

Maria (Mia) Ong, Ph.D.

TERC, 2067 Massachusetts Avenue, Cambridge, MA 02140
617-873-9678; maria_ong@terc.edu

Professional Preparation

Swarthmore College	Soc/Anth	B.A., High Honors	1994
University of California, Berkeley	Education	Ph.D.	2002
Wellesley College	Sociology	Post-Doc	2002-3
Harvard University	Education	Post-Doc	2003-5

Work Experience

Technical Education Research Centers, Inc. (TERC), Education Research Collaborative. Senior Research Scientist and Evaluator. 8/08 – present.

National Center for Women & Information Technology Social Science Advisory Board Consultant Services. Consultant. 6/10 – present.

The City College New York NIH Minority Undergraduate Biomedical Engineering Program. Independent External Evaluator. 3/05 - 8/11.

TERC, Center for School Reform. Project Leader and Senior Research Analyst. 6/05 – 8/08.

Sokendai, The Graduate University for Advanced Studies, Hayama, Japan. Senior Researcher, Digital Archives Oral History Project of Women and Foreign Scientists. 6/06 – 9/06.

Harvard Graduate School of Education. Education Postdoctoral Fellow and Instructor. 9/03 - 6/05.

Wellesley College, Sociology Department. Education Postdoctoral Fellow and Instructor. 8/02 - 6/03.

U.C. Berkeley, Center for Studies in Higher Education. Senior Researcher. 5/00 - 7/02.

Swarthmore College, Department of Education. Visiting Professor. 9/99 – 12/99.

U.C. Berkeley, Coalition for Excellence and Diversity in MSE. Member. Director, NSF/AMP-sponsored Physics Scholars Program. 6/96 – 9/99; 1/00 - 5/00.

Swarthmore College, Department of Mathematics and MathForum.net. Assistant Researcher. 6/94 – 6/95.

Federal Advisory Committees and Other Affiliations

The Center for Gender Equity in Science and Technology, Arizona State University. Advisory Board Member. 7/15 – present.

The National Center for Women & Information Technology. Member of the Social Science Advisory Board. 3/08 – present.

The Civil Rights Project (CRP)/*Proyecto Derechos Civiles* at UCLA, The Project for Science and Engineering Equity and Diversity. Founder and Director. 8/05 – present.

The NSF Committee on Equal Opportunities in Science and Engineering (CEOSE). Member. Led CEOSE's authoring of its ten recommendations to NSF for promotion of women of color in STEM. 2/08 – 1/14.

The Advisory Committee for Social, Behavioral, and Economic Sciences. Member and CEOSE Liaison. Chair of the SBE Subcommittee on the Science and Practice of Broadening Participation in STEM. 10/09 – 11/13.

United States Delegation, 4th and 2nd International Union of Pure and Applied Physics International Conference on Women in Physics. Delegate. Stellenbosch, South Africa and Rio de Janeiro, Brazil, respectively. 2/11 – 8/12; 5/05 – 8/06.

Federal Advisory Committees and Other Affiliations (continued)

The STEM Women of Color Conclave. Advisory Board Member. 3/10 – 6/10.

The Advisory Committee for GPRA Performance Assessment. Member and CEOSE Liaison. 1/09 – 12/09.

Peer-Reviewed Publications (Selected)

Ong, M., Ko, L. T., and Hodari, A. K. (in press). Agency of women of color in STEM: Individual and institutional strategies for persistence and success. In E. H. Branch (Ed.), *Pathways, potholes, and the persistence of women in science: Reconsidering the pipeline*. Lanham, MD: Lexington Books.

Hodari, A. K., **Ong, M.**, Ko, L. T., and Smith, J. (in press). Enabling courage: Agentic strategies of women of color in computing. *IEEE Computing in Science and Engineering Journal Special Issue: Best of RESPECT 2015*.

Kachchaf, R., Ko, L., Hodari, A., and **Ong, M.** (2015). Career-life balance for women of color: Experiences in science and engineering academia. *Journal of Diversity in Higher Education*, 8(3), 175-91.

Hodari, A. K., **Ong, M.**, Ko, L. T., and Smith, J. (2015). Enabling courage: Agentic strategies of women of color in computing. *Research in Equity and Sustained Participation in Engineering, Computing, and Technology (RESPECT)* (pp. 1-7). Piscataway, NJ: IEEE.

Ko, L. T., Kachchaf, R. R., Hodari, A. K., and **Ong, M.** (2014). Agency of women of color in physics and astronomy: Strategies for persistence and success. *Journal of Women and Minorities in Science and Engineering* (20)2, 171-95.

Ong, M. (2013). Advancing women of color in science academia and professions: Successful individual and institutional strategies. In (B. Cunningham, Ed.), *Women in physics: Fourth IUPAP International Conference on Women in Physics, AIP conf. proc., 1517* (p. 184). Melville, NY: American Institute of Physics.

Coble, K., Cunningham, B., Freeland, E., Hodapp, T., Hodari, A. K., Ivie, R., Martinez-Miranda, L., **Ong, M.**, ... & White, H. (2013). Many steps forward, a few steps back. In (B. Cunningham, Ed.), *Women in physics: Fourth IUPAP International Conference on Women in Physics, AIP conf. proc., 1517* (pp. 162-163). Melville, NY: American Institute of Physics.

Ko, L.T., Kachchaf, R.R., **Ong, M.**, and Hodari, A.K. (2013). Narratives of the double bind: Intersectionality in life stories of women of color in physics, astrophysics and astronomy. In *2012 Physics Education Research Conference, 1513*(1), 222-225. Melville, NY: American Institute of Physics.

Ong, M., Wright, C., Espinosa, E., & Orfield, G. (2011). Inside the double bind: A synthesis of empirical research on undergraduate and graduate women of color in science, technology, engineering, and mathematics. *Harvard Educational Review*, 81(2), 172-208.

Ong, M. (2011). The status of women of color in computer science. In *Communications of the ACM*, 54(7), 32-34.

Ong, M. (2008). Challenging cultural stereotypes of ‘scientific ability.’ In M. Pollock (Ed.), *Everyday Antiracism: Getting Real about Race in School* (pp. 114-119). New York: New Press.

Ong, M. (2007). Sowing the seed of diversity. *Interactions across Physics and Education*, 37(3), 26-27.

Laughlin, C., Zastavker, Y. V., & **Ong, M.** (2007). Is integration really there? Students’ perceptions of integration in their project-based curriculum. *2007 37th annual Frontiers in Education conference: Global engineering: Knowledge without borders - opportunities without passports (FIE proceedings)*. Piscataway, NJ: IEEE.

Peer-Reviewed Publications (continued)

Zastavker, Y.V., **Ong, M.**, & Page, L. (2006). Women in engineering: Exploring the effects of project-based learning in a first-year undergraduate engineering program. *36th annual Frontiers in Education conference (FIE proceedings)*. Piscataway, NJ: IEEE.

Budil, K. S., Daniels, K. E., Daniels-Race, T., Eblen-Zayas, M., Hartline, B. K., Hazeltine, R., Hodari, A. K., Horton, K. R., Ivie, R., Kay, L. Martínez-Miranda, L. J., Michelman-Ribeiro, A., **Ong, M....** & Zastavker, Y. V. (2005). Women in physics in the United States: A progress report. In B. K. Hartline and A. Michelman-Ribeiro, (Eds.), *Women in physics: Second IUPAP International Conference on Women in Physics, AIP conf. proc.*, 795 (pp. 175-178). Melville, NY: American Institute of Physics.

Ong, M. (2005). Body projects of young women of color in physics: Intersections of gender, race, and science. *Social Problems*, 52(4), 593-617.

Other Significant Publications (Selected)

Committee on Equal Opportunities in Science and Engineering. (2014). *Broadening participation in America's STEM workforce: 2011-2012 biennial report to Congress*. Arlington, VA: NSF.

Espinosa, L. & **Ong, M.** (2012). The experience of women of color in STEM. In *100 Women Leaders in STEM* (pp. 12-14). Washington, DC: STEMConnector.org.

Social, Behavioral, and Economic Sciences Advisory Committee (2011). *The Social, Behavioral, and Economic Sciences Advisory Committee futures report* (report to the National Science Foundation SBE Directorate). Arlington, VA: National Science Foundation.

Committee on Equal Opportunities in Science and Engineering. (2011). *Broadening participation in America's STEM workforce: 2009-2010 biennial report to Congress*. Arlington, VA: NSF.

Ong, M. (2010). *The mini-symposium on women of color in science, technology, engineering, and mathematics: A summary of events, findings and suggestions*. Cambridge, MA: TERC.

Committee on Equal Opportunities in Science and Engineering. (2009). *Broadening participation in America's STEM workforce: 2007-2008 biennial report to Congress*. Arlington, VA: NSF.

The Advisory Committee for the GPRA Performance Assessment. (2009). *Report of the Advisory Committee for the GPRA Performance Assessment: FY2009*. Arlington, VA: NSF.

Ong, M. (2005). Understanding the dearth of women in science. *Harvard Community Resource*, 7/1, 3.

Ong, M. (2001). Playing with in/visibility: How minority women gain power from the margins of science culture. *Women in Higher Education*, 10(11), 42-44.

Over 75 total conference papers delivered between 6/99 and 2/16.**Keynote, Plenary, and Invited Appearances (Selected)**

White House Roundtable on Inclusive STEM Education, hosted by Arizona State University's Center for Gender Equity in Science and Technology & The White House Council on Women and Girls. *The personal is institutional: Fostering the success of women of color in STEM*. Invited Speaker. Washington, DC. 7/15.

National Diversity Equity Workshop, hosted by The Open Chemistry Collaborative in Diversity Equity. *Be the difference: Institutional strategies for promoting the success of women of color in STEM*. Plenary Speaker. Arlington, VA. 4/15.

Society of Women Engineers. *Beyond lip service: Recommendations for women of color in engineering and their institutions*. Invited Speaker. Baltimore, MD. 10/13.

American Institutes for Research. A 'chilly climate' for underrepresented minority students and professionals in STEM. Invited Speaker. Washington, D.C. 9/13.

Keynote, Plenary, and Invited Appearances (continued)

- Institute for Women's Policy Research, Conference on Accelerating Change for Women of Color in STEM: Policy, Action, and Collaboration. *Improving the status of women of color faculty in STEM: Policy recommendations for systemic change*. Invited Speaker. Washington, D.C. 5/13.
- STEM Women of Color Conclave. *Listening for success: Strategies that enable women of color to advance in STEM*. Keynote Speaker. Atlanta, GA. 6/11.
- Joint Meeting of Women in Engineering ProActive Network and National Association of Multicultural Engineering Program Advocates. *Advancing the status of women of color in STEM: Strengths, challenges, and the national imperative*. Keynote Speaker. Baltimore, MA. 4/10.
- Interferometric Investigations of Physical Knowledges and Gender in the Making Symposium. *Changing ways in becoming a physicist*. Plenary Speaker. Stellenbosch University, Stellenbosch, Sweden. 9/11.
- Sveriges Radio (Swedish National Public Radio) "Science Friday" Programs. Invited Guest. Discussed gender and science in U.S. physics. Retrieved from (<http://sverigesradio.se/sida/artikel.aspx?programid=406&artikel=4686621>). 9/11.
- The Mini-Symposium on Women of Color in STEM. *Findings from the Inside the Double Bind synthesis project: Empirical research on women of color in STEM, 1970 - 2008*. Plenary Speaker. Arlington, VA. 10/09.
- NSF ADVANCE Meeting, Session on Women of Color in STEM. *Empirical research on women of color in STEM careers*. Invited Speaker. Alexandria, VA. 11/10.
- American Chemical Society (ACS) 240th National Meeting, Award Symposium in Honor of Robert L. Lichter. *Promoting the status of women of color in STEM: Strengths, challenges, and strategies*. Invited Speaker. Boston, MA. 8/10.
- National Symposium for the Advancement of Women in Science. *Keeping women in science: Tightening the leaky pipeline*. Invited Speaker. Harvard University, Cambridge, MA. 4/05.

Grant Awards

- NSF/REE Grant Award (EEC-1427129), *Engineering Beyond the Double Bind: Women of Color in Engineering Education and Careers* (with A. K. Hodari). 9/14 – 2/17.
- NSF/CISE Grant Award (CNS-1240768), *Computing Beyond the Double Bind: Women of Color in Computing Education and Careers* (with A. K. Hodari). 1/13 – 12/16.
- NSF/REESE Grant Award (DRL-0909762), *Beyond the Double Bind: Women of Color in STEM* (with A. K. Hodari). 8/09 – 7/14.
- NSF/OIA Grant Award (OIA-0953861), *Mini-Symposium on Women of Color in STEM*. 9/09 – 6/11.
- NSF/REESE Grant Award (DRL-0635577), *Inside the Double Bind: A Synthesis of Literature on Women of Color in STEM* (with G. Orfield). 10/06 – 12/09.
- NSF/GSE Grant Award (GSE-0624738), *Does Project-Based Learning Matter to Undergraduate Women in Engineering?* (with Y. Zastavker). 9/06 – 8/11.
- Spencer Foundation Grant Award, *Diversifying Engineering through Gateway Courses: Assessment of Project-Based Learning in Undergraduate Physics, Mathematics, and Engineering* (with Y. Zastavker). 9/05-8/06.

Other Awards (Selected)

2012 Physics Education Research Conference (PERC) Proceedings Paper Award. 1/13.

Frontiers in Education Benjamin J. Dasher Best Paper Award. 8/06.

Harvard University Graduate School of Education Postdoctoral Fellowship on Education. 8/03 – 6/05.

Consortium for a Strong Minority Presence in Liberal Arts Colleges Postdoctoral Fellowship (Wellesley College). 8/02 - 7/03.

University of California President's Dissertation-Year Fellowship. 9/01 - 8/02.

National Science Foundation – University of California, Berkeley Program in the Social Studies of Science and Technology Fellowship. 9/01 – 8/02.

American Educational Research Association Fellowship. 8/00 - 7/01.

Spencer Foundation – U.C. Berkeley Center for Research in Education and Work Fellowship. 9/99 - 8/00.

U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring. 6/98.

Community Service (Selected)

Peer-reviewed manuscripts: *Science Education*, *Journal of Women and Minorities in Science and Engineering*, *Social Problems*, *IEEE Technology and Society Magazine* (special issue on women and minorities in engineering); *Cultural Studies of Science Education*; and *Advancing Women in Science: An International Perspective* (Eds. W. Pearson, L. Frehill, & C. McNeely) (1). 3/03 – 5/14.

Peer-reviewed proposals: NSF/MPS (ad hoc), NSF/OISE (ad hoc); NSF/ADVANCE (2 review panels), NSF/CISE (review panel). 3/08 – 1/12.

Peer-reviewed programs: Member of the Site Visit Committee at MIT, The American Physical Society Committee on the Status of Women in Physics and the Committee on Minorities; NSF/CISE reverse site visit; NSF/CISE site visit. 10/09-3/15.

Served as Advisor: Broad Institute of MIT and Harvard Diversity Initiative (3/14 – present); American Association of University Women (8/14 – 3/15); Institute for Women's Policy Research (2/13 – 11/13); COMPUGIRLS Project (PI: K. Scott, NSF/GSE, 10/11 – 9/14); Learning from Small Numbers Project (PI: A. Pawley, NSF/CAREER, 9/10 – 8/14).

Served as Mentor: the TERC Postdoctoral Fellowship Program (2 fellows, 9/11 – 8/13; 1 fellow, 9/15 - present); NARST Mentoring Program (3/14); and Harvard Graduate School of Education Master's Program (3 students, 8/03 – 6/05).

Organized STEM Diversity and Inclusion Gatherings:

Lead organizer and host, Project SEED National Symposium, *Promoting Educational Equity and Diversity in Science, Technology, Engineering, and Mathematics* (Harvard University, Cambridge, MA, 1/05).

Lead organizer and host, *The Mini-Symposium on Women of Color in STEM* (Arlington, VA, 10/09).

Co-founder, Society for Women in the Physical Sciences (University of California, Berkeley, 9/97).