KRISTEN VICTORIA NAPOLITANO, ED.D. Lecturer, Institute for STEM Education 092 Life Sciences, Stony Brook University, NY 11794 <u>kristen.napolitano@stonybrook.edu</u> ORCID: https://orcid.org/0000-0002-0248-8711

RESEARCH INTERESTS

- K-12 STEM teacher leadership, professional development
- Accountability and teacher certification
- Social justice, positional and discursive identity

EDUCATION

Teachers College, Columbia University, New York, NY

May 2020

Doctor of Education (Ed.D.), Science Education Specialization in Teacher Education, Curriculum and Teaching

Dissertation: Forming Science Teacher Identity: The Role That Identity Plays in Designing Learning Goals and Classroom-Based Formative Assessments ProQuest Dissertations & Theses Global (Publication No. 27996767)

Sponsor: Felicia Moore Mensah, Ph.D.

Montclair State University, Montclair, NJ

May 2014 Master of Art in Teaching, Biology

May 2012 Bachelor of Science, Biology

FACULTY EXPERIENCE

Stony Brook University, Stony Brook, NY

Institute for STEM Education (I-STEM)September 2024 -PresentLecturer, History and Philosophy of STEM Education (CSM 600), STEM TeacherEducation (CSM 620)

Mercy University, Dobbs Ferry, NY

Department of Secondary Education

September 2022 - Present	Senior Researcher, Center for STEM Education
	Adjunct Faculty, Introduction to Science Teaching (BIOL 223), Forensic Science (SCIE 555), Engineering in the Classroom (SCIE 553), Methods and Material in Middle Childhood Education (EDUC 518)
September 2020- June 30, 2022	Postdoctoral Researcher, Center for STEM Education

Teachers College, Columbia University, New York, NY Department of Mathematics Science and Technology

Department of Ma	amematics, science, and recimology
September 2020- June 2021	Postdoctoral Fellow
	Adjunct Assistant Professor, Introduction to Science Education Practice (MSTC 4363), Physical Science Curriculum/Methods Lab (MSTC 4047)
	Research Team Mentor, Science Education Ed.M. Program
September 2019- June 2021	Research Assistant of Student Teaching in Science (MSTC 4762), Instructor of Physical Science Curriculum/Methods Lab (MSTC 4047)

Wood-Ridge Public Schools, Wood-Ridge, NJ Science Department

Science Department		
September 2014-	Teacher of Biological Sciences, Grades 7-12, Biology, Genetics, Biotechnology,	
June 2020	and Forensics	

Gifted and Talented Academy, Montclair State University, NJ General Education

June 2011- August Instructor of Sciences, Grades 1-12 2017

LEADERSHIP & PROFESSIONAL DEVELOPMENT EXPERIENCE

Mercy University, Dobbs Ferry, NY Center for STEM Education

September 2020-
PresentDirector of Wipro Reimagined, Greater New York Region (White Plains,
Tarrytown, East Ramapo, New Rochelle, and Port Chester)

Senior Team Member

 Wipro Science Education Fellowship, Greater New York Region, Saturday STEM Academy, Mercy University STEM Master Teacher Fellowship (MTF), Mercy University Intensive STEM Teacher Initiative (MISTI & MISTI II), Family Learning and Outreach for Research and Education in STEM (FLORES)

Professional Development Leader

New Rochelle City School District, NY, General Education Grades 4-5;
Clarkstown, NY, General Education Grade K-8; Westchester County, NY (Ossining, Tarrytown, New Rochelle, Elmsford, Port Chester, White Plains), General Education Grades K-8; Nanuet, NY, Science, High School; Bayonne, NY, Science, Grades 3 and 5

Evaluator

 Pan-African Higher Education Initiative (PaHEi), Mercy University; Quantum Education for Students and Teachers (Quest), NSF #2148467, Stony Brook University

Teachers College, Columbia University, New York, NY

Department of Mathematics, Science, and Technology, Science Education Program September 2020- Student Teaching Coordinator of Secondary Science Preservice Teachers May 2021

January 2017- May	University Supervisor of Secondary Science Preservice Teachers and
2021	Dual Certification Special Education/Science Education Residents

Wood-Ridge Public Schools, Wood-Ridge, NJ

September 2015- Environmental Club Advisor and Community Environmental Team Liaison June 2020

Montclair State University, Montclair, NJ

ADP Center for Teacher Preparation and Learning Technologies

September 2012-
June 2014Graduate Assistant
-
STEM Coordinator, "100kin10" Coordinator

Professional Development Leader

- Paterson Public School District, New Jersey Education Computing Cooperative (NJECC)

Gifted and Talented Academy

June 2011 - June Subject Matter Expert, Grades K-8, Biological and Earth Sciences 2017

FUNDED GRANTS AS RESEARCHER, AND COLLABORATIVE TEAM PROJECTS

- 1. Faculty Development Grant. Mercy University. An Ambassadorship for Inclusive Computer Science and Engineering and School Change. Spring 2024. \$1,500.
- 2. Wipro Grant. India, in partnership with UMass Boston. Wipro Reimagined. Fall 2022-2026. Director. \$400,000.
- National Science Foundation. Robert Noyce Teacher Scholarship (#205064). Preparation for Persistence: Exploring the Longevity of Noyce Scholar Alumni in High Needs Schools. MCSE Senior Researcher. Fall 2022 – Spring 2024. \$1.6 million.
- 4. Faculty Development Grant. Mercy University. FLORES: Family Learning and Outreach for Research and Education in STEM. Spring 2022. \$1,500.
- 5. National Science Foundation. Robert Noyce Teacher Scholarship (#2050406). Preparing Highly Qualified, Diverse Secondary STEM Teachers for High-Need New York Schools. Researcher. Fall 2021- Present. \$1.2 million.
- 6. Faculty Development Grant. Mercy University. FLORES: Family Learning and Outreach for Research and Education in STEM. Spring 2021-Fall 2021. \$3,000.
- National Science Foundation. Robert Noyce Teacher Scholarship (#1758317). Preparing STEM Master Teacher Fellows in the Greater New York City Area. Researcher. Fall 2020- Present; \$1.46 million.
- 8. National Science Foundation. Robert Noyce Teacher Scholarship (#1339951). Mercy University Intensive STEM Teacher Initiative. Researcher. Fall 2020; \$1.45 million.
- 9. New Teacher Fellowship Project. Teachers College, Columbia University, Teacher Education Policy Committee. Researcher/Doctoral Fellow. Fall 2018- Spring 2019; \$20,000.

 Provost Investment Fund Grant. Teachers College, Columbia University. Initiating a Program of Research into the Education of Teacher Educators: Part 2: Content-Specific Knowledge and Practices. Fall 2017- Summer 2018; Researcher. \$20,000.

HONORS AND AWARDS

2018	Teachers College, Columbia University New Teacher Fellowship Doctoral
	Fellowship
2017	Teachers College, Columbia University General Scholarship
2012	Graduate Assistantship awarded by ADP Center for Teacher Preparation and
	Learning Technologies, Montclair State University, Montclair, NJ.

CENTER AFFLIATIONS

September 2020-	Center for STEM Education (CSE), Mercy University, Postdoctoral Researcher
present	

September 2008-
June 2014ADP Center for Teacher Preparation and Learning Technologies, Montclair
State University, Graduate Assistant

SCHOLARSHIP

**publications and presentations completed before 2021 credit née Larson

Peer-Reviewed Papers

- 1. Napolitano, K. V., Marrero, M. E., & Gunning, A. M. (in press). Effective practices for STEM teacher persistence through community-building [blog post]. *Advancing Research & Innovation in STEM Education of Preservice Teachers in High-Need School Districts (ARISE).*
- 2. Napolitano, K. V., Gunning, A. M., Marrero, M. E., & Nitecki, E. (2023). Developing and sustaining elementary STEM teacher leadership identities. *Global Education Review*, *10*(4).
- Napolitano, K. V., Marrero, M. E., Gunning, A. M., Brandon, L. T., & Riccio, J. F. (2022). What happens after edTPA? *Education Policy Analysis Archives*, 30(80). <u>https://doi.org/10.14507/epaa.30.6988</u>
- Gunning, A. M., Marrero, M. E., & Larson, K. (2021). Studying In-service Teacher Professional Development on Purposeful Integration of Engineering into K-12 STEM Teaching. Conference Proceedings. *American Society for Engineering Education*. <u>https://peer.asee.org/37778</u>
- Mensah, F. M., & Larson, K. V. (2018). A Summary of Inclusive Pedagogies for Science Education. National Academies Press: Washington, DC. [Commissioned paper] <u>https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_189501</u> <u>.pdf</u>

Peer-Reviewed Conference Presentations & Proceedings

(*Former/Present Student Collaborator)

- 2024
 - Gunning, A. M., Piccirella, A., Napolitano, K. V., & Marrero, M. E., (2024, July). A Tale of Two Environments: Exploring Contexts that Support STEM Teacher Leadership. Poster presented at 2024 Annual Noyce Summit, Washington, DC.

2. Gunning, A. M., Napolitano, K. V., & Marrero, M. E. (2024, January). Teacher Leadership for School Change through K-8 STEM Professional Development. Poster presented at 2024 ASTE Annual International Conference, New Orleans, LA.

2023

- 1. Gunning, A. M., Napolitano, K. V., & Marrero, M. E. (2023, April). Developing elementary STEM teacher leaders [related paper set]. National Association for Research in Science Teaching (NARST) Annual International Conference, Chicago, IL.
- Marrero, M. E., Napolitano, K. V., & Gunning, A. M. (2023, April). Parents as STEM facilitators: Perspectives following a parent/child workshop series [related paper set]. National Association for Research in Science Teaching (NARST) Annual International Conference, Chicago, IL.

2022

- Marrero, M. E., Napolitano, K. V., & Gunning, A. M. (2022, April). Increasing Access to STEM Learning by Building Caregivers' Self-Efficacy. AERA Annual Meeting, San Diego, CA.
- 2. Gunning, A. M., Napolitano, K. V., & Marrero, M. E. (2022, March). Exploring How Engineering Instruction Supports Culturally Relevant Teaching Practices. NARST Annual International Conference, Vancouver, BC, CA.
- 3. Otero, L.V*, Dincer, I. D.*, Pelliccio, E. J., Riccio, J. F., & Napolitano, K. V. (2022, January). Teacher Educator Preparation: Experiences in a Multi-Tiered Mentoring Program in Science Teacher Education. ASTE Annual International Conference, Greenville, SC.

2020-2021

- 1. Gunning, A. M., Napolitano, K. V., Marrero, M. E. (2021, October). Examining the Integration of Robotics in STEM Teacher Education. Northeast Region ASTE Annual Conference, virtual.
- Gunning, A. M., Marrero, M., & Larson, K. V. (2021, July) Studying In-service Teacher Professional Development on Purposeful Integration of Engineering into K-12 STEM Teaching. ASEE Annual Conference & Exposition, Long Beach, CA.
- Larson, K. V, Mensah, F. M., & Riccio, J. F. (2021, April, accepted). Challenges in Representing Science Teacher Identity in Classroom-Based Formative Assessments. NARST Annual International Conference, virtual.
- 4. Gunning, A., Marrero, M., Nitecki, E., Brandon, L., Larson, K., & Baldwin, B. (2021, April, accepted). Supporting Elementary Teachers in High-need Schools to Teach STEM. NARST Annual International Conference, virtual.
- 5. Larson, K. V. (2021, April, accepted). Examining Accountability as a Factor in Science Teacher Identity and Hurdles for Teacher Education. AERA Annual Meeting, virtual.
- 6. Marrero, M., Brandon, L., Gunning, A. M., Larson, K. V., & Riccio, J. F. (2021, April, accepted). What Happens After edTPA? AERA Annual Meeting, virtual.
- Gunning, A., Marrero, M., & Larson, K. V. (2021, February, accepted). Examining the Integration of Robotics in a STEM Teacher Certificate Program. Poster presentation. IOSTE Symposium, virtual.
- Larson, K. V., Mensah, F. M., & Riccio, J. F. (2021, January). Designing Formative Assessments That Align with Science Teacher Identity: Challenges and Successes in Preservice and Induction. ASTE International Conference, virtual, <u>https://padlet.com/kec2214/z1yx6z6hy0sa86h0</u>
- Gunning, A. M., Marrero, M. E., Brandon, L. T., & Larson, K. V. (2021, January). Supporting Elementary Teachers' Growth as Teachers of STEM. ASTE International Conference, virtual.

- Dincer, I. D.*, Riccio, J., Mazin, A., & Larson, K. (2021, January). One Preservice Teacher's Reflection on Collaborative Co-Teaching in Science and Special Ed While Student Teaching: Exploring Inclusive Pedagogy in Action. Poster presentation. ASTE International Conference, virtual.
- 11. Gunning, A. M., Nitecki, E., Marrero, M. E., Baldwin, B. T., & Larson, K. (2021, January). Integrating STEM into Elementary Education: A Case Study of a Professor's Journey. Poster presentation. ASTE International Conference, virtual.
- 12. Riccio, J. F., Larson, K. V., Otero, L. V.*, Dincer, I. D.*, & Olney, M.* (2021, January). Video Analysis in Preservice Science Teacher Education: A Reflection on Its Homeostatic Effect During Challenges to Clinical Fieldwork in a Viral Pandemic. Exploratory Session. ASTE International Conference, virtual.
- 13. Mazin, A. L., Riccio, J. F., & Larson, K. V. (2021, January). Project VECTOR: Virtual Education Communities- Teaching Online with Inclusive Resources: Disrupting Inequities in STEM Classrooms by Co-constructing a Model for Inclusive Digital Pedagogies. ASTE International Conference, virtual.
- Riccio, J., Larson, K., Neesemann, L., Entress, C., & Passero, J. (2020, April, accepted/COVID-19). ASTE: Using Vialogues to Analyze Preservice Portfolio Development and the Integration of SEPs and Data Analysis for 7-12 Classrooms. NSTA National Conference, Boston, MA. Cancelled.
- 15. Larson, K. V. (2020, January). Challenges, Opportunities, and Successes in Developing a Lens for Issues of Equity and Diversity in Preservice Science Teacher Preparation. ASTE International Conference, San Antonio, TX.
- 16. Riccio, J. F., Larson, K. V., Neesemann, L., Passero, J., Entress, C., & Javid, A. (2020, January). Cultivating Solutions for Science Teacher and Science Teacher Educator Preparation Nested within a Preservice Science Education Program: A Collaborative Model for Creating a Community of Practice. ASTE International Conference, San Antonio, TX.

2018-2019

- Larson, K. V., & Mensah, F. M. (2019, January). Colorblindness and Missed Opportunities in Science Education: Preservice Science Teacher Education and Justice-Based Culturally Competent, and Racially Literate Pedagogy. ASTE International Conference, Savannah, GA.
- Mensah, F. M., Kastel, D., Larson, K., Parkes, K., Aguirre, R., Hafeli, M., & Johnson, N. (2019, January). Research into the Education of Science Teacher Educators. ASTE International Conference, Savannah, GA.
- Larson, K. (2018, June). Building a Collaborative, Community Based Classroom. Emerging Learning Design (ELD) Annual Conference, Montclair State University, Montclair, NJ, <u>https://eldc2018.sched.com/event/EPh3/instructional-tech-for-building-a-collaborativecommunity-based-classroom</u>

2014-2017

1. Larson, K. (2014, May). Scratch: A 21st Century Language for Engaging Learning. ELD Annual Conference, Montclair State University, Montclair, NJ

INVITED SPEAKER: CONFERENCE, WORKSHOP, CLASSROOM

- 1. Napolitano, K. V. (July 12, 2024). Panel speaker. National Association for Research in Science Teaching (NARST) Early Career Scholar Institute.
- 2. Napolitano, K. V., Gunning, A. M., & Marrero, M. E. (November 9, 2023). Exploring how pK-12 teachers [un]intentionally developed their culturally responsive-sustaining pedagogy through engineering instruction. Office of the Provost. Research Salon. Mercy University, Dobbs Ferry, NY.

- 3. Marrero, M. E., Napolitano, K. V., & Gunning, A.M. (May 12, 2023). Increasing access to STEM learning by building caregivers' self-efficacy. Faculty Recognition Ceremony. Mercy University, Dobbs Ferry, NY.
- 4. Napolitano, K. V. (March 17, 2023). Science and Engineering Practices and NGSS (3rd Grade). Professional development. Bayonne Public Schools. Bayonne, NJ.
- 5. Napolitano, K.V. (February 13, 2023). Science and Engineering Practices and NGSS (K-12th Grades). Professional development. Bayonne Public Schools. Bayonne, NJ.
- 6. Napolitano, K. (November 8, 2022). Introduction to 3D Assessment for the Science Classroom. Professional Development Workshop. Nanuet High School. Nanuet, NY.
- Gunning, A. M., Napolitano, K. V., & Marrero, M. E. (May 16, 2022). Investigating teachers' learning of STEM teaching for K-12 classroom. Faculty Recognition Ceremony. Dobbs Ferry, NY.
- Napolitano, K., & Marrero, M. E. (September 2021- Present). Introduction to the New York State K-12 Computer Science and Digital Literacy Standards. Grant-Funded Professional Development Series. The Westchester County Consortium: K-8 STEM Ambassadors Program.
- Napolitano, K. (January 2021- March 2022). Introduction to Science and Engineering, New York State Science Learning Standards, and 5E Lesson Planning for the K-5 Classroom. Professional Development Series. New Rochelle Public School District.
- Larson, K. (February 5, 2021). "Imagining and Re-Imagining Teaching, Becoming and Being Teacher Educators". Colloquium Series. Department of Curriculum and Teaching: Doctoral Specialization in Teacher Education, Teachers College, Columbia University.
- Larson, K. (December 4, 2020). Using Vialogues for Meaningful and Constructive Supervision and Mentorship for Residents. TR@TC Teaching Residency, Teachers College, Columbia University.
- 12. Larson, K., & Riccio, J. F. (December 2, 2020). An Introduction to Vialogues as an Online Tool for Teacher Preparation and Feedback. Student Teaching Coordinator Group Talk, Office of Teacher Education, Teachers College, Columbia University.
- Larson, K. (October 23, 2018). How to Find Information, Lesson Plans, and Resources in Science Education. Science in Secondary Schools Course Guest Speaker. Department of Mathematics, Science, and Technology, Teachers College, Columbia University.
- Larson, K. (December 19, 2017). "Culturally Relevant Pedagogy in a Science Teacher Education Introductory Fieldwork Course". Introduction to Qualitative Methods Course Speaker. Department of Mathematics, Science, and Technology, Teachers College, Columbia University.
- 15. Larson, K. (December 14, 2017). "Science Teacher Education and Culturally Relevant Pedagogy". Science Education Research Seminar Course Speaker. Department of Mathematics, Science, and Technology, Teachers College, Columbia University.
- 16. Larson, K. (November 7, 2017). "Students as Co-teachers: A Science Classroom Pedagogy". Workshop. Wood-Ridge Public School District, Wood-Ridge, NJ.
- Larson, K. (March 11, 2014). "Scratch: A 21st Century Language for Engaging Learning". Workshop. New Jersey Educational Computing Cooperative (NJECC): Digital Learning Institute, Montclair State University, Montclair, NJ.
- Larson, K. (April 16, 2013). "Project/Problem Based Learning in an Interdisciplinary Classroom" Undergraduate Teaching for Learning Course Guest Speaker. Department of Early Childhood, Elementary Education, and Literacy Education, Montclair State University, Montclair, NJ.
- Larson, K. (February 27, 2013). "Project Based Learning in the Science Classroom". Workshop. ADP Center of Teacher Preparation and Learning Technologies, Montclair State University, Montclair, NJ.
- 20. Larson, K. (December 12, 2012). "STEM Learning Projects Using Technology" Workshop. ADP Center of Teacher Preparation and Learning, Montclair State University, Montclair, NJ.

 Larson, K. (April 21, 2012). "Green Minds Working Locally, Thinking Globally". Parents of Gifted Offspring (POGO), Gifted and Talented Academy, Montclair State University, Montclair, NJ

SERVICE

Professional Memberships

National Association of Research in Science Teaching (NARST) 2020- present

- 2022, 2021 Annual Conference Reviewer, Strand 7 Preservice Science Teacher Education National Science Teaching Association (NSTA) 2019- present

American Educational Research Association (AERA) 2017- present

- 2020 Annual Meeting Reviewer, Division C Section 1d Science

Association of Science Teacher Education (ASTE) 2016- present

- 2021 International Conference Reviewer
- 2021 International Conference Presider
- Women in Science Education (WISE) Scholar

Emerging Learning Design (ELD) 2014-2019

- 2013 Annual Conference Technical Assistant

<u>Review Experience: Conferences</u>

- NARST, Strand 7 Preservice Science Teacher Education, 2020- present
- AERA, Division C, Section 1d Science, 2019
- American Society for Engineering Education (ASEE), Precollege Engineering Education Division, 2020- present
- ASTE, Preservice teacher education, 2019- present

Review Experience: Journals

- Journal of Research in Science Teaching (JRST), Early Career Reviewer, August 2021
- ASEE Conference Proceedings, Precollege Engineering Education Division, 2021
- Electronic Journal for Research in Science and Mathematics Education (EJRSME), 2021present

Service to Mercy University

- Cofacilitator. STEM Education's STEM Educator Conference (2020-Present)
- Coordinator. STEM Schools Network (2023)
- Cofacilitator. Local STEM Teacher Gardening Education Social (2023)
- Advising. STEM Schools Network and School of Education, Adolescent Education (Present)

Service to Teachers College, Columbia University

- Research team mentor for Ed.M. Science Education Program (2020-2021)
- Pre-service secondary science teaching portfolio reviewer (2017- present)
- edTPA team mentor for MAT Science Education Program (2017-2020)
- Student Teaching Coordinator (2020-2021)

School Partnerships

- White Plains Public Schools, East Ramapo Central School District, City School District of New Rochelle, Tarrytown Public Schools, Port Chester School District (2022-2026)
- Wood-Ridge Public Schools, 258 Hackensack St, Wood-Ridge, NJ 07075 (2020- 2021)
- Elementary School No 5. (Paterson), 430 Totowa Ave, Paterson, NJ 07502 (2011-2012)

Other Professional Experiences

- 1. Postdoctoral Researcher, Center for STEM Education, Mercy University. The center is funded through several grants including two NSF Noyce Scholarship grants. These projects focus on the development of STEM teacher leadership at all grade levels and across all levels of teaching experience. The center is committed to developing community partnerships, fostering supports for teachers and students in high-need school districts, and developing resources for beginning and master STEM teachers both in elementary and secondary education. (Fall 2020-2022). https://www.mercy.edu/academics/center-stem-education
- 2. Postdoctoral Fellow, Secondary Science Education, Teachers College, Columbia University. The Science Education program focuses on research and practice towards preparing science teachers for reflexive, inquiry-based teaching in local, urban schools. This program has worked on developing a novel model of embedded support for student teachers through videobased feedback, continuous master teacher mentorship, and participant-supervisor interactions. (Fall 2020- present).
- 3. Graduate Assistant, ADP Center for Teacher Preparation and Learning Technologies, Montclair State University. This focuses on enhancing "teaching, learning, and research through the incorporation of technology. The ADP Center provides services, training, and support, as well as access to state-of-the-art equipment in the College of Education and Human Services at Montclair State University. The Center offers a variety of programs including workshops, seminars, and conferences as well as providing services such as room/lab rentals, media services, equipment use and 1:1 technology help" (https://www.montclair.edu/adpcenter/). This center has developed partnerships with local, high-need schools, to promote coding and STEM in elementary schools. Additionally, we worked on projects, such as 100kin10 to generate support for and increase the numbers of diverse math and science teachers (Fall 2012- June 2014).