PREETI GUPTA

EDUCATION

Graduate Center of the City University of New York, Division of Urban Education	
Ph.D. in Urban Education, Program Advisor: Dr. Kenneth Tobin	2009
The George Washington University, School of Education and Human Development	
M.A. in Education	1999
Columbia University in the City of New York, Fu School of Engineering and Applied Science	
B.S. in Bioengineering	1995

EMPLOYMENT

Director of Youth Learning and Research, American Museum of Natural History 2011-current

Responsible for strategic planning and growth of out of school time learning experiences for youth, serving 1500 annually. Oversight of 19 staff. Co-lead on the Education Research and Evaluation group. Faculty on the MAT Earth Science program.

Senior Vice President for Education and Public Programs , New York Hall of Science 2001-2011

Manage strategic growth, development and implementation across various sectors of the museum's education initiatives including prek-college students, teachers, and museum visitors.

Adjunct Professorship, Brooklyn College,

Fall 2009-Spring 2011

- City University of New York, Brooklyn College, Master's Course in Department of Education, Science Seminar in the City
- New York University, Master's Course in Dept of Museum Studies, *Museums, Community, Identity*
- City University of New York, Lehman College, Master's Course in Dpt. of MS and HS Teaching, Methods of Ed. Research

PUBLICATIONS

- Cooke-Nieves, N., Wallace, J., **Gupta, P.,** & Howes, E. (In press). The magic of informal settings: A literature review of partnerships and collaborations that support preservice science teacher education across the globe. In J. Luft. & G. Jones (Eds.), *Handbook of research on science teacher education*. Routledge.
- Chaffee, R., **Gupta, P.**, Jackson, T., Hammerness, K. (in press). Centering equity and access: An examination of a museum's mentored research youth program. In B. Bevan & B. Ramon (Eds.), Making Museums More Equitable: Structural Constraints and Enduring Challenges Surfaced through Research and Practice Perspectives. Taylor and Francis.
- Chaffee, R., Hammerness, K., **Gupta, P.,** Anderson, K., Podkul, T. (in press). Re-examining Wenger's community of practice theoretical framework: Exploring youth learning in science research. In P. Patrick (Ed.), Applying Learning Theories in Research Outside the Classroom. Springer.
- Tran, L. & **Gupta, P.** (accepted). Rebuilding education teams to be critically conscious. Journal of Informal Science and Environmental Learning, 1(1).
- Habig, R. **Gupta, P.** & Adams, J. (2021). Disrupting deficit narratives in informal science education: applying community cultural wealth theory to youth learning and engagement. Cultural Studies of Science Education.
- MacPherson, A., Howes, E., **Gupta, P.,** Abowd, N., Hammerness, K. & Kinzler, R. (2020). Preparing teachers to teach science in a non-university setting. In Stroupe, D., Hammerness, K. & McDonald, S. (2020). Preparing science teachers through practice-based teacher education. Cambridge, MA: Harvard Education press.
- Tran, L.U., **Gupta, P.,** Bader, D. (2019). *Redefining Professional Learning in Museum Education.* Journal of Museum Education, 44(2), pp. 135-146

- Chaffee, R & **Gupta, P.** (2018). Accessing the elite figured worlds of science. Cultural Studies of Science Education. 13, pp. 797-805
- Habig, B., **Gupta, P.,** Levine, B., Adams, J. (2018) *An Informal Science Education Program's Impact on STEM Major and STEM Career Outcomes.* Research in Science Education. 50, Pp 1051-1074
- **Gupta, P.** & Correa, J. (2017). There is no "Off Button" to Explaining: Theorizing identity development in youth who work as floor facilitators. Book Chapter. In Patrick, P. (Ed) *Preparing Informal Educators*. Springer Publications
- **Gupta, P.,** Trowbridge, C. MacDonald, M. (2016). Breaking Dichotomies: Learning to be a teacher of science in formal and informal settings. In Avraamidou, L, Roth, M-W (Eds.) *Intersections of Formal and Informal Science*, Routledge Publishers
- Adams, J. & Gupta, P. (2017). *Informal Science Institutions And Learning To Teach: An Examination Of Identity, Agency And Affordances.* Journal of Research in Science Teaching. 54(1) pp 121-138
- Adams, J. & **Gupta, P.** Cotumaccio, A. (2014) *Long-Term participants: A museum program enhances girls' STEM interest, motivation, and persistence.* Afterschool Matters, Fall Issue
- **Gupta, P.** & Pineda, O. (May 2014). *Teen scientists: Youth doing rigorous authentic science research at museums.* ASTC Dimensions. May-June 2014
- Adams, J., & **Gupta, P** (2013). "I learn more here than I do in school. Honestly, I wouldn't lie about that.": Creating a space for agency and identity around science. International Journal for Critical Pedagogy 4(2).
- Gupta, P., & Adams, J. (2012). Museum-University Partnerships for Pre-service Education. In Second International Handbook for Science Education. Eds. B. Fraser, K. Tobin & C.J. McRobbie (eds.). Springer Publications. 1147-1162
- **Gupta, P.** Adams, J., & Dierking, L (September, 2011). *Motivating youth through authentic, meaningful and purposeful activities: An examination through the lens of transformative activist stance.* Invited White Paper for Convening on Advancing Research on Youth Motivation in STEM. Boston, Massachusetts
- **Gupta, P.** Correa, J. Bueno, S., & Sharma, J. (2010) Using cogenerative dialogues in an informal science institution. In K. Tobin, A. Shady (Eds.) *Producing successful science and math education: Teachers and students working collaboratively.* Sense Publishers
- Saxman, L., **Gupta, P.,** & Steinberg, R. (2010). *CLUSTER: University-Science Center Partnership for Science Teacher Preparation.* New Educator. 6(3/4). 280-296
- **Gupta, P.,** Adams, J., Kisiel, J., & DeWitt, J. (2010). *Examining the complexities of school-museum partnerships*. Cultural Studies of Science Education. *5*(3). 685-699
- Parker C., Stylinski, C., Darrah M., McAuliffe C., & **Gupta,P.** (2010). *Integrating information technology into STEM classrooms: A preliminary review of ITEST teacher professional development.* Journal of Technology & Teacher Education. 18(2), 203-230, Chesapeake, VA: AACE
- **Gupta, P.,** & Siry, Christina (2009). *A Review of Michael Wolff-Roth's "In search of meaning and coherence: A life in research"*. Cultural Studies of Science Education. 4(2). 487-493
- Adams, J., Tran, L.U., **Gupta, P.**, & Creedon O'Hurley, H. (2008). *Sociocultural frameworks of conceptual change: implications for teaching and learning in museums.* Cultural Studies of Science Education. 3(2), 430-444
- **Gupta, P.**, & E. Siegel. (2007). Science career ladder at the NY Hall of Science: Youth facilitators as agents of inquiry. In *Exemplary science in informal education settings: Standards-based success stories*, Eds. R. E. Yager and J. H. Falk, 71-84. Arlington, VA: NSTA Press.

SELECT INVITED TALKS & PRESENTATIONS

Habig, R & **Gupta P. (2020)** Authentic STEM research, practices of science, and interest development in an informal science education program. Paper at the National Association of Research in Science Teaching (NARST), Portland, Oregon.

- **Gupta P.** (2019) Practice-based Facilitation: Advancing science center's ability to engage visitors in STEM. Presentation at Association of Science and Technology Centers (ASTC) Annual Conference, Toronto, ON
- **Gupta P.** (2019) Take a break from building the plane while flying it: A solution room. Presentation at the Association of Science and Technology Centers (ASTC) Annual Conference, Toronto, ON
- **Gupta, P.** (2018) Reflecting on Practice: A Professional Learning Program for Museum Staff. Session Presented at the Association of Science and Technology Centers (ASTC) Annual Conference, Hartford, CT
- **Gupta, P.** (2018) I Want to Become Senior Management! Tell Me . . . How Did You Climb the Leadership Ladder? Presentation at ASTC Annual Conference, Hartford, CT
- **Gupta, P.** (2017): The Leadership System..... Session Presented at the Association of Science and Technology Centers (ASTC) Annual Conference, San Diego, CA.
- Gupta, P. (2017). Seeking Purpose Series. Invited Talk at Hofstra University. http://bit.ly/2ACeW24
- **Gupta, P.,** Chaffee, R., Hammerness, K., & Podkul, T. (2017) Staying in Science: An examination of pathways of youth who participate in immersive science research activities. Presentation at the National Association of Research in Science Teaching (NARST), San Antonio, TX.
- Robert, H., **Gupta, P.,** & Adams, J. (2017) An ISE Program's Impact on STEM Major and STEM Career Outcomes. Presentation at the NARST, San Antonio, TX.
- Gupta P. (2016). Leading at every level. Presentation at ASTC. Tampa, FL.
- **Gupta, P.** 2016). *Engaging High School Youth in Conservation Biology Science Research*. Paper presented at (NARST), Baltimore, MD.
- **Gupta, P.,** Adams, J., Hammerness, K. (2016). *Using the Affordances of Museums in Learning to Teach.*Paper presented at American Education Research Association (AERA), Washington, D.C.
- **Gupta P.** (October 2014). Invited Talk, *Building Bridges: Supporting Youth Trajectories in STEM.*National Science Teachers Association Regional Conference, Richmond, VA.
- **Gupta, P.**, Correa, J. (2015). *Informal Science Education. Pedagogy and Epistemology.* Paper presented at National Association of Research in Science Teaching (NARST), Chicago, IL.
- **Gupta, P.** Adams, J, & Cotumaccio A. (2014). *Long-term Museum Programs and their Impact on Underrepresented Youth's Ability to Persist in Science.* Paper presented at National Association of Research in Science Teaching, Pittsburgh, PA
- **Gupta P.** (2014). Invited Talk, *Building Bridges: Supporting Youth Trajectories in STEM.* National Science Teachers Association Regional Conference, Richmond, VA.
- **Gupta, P.** Adams, J, & Cotumaccio A. (2014). *Long-term Museum Programs and their Impact on Underrepresented Youth's Ability to Persist in Science.* National Association of Research in Science Teaching, Pittsburgh, PA
- Macdonald, M, **Gupta, P.** & Cotumaccio A. (2014) *Studying Contributions of a Place-based Museum Teaching Residency on Urban Science Teacher Candidates.* National Association of Research in Science Teaching, Pittsburgh, PA
- **Gupta, P.** (2012). *The Long Term Impact of Working as a Floor Facilitator in a Science Center.* National Association of Research in Science Teaching, Indianapolis, IN
- Ferguson, C. & **Gupta, P** (2012). *High School Students' Development of ICT Fluency/Workforce Skills by Designing a Virtual Science Center.* National Association of Research in Science Teaching, Indianapolis, IN
- Adams, J., & **Gupta P.** (2012). *Place and the Structuring of Science Identities in a Science Center.*National Association of Research in Science Teaching, Indianapolis, IN
- **Gupta, P.** (February 2011). Invited Talk, *Women Taking the Lead: Education, Entrepreneurship and Opportunities for All: A Panel Presentation and Dialog at the United Nations Commission on the Status of Women.* The 55th Session on the Status of Women, United Nations
- **Gupta, P., &** Correa, J. (March 2010). *Examining the role of laughter as a structure for developing reflexivities towards teaching and learning.* Paper part of a Symposium: Laughing together,

- learning together: The role of laughter in science education. Symposium presented at National Association of Research in Science Teaching (NARST). Philadelphia, PA
- **Gupta, P.** (October 2009). *Network for Leaders of Interpreters, Facilitators, and Explainers (NetLIFE).* A Whole Day Pre-conference Workshop presented at Association for Science and Technology Centers (ASTC). Fort Worth, TX.
- **Gupta, P.** (June 2009) *Science Centers as Sites for Pre-service Practicum Experiences.* Paper presented at European Science Center Conference (ECSITE), Milan, Italy.
- **Gupta, P.** (June 2009) *Train Table and Ball Run: Early Childhood Learning Research at the NY Hall of Science.* Paper presented at European Science Center Conference (ECSITE), Milan, Italy.
- **Gupta, P.** (April 2009) *Informal Science Institutions As Incubators for Science Teachers: Documenting Identity Development in Floor Staff.* Paper presented at National Association for Research in Science Teaching. CA.
- Saxman, L., & **Gupta, P.** (April 2009) *Into the Wild: Navigating a New Frontier for Pre-Service Science Teacher Education.* Paper presented at National Association for Research in Science Teaching. Garden Grove, CA.
- **Gupta, P.** (January 2009) *Preparing Science teachers for the new millennium: Harnessing the power of innovative collaborations with science centers.* Paper at Association for Science Teacher Education (ASTE). Hartford, CT.
- Saxman, L., & **Gupta, P.** (April 2008) *Into the Wild: Navigating a New Frontier for Pre-Service Science Teacher Education.* Paper presented at National Association for Research in Science Teaching. Garden Grove, CA.
- Adams, J., & **Gupta, P.** (April 2009) *Science-Related Identity Development in Science Center Floor Staff.*Poster presented at National Association for Research in Science Teaching. Garden Grove, CA.
- DeWitt, J., Laursen, S., **Gupta, P**., & Hoyle, R. (May 2008) *University-science centre collaborations to support science learning.* Panel Presentation at Ecsite Annual Conference, Budapest, Hungary
- Parker, C., Stylinksi, C., Darrah, M, and **Gupta, P** (March 2008) *Emerging Technology as a Vehicle for Teacher Change: Frameworks and Assessment Strategies.* Panel Presentation at American Educational Research Association (AERA), New York, NY
- **Gupta P,** Saxman, L, & Weiner, M. (February 2008) *CLUSTER: A Science Center-University Partnership* for Science Teacher Preparation. Roundtable Discussion at American Association of Colleges for Teacher Education (AACTE), New Orleans, LA
- **Gupta, P.** Motto, A., & Saxman L. (August 2007) *Science Teacher Preparation: When University and Museum Meet.* Roundtable Discussion at Bay Area Institute (BAI), San Francisco, California (Presentations conducted from 1996-2006 not listed)

HONORS

Annual Conference Student Scholarship, Visitor Studies Association, (July 2008)

National Roy L Schafer Leading Edge Award for Experienced Leadership in the Field, Association for Science Technology Centers, Inaugural Award, (October 2005)

The Many Faces of Queens Women. Jamaica Arts Center, Queens, NY – selected as one of forty-two women showcased in a photo exhibition for contributed to the community in unique ways (1999-2000)

FEDERAL AWARDS AND PROJECTS

July 2021 **Co-Principal Investigator –** National Science Foundation, Preparing High School

Students for Careers in Machine Learning through Mentored Scientific Research,

Award #2049022, \$xxxxxx over 3 years.

August 2020 **Principal Investigator –** National Science Foundation, RAPID: Supports and Challenges in an Educational Crisis: The Impact of the COVID-19 Pandemic on

Youth STEM Pathways, Award #2033515, \$199,981 over 1 year.

January 2020 **Principal Investigator** – National Science Foundation, Decoding Urban Ecosystems: Computational Thinking Integration in Middle School STEM. Award

#1934039, \$1,911,665 over 3 years.

January 2020 Principal Investigator – Institute of Museum and Library Services, Next

Generation Museum Conversations, Award # MA-10-19-0593-19, \$245,098 over 2

years.

September 2016 **Principal Investigator** – National Science Foundation, Staying in Science,

Examining the pathways of under-represented youth mentored in research.

Award #DRL 1561637, \$1.5 million over 3 years

July 2015 **Principal Investigator** – National Institutes of Health, Biodiversity and Human

Health

July 2010 Principal Investigator – Institute of Museum and Library Services, Award# MA-

04-010-0505, Sustainable Community Collaborations, \$143,454

September 2009 Principal Investigator - Institute for Museum and Library Services, Award # LG-

54-09-0056-09, Role of Youth in Interactive Museum Learning Experiences,

\$75,205

September 2009 **Principal Investigator -** National Science Foundation, *Award # DRL-0929206*,

Virtual Hall of Science, \$800,000

September 2006 Principal Investigator - Institute for Museum and Library Services, Science

Career Ladder Dissemination of Best Practices - \$416,091

April 2006 Co-Principal Investigator - National Science Foundation, Award #0554262,

CLUSTER-Investigating a New Model Partnership for Teacher Preparation –

\$317,929 over two years, \$477,674 over next three years

October 2005 **Principal Investigator** - National Science Foundation, *Award #0525119, Crime*

Scene Information Technology – \$1.2 million over three years

PROFESSIONAL COMMITTEES

2020 Association of Science and Technology Centers (ASTC) and Informal Learning

Leadership Collaborative (ILLC), Steering Committee Member, Leadership Learning Labs Program, a new initiative created and planned for implementation to provide

professional learning for emerging leaders.

2017-current Association of Science and Technology Centers, Diversity and Field Development

Committee, **Co-Chair**, responsible for steering the activities to supporting emerging, mid-level, and upper-level museum professionals with opportunities for professional

development, and reflective practices.

2007-2009 National Science Foundation Project, Center for Advancement of Informal Science

Education (CAISE), **Chair of Leadership and Diversity Taskforce**, lead role on steering committee for multi-year project designed to increase the capacity of the

informal science education field.