research interests include gender-based violence, global human resources for health, social justice, and global women's health. She has traveled to Rwanda, Uganda, and India as a nursing volunteer and taught nursing in Ghana. In 2009, she was a visiting scholar in the Department of Human Resources for Health at the World Health Organization in Geneva, Switzerland.



Principal Investigator: Reine Sarmiento

Sponsor: United States Department of Education (HSI-STEM)

Amount awarded: \$5,785,981

Award period: 10/01/2016 – 9/30/2021

Title: Pathways to STEM Success: Using High Impact Practices to Improve STEM Enrolment, Retention, Transfer and Graduation

Abstract: Lehman College was awarded a 5-year, \$5 Million dollar U.S. Department of Education Hispanic-Serving Institution STEM grant for our “Pathways to STEM Success” project. The project is a coherent and collaborative program that will engage senior and community college students in activities designed to build their cultural capital through: intensive advisement; mastery of academic content and skills; and participation in STEM activities that are central to STEM interest, efficacy, and success. PTS3 will also address administrative barriers that plague transfer students through joint planning and collaborative implementation. The goals being to increase the number of Hispanic (and Low-Income) students who graduate with STEM degrees; develop and enhance articulation between 2 and 4 year institutions; and support student-centered program services and activities that lead to improved student outcomes in STEM.



Principal Investigator: Justine McGovern & Mohan Vinjamuri

Sponsor: Robert Wood Johnson Foundation

Amount awarded: \$181,463

Award period: 7/1/2017 – 6/14/2018

Title: Reducing Health and Social Disparities by Strengthening Ties across LGBTQ Community

Abstract: This research project uses an intergenerational practice model developed by the International Longevity Centre in the United Kingdom to raise awareness about health and social disparities experienced by LGBTQ persons across generations and develop a curriculum and toolkit for organizations serving this population.



Principal Investigator: Esther Wilder

Sponsor: National Science Foundation

Amount awarded: \$196,978

Award period: 9/1/2016 – 8/31/2018

Title: Numeracy Infusion for College Educators (NICE)

Abstract: This project provides training to faculty from across the disciplines in best practices for quantitative reasoning instruction at the City University of New York’s three Hispanic-Serving Institutions in the Bronx.



Principal Investigator: Susan Markens

Sponsor: National Science Foundation

Amount Awarded: \$271,808

Award Period: 9/1/2016 – 8/31/2019

Title: Translating Genomic Science and Doing Ethics: Genetic Counselors as Expert/Users

Abstract: Utilizing a rich multi-sited qualitative approach, this project harnesses theories and methods from the field of science studies to explore the ways in which the genetic counseling profession frames its translational role as an "expert/user" of genetic knowledge, including the profession's stand on issues concerning advances in genetic science, from bioethical debates to health policy. Genetic counselors provide an important and unique analytic lens for the public uptake of genetic science and genetic decision-making as they traverse between the formal knowledge arena and the situational practice arena, bridging the world of science (bench scientists) and the world of the clinic (patients, as well as physicians). By asking what genetic counselors themselves consider the nuances and goals of their professional responsibilities to be, this study interrogates the tensions these specific genetic professionals encounter in their work and whether and how they attempt to "do ethics" as a pivotal player in the translation of genetic science. In so doing this project will contribute to our understanding of how social actors, social factors, and social norms interact to produce and influence public understandings of science and the practices and consequences of the ethics of genetic knowledge and decision-making in the clinical arena.



Principal Investigator: Cecelia Cutler

Sponsor: National Science Foundation

Amount Awarded: \$180,533

Award Period: 8/01/2016 – 1/31/2020

Title: Collaborative Research: A Corpus of New York City English: Audio-Aligned and Parsed

Abstract: This project aims to further the study of New York City English (NYCE) - the varieties of English particular to New York City and the surrounding region - through the development and use of an innovative audio-aligned and parsed corpus of New Yorkers' speech. The project will combine recent advances in speech corpus development tools with the special talents and backgrounds of undergraduates at the City University of New York (CUNY), to create a database that will be unprecedented in nature and scope. This project, which would create the first such corpus of New York City English, will be based on interviews with New Yorkers across the five boroughs and Long Island, conducted by CUNY undergraduates from Queens College, Lehman College (The Bronx), and the College of Staten Island.



Principal Investigator: Heather Sloan

Sponsor: National Science Foundation

Amount Awarded: \$136,072

Award Period: 11/01/2016 – 10/31/2019

Title: Collaborative Research: Interaction of Transpressional Structures at the N. American-Caribbean Plate Boundary: Geophysical Imaging Beneath Lake Azuie, Haiti

Abstract: This project proposes to image the transpressive structures as they extend beneath that shallow (< 35 m) lake, characterize their field relations, resolve the Holocene stratigraphy, and thus unravel the recent tectonic history. To that effect, the high -resolution geophysical equipment from URI will be deployed using a small boat provided by the State University of Haiti (UEH). A two -week survey will provide a dense grid of seismic profiles with an expected penetration of a few hundred meters.



Principal Investigator: Christina Sormani

Sponsor: National Science Foundation

Amount Awarded: \$167,998

Award Period: 9/1/2016-8/31/19

Title: Geometric Compactness Theorems with Applications to General Relativity

Abstract: The PI will develop and apply a variety of compactness theorems for sequences of spaces under a variety of geometric conditions. The goal of such compactness theorems is to guarantee that a subsequence of the given sequence of spaces converges in some sense to a limit space which also satisfies the same geometric conditions in some generalized way. Theorems of this sort have been applied in Federer-Fleming's solution to Plateau's Problem and in Perelman's solution of the Poincare Conjecture. New compactness theorems with new notions of convergence are needed to address problems arising in General Relativity.

Principal Investigator: Mia Budescu & Anna Luerssen

Sponsor: American Psychological Foundation / Bruce and Jane Walsh Grant

Amount Awarded: \$12,850

Award Period: 9/01/2017-10/01/2018

Title: Message in a bottle: Socialization patterns and adolescents' goal pursuit during the transition out of high school

Abstract: The primary purpose of the proposed study is to evaluate whether and how adolescent - caregiver socialization (i.e., communication) contributes to the development of psychological health (including a positive identity and healthy relationships) and educational and vocational success during the transition to emerging adulthood.

CUNY Research in the Classroom Awardees (RIC)



Principal Investigator: Olivia Moy

Sponsor: CUNY Research in the Classroom

Amount awarded: \$7,500

Award period: 1/1/2017 – 6/30/2017

Title: Encounters with the Archives: Undergraduate Research in Rare Books & Special Collections

Abstract: Access to manuscripts and special collections is generally reserved for graduate students and faculty, while undergraduates are traditionally limited to working with literary texts through paperback prints or anthologies. I propose developing a course that exposes undergraduate students to archival research first-hand, incorporating manuscript research into the 300-level English curriculum and training students to engage directly with rare books. Not only is it exhilarating to handle the manuscripts of great canonical figures, but encounters with the material text bring authors and their writings to life, confronting students with questions of historical context, print culture, and publication history.



Principal Investigator: Naphtali O'Connor

Sponsor: CUNY Research in the Classroom

Amount awarded: \$7,500

Award period: 1/1/2017 – 6/30/2017

Title: Role-Playing to Replace the Traditional Laboratory Experiment

Abstract: The majority view is that the laboratory course exists to re-inforce lecture. While the utility of lab courses at achieving this goal is hotly debated there is little disagreement that traditional lab courses have become formulaic and do a poor job of inspiring enthusiasm for science. Most labs are designed with a hypothesis or question and a known answer. It is the job of the student to achieve this answer. Science requires creativity but this is not evident from our lab courses. In an effort to simplify grading, mass produce and standardize courses we have driven creativity from the classroom. Herein is proposed an investigative model for laboratory design where students 'role-play' as research chemists. With this approach we propose to introduce creativity into the classroom and target learning processes difficultly achieved with a lecture by placing students within 'Scenarios'. Within a scenario students are given a task similar to that of a researcher or an industrial chemist. For example, the development or improvement of a product. We propose to develop an initial demonstration of this lab strategy where using a scenario experiment where students utilize latexes to develop a water-based nail polish product in a similar setting to that of an industry research scientist.



Principal Investigator: Justine McGovern

Sponsor: CUNY Research in the Classroom

Amount awarded: \$1,000

Award period: 7/1/2017 – 6/14/2018

Title: Perceptions about Aging: Student Research in Gerontology

Abstract: This project aims to restructure the syllabus for the Social Work Practice with Older Adults by incorporating an authentic research experiences for undergraduates who, through a qualitative research project, will explore how adults over 65 would like perceptions to be different.

CUNY Diversity Projects Development Fund Awardees (DPDF)



Principal Investigator: Teresita Levy & Lynne Van Voorhies

Sponsor: CUNY Diversity Projects Development Fund

Amount awarded: \$4,000

Award period: 7/1/2017 – 6/14/2018

Title: International Programs & Global Partnerships: Global Lehman Seminar



Principal Investigator: Olivia Moy

Sponsor: CUNY Diversity Projects Development Fund

Amount awarded: \$4,000

Award period: 1/1/2017 – 6/30/2017

Title: Activism in Academia

Abstract: This award proposes to initiate a larger conversation between CUNY and non-CUNY faculty and students about the value of apolitical and political work in the classroom as it relates to activism within underrepresented communities.

CUNY Faculty Fellowship Publication Program Awardees (FFPP)



Principal Investigator: Elia Machado

Sponsor: CUNY Faculty Fellowship Publication Program

Amount awarded: \$3,654

Award period: 1/1/2017 – 6/30/2017



Principal Investigator: Olivia Moy

Sponsor: CUNY Faculty Fellowship Publication Program

Amount awarded: \$3,654

Award period: 1/1/2017 – 6/30/2017



Principal Investigator: Sarah Ohmer

Sponsor: CUNY Faculty Fellowship Publication Program

Amount awarded: \$3,654

Award period: 1/1/2017 – 6/30/2017

CUNY Interdisciplinary Research Grant Awardees (IRG)



Principal Investigator: Thomas Kurtzman

Sponsor: CUNY Interdisciplinary Research Grant

Amount awarded: \$39,509

Award period: 9/1/2016 – 6/30/2017



Principal Investigator: Justine McGovern & David Schwittek

Sponsor: CUNY Interdisciplinary Research Grant

Amount awarded: \$21,929

Award period: 9/1/2016 – 6/30/2017