

## CATHERINE RIEGLE-CRUMB, PHD

### PROFESSIONAL APPOINTMENTS

Full Professor, Department of Sociology Director, Center for Research on Educational Opportunity (CREO) <i>University of Notre Dame</i>	2025-
Full Professor Department of Curriculum and Instruction, STEM Education Department of Sociology (By Courtesy) <i>University of Texas at Austin</i>	2020-2025
Associate Professor Department of Curriculum and Instruction, STEM Education Department of Sociology (By Courtesy) <i>University of Texas at Austin</i>	2013- 2020
Associate Director of Research STEM Education Center, <i>University of Texas at Austin</i>	2015-2020
Faculty Research Associate Population Research Center, <i>University of Texas at Austin</i>	2006-Present
Assistant Professor Department of Curriculum and Instruction, STEM Education Department of Sociology (By Courtesy) <i>University of Texas at Austin</i>	2007-2013
Postdoctoral Fellow Population Research Center, <i>University of Texas at Austin</i>	2002-2006
Research Associate Bureau of Sociological Research, <i>University of Colorado at Boulder</i>	2000-2002
Research Assistant National Opinion Research Center, <i>University of Chicago</i>	1994-2000

### EDUCATION

Doctor of Philosophy (PhD), Sociology, <i>University of Chicago</i> , Chicago, Illinois	2000
Master of Arts (MA), Sociology, <i>University of Chicago</i> , Chicago, Illinois	1996
Bachelor of Arts (BA), Sociology, <i>Texas A&amp;M University</i> , College Station, Texas	1993

## PUBLICATIONS IN PEER-REVIEWED JOURNALS

\*indicates graduate student co-author at the time of submission

Buontempo, J., **Riegle-Crumb, C.**, & Morton, K. (2025). "Exploring Deficit Beliefs among High School Math Teachers." *Educational Researcher* 54(2): 111-115.  
<https://doi.org/10.3102/0013189X251317135>

\*Nguyen, U. & **Riegle-Crumb, C.** (2024). "Gender typicality and engineering attachment: Examining the viewpoints of women college engineers and variation by race/ethnicity." *Behavioral Sciences* 14, no. 7: 573.  
<https://doi.org/10.3390/bs14070573>

\*Donovan, B., Syed, A., Arnold, S., Lee, D., Stuhlsatz, M., \***Riegle-Crumb, C.** & \*Cimpian, A. (2024). Sex and gender essentialism in textbooks. *Science* 383, 822-825 (20-25).  
DOI:[10.1126/science.ad11188](https://doi.org/10.1126/science.ad11188)

\*Lead authors

\*Patrick, A., \*Andrew, M., **Riegle-Crumb, C.**, Kendall, M., Bachman, J., & Subbian, V. (2023). "Sense of belonging in engineering and identity centrality among undergraduate students at Hispanic Serving Institutions. *Journal of Engineering Education*, 112( 2), 316– 336. <https://doi.org/10.1002/jee.20510>.

**Riegle-Crumb, C.**, +Russo-Tait, T., Doerr, K., & +Nguyen, U. (2023). "Critical consciousness of gender inequality: Considering the viewpoints of racially diverse high school girls with engineering aspirations." *Sociological Perspectives*, 66(1): 5-27.  
<https://doi.org/10.1177/07311214221112448>

+Nguyen, U., +Russo-Tait, T., **Riegle-Crumb, C.**, & Doerr, K. (2022). "Changing the gendered status quo in engineering? The encouraging and discouraging experiences of young women with engineering aspirations." *Science Education*, 106(6): 1442-1468.  
<https://doi.org/10.1002/sce.21748>

+Walsh, J. A., +Fenech, M., Tucker, D. L., **Riegle-Crumb, C.**, & La Cour, B. R. (2022). "Piloting a full-year, optics-based high school course on quantum computing." *Physics Education*, 57(2), 025010.

+Doerr, K., **Riegle-Crumb, C.**, +Russo-Tait, T., +Tarasaki, K., Sassler, S., & Levitte, Y. (2021). "Making merit work at the entrance to the engineering workforce: Examining women's experiences and variations by race/ethnicity." *Sex Roles*, 85(7): 422-439.  
10.1007/s11199-021-01233-6

**Riegle-Crumb, C.**, & +Peng, M. (2021). "Examining high school students' gendered beliefs about math: Predictors and implications for choice of STEM college majors." *Sociology of Education*, 94(3): 227-248. doi:10.1177/00380407211014777

+Nguyen, U., & **Riegle-Crumb, C.** (2021). "Who is a scientist? Gender, counter-stereotypical beliefs about scientists, and the STEM major intentions of Black and Latinx students." *International Journal of STEM Education*, 8(28): 1-18.  
<https://doi.org/10.1186/s40594-021-00288-x>

+Patrick, A., **Riegle-Crumb, C.** & Borrego, M. (2021). "Examining the gender gap in engineering professional identification." *Journal of Women and Minorities in Science and Engineering*, 27(1): 31-55.

+Patrick, A., Borrego, M. & **Riegle-Crumb, C.** (2021). "Post-graduation plans of undergraduate BME students: Gender, self-efficacy, value, and identity beliefs." *Annals of Biomedical Engineering*, 49(5): 1275-1287. <https://doi.org/10.1007/s10439-020-02693-9>

Morton, K., & **Riegle-Crumb, C.** (2020). "Is school racial/ethnic composition associated with content coverage in algebra?" *Educational Researcher*, 49(6): DOI: 10.3102/0013189X20931123

**Riegle-Crumb, C.**, +Peng, M. & +Buontempo, J. (2019). "Gender, competitiveness, and intentions to pursue STEM fields." *International Journal of Gender, Science and Technology*, 11(2): 234-257.

Morton, K. & **Riegle-Crumb, C.** (2019). "Who gets in? Examining inequality in 8th grade algebra." *Journal for Research in Mathematics Education*, 50(5), 529-554.

**Riegle-Crumb, C.**, Morton, K., +Nguyen, U. & Dasgupta, N. (2019). "Inquiry-based instruction in science and mathematics middle school classrooms: Examining its association with students' attitudes by gender and race/ethnicity." *AERA Open*, 5(3), 1-17; DOI: 10.1177/2332858419867653

**Riegle-Crumb, C.**, +Peng, M. & +Russo-Tait, T. (2019). "Committed to STEM? Examining factors that predict occupational commitment among Asian and White female students completing STEM postsecondary programs." *Sex Roles*, 1-15; DOI: 10.007/s11199-019-01039-8.

**Riegle-Crumb, C.**, King, B. & Irizarry, Y. (2019). "Does STEM stand out? Examining racial/ethnic gaps in persistence across postsecondary fields." *Educational Researcher*, 48(3), 133-144.

+Buontempo, J., **Riegle-Crumb, C.**, +Patrick, A. & +Peng, M. (2017). "Examining gender differences in engineering identity among high school engineering students." *Journal of Women and Minorities in Science and Engineering*, 3, 271-287.

**Riegle-Crumb, C.** & +Morton, K. (2017). "Gendered expectations: Examining how peers shape female students' intent to pursue STEM fields." *Frontiers in Psychology*, 8, 1-11; DOI:10.3389/fpsyg.2017.00329

+Kyte, S. B. & **Riegle-Crumb, C.** (2017). "Perceptions of the social relevance of science: Exploring the implications for gendered patterns in expectations of majoring in STEM fields." *Social Sciences*, 6(1), 1-17; DOI: 10.3390/socsci6010019

**Riegle-Crumb, C.**, +Moore, C. & +Buontempo, J. (2017). "Shifting STEM stereotypes? Considering the role of peer and teacher gender." *Journal of Research on Adolescence*, 27(3), 492-505.

**Riegle-Crumb, C.**, King, B. & +Moore, C. (2016). "Do they stay or do they go? The switching decisions of individuals who enter gender atypical college majors." *Sex Roles*, 74, 436-449; DOI: 10.1007/s11199-016-0583-4

**Riegle-Crumb, C.**, +Morton, K., +Moore, C., Chimonidou, A., Labrake, C. & Kopp, S. (2015). "Do inquiring minds have positive attitudes? The science education of preservice elementary teachers." *Science Education*, 99, 819-836.

**Riegle-Crumb, C.** & +Moore, C. (2014). "The gender gap in high school physics: Considering the context of local communities." *Social Science Quarterly*, 95(1), 253-268.

**Riegle-Crumb, C.** & +Moore, C. (2013). "Examining gender inequality in a high school engineering course." *American Journal of Engineering Education*, 4 (1), 55-65.

**Riegle-Crumb, C.** & +Humphries, M. (2012). "Exploring bias in math teachers' perceptions of students' ability by gender and race/ethnicity." *Gender and Society*, 26(2), 290-322.

**Riegle-Crumb, C.**, +King, B., Grodsky, E. & Muller, C. (2012). "The more things change, the more they stay the same? Prior achievement fails to explain gender inequality in entry into STEM college majors over time." *American Educational Research Journal*, 49 (6), 1048-1073.

**Riegle-Crumb, C.**, +Moore, C. & +Ramos-Wada, A. (2011). "Who wants to have a career in science or math?: Exploring adolescents' future aspirations by gender and race/ethnicity." *Science Education*, 95(3), 458-476.

**Riegle-Crumb, C.** & Grodsky, E. (2010). "Racial-ethnic differences at the intersection of math course-taking and achievement." *Sociology of Education*, 83(3), 248-270.

**Riegle-Crumb, C.** & +King, B. (2010). "Questioning a white male advantage in STEM: Examining disparities in college major." *Educational Researcher*, 39, 656-664.

**Riegle-Crumb, C.** (2010). "More girls go to college: Exploring the social and academic factors behind the female postsecondary advantage among Hispanic and White students." *Research in Higher Education*, 51(6), 573-593.

Grodsky, E. & **Riegle-Crumb, C.** (2010). "Those who choose and those who don't: Social background and college orientation." *The ANNALS of the American Academy of Political and Social Science*, 627 (1), 14-35.

Muller, C., **Riegle-Crumb, C.**, Schiller, K., +Wilkinson, L. & Frank, K. (2010). "Race and academic achievement in racially diverse high schools: Opportunity and stratification." *Teachers College Record*, 112 (4), 1038-1063.

**Riegle-Crumb, C.** & Callahan, R. (2009). "Exploring the academic benefits of friendship ties for Latino boys and girls." *Social Science Quarterly*, 90(3), 611-631.

+Pearson, J., +Crissey, S. & **Riegle-Crumb, C.** (2009). "Gendered fields: Sports and advanced course taking in high school." *Sex Roles*, 61, 519-535.

Frank, K., Muller, C., Schiller, K., **Riegle-Crumb, C.**, +Mueller, A., Crosnoe, R. & +Pearson, J. (2008). "The social dynamics of mathematics course-taking in high school." *American Journal of Sociology*, 113(6), 1645-1696.

+Choi, K., Raley R. K., Muller, C. & **Riegle-Crumb, C.** (2008). "A longitudinal analysis of exposure to peers with college educated parents and students' college enrollment." *Social Science Quarterly*, 89(4), 846-866

Crosnoe, R., **Riegle-Crumb, C.**, Field, S., Frank, K. & Muller, C. (2008). "Peer group contexts of adolescent academic experiences." *Child Development*, 79(1), 139-155.

Cavanagh, S., **Riegle-Crumb, C.** & Crosnoe, R. (2007). "Early pubertal timing and girls' academic careers." *Social Psychology Quarterly*, 70 (2), 186-198.

Crosnoe, R. & **Riegle-Crumb, C.** (2007). "A life course model of education and alcohol use." *Journal of Health and Social Behavior*, 48, 267-282.

Crosnoe, R., **Riegle-Crumb, C.** & Muller, C. (2007). "Gender, self-perception, and academic problems in high school." *Social Problems*, 54 (1), 118-138.

**Riegle-Crumb, C.**, Farkas, G. & Muller, C. (2006). "The role of gender and friendship in advanced course-taking." *Sociology of Education*, 79 (3), 206-228.

**Riegle-Crumb, C.** (2006). "The path through math: Course-taking trajectories and student performance at the intersection of gender and race/ethnicity." *American Journal of Education*, 113 (1), 101-122.

Cavanagh, S., Schiller, K. & **Riegle-Crumb, C.** (2006). "Marital transitions, parenting, and schooling: Exploring the linkage between family structure history and adolescents' educational careers." *Sociology of Education*, 79 (4), 329-354.

Reprinted in *Schools and Society: A Sociological Approach to Education*, 3<sup>rd</sup> edition. Edited by J. Ballantine and J. Spade. Pine Forge Press/Sage Publications, 2007.

Field, S., Frank, K., Schiller, K., **Riegle-Crumb, C.** & Muller, C. (2006). "Identifying positions from affiliation networks: Preserving the duality of people and events." *Social Networks*, 28 (2), 97-186.

Smith, S., Pederson-Gallagos, L. & **Riegle-Crumb, C.** (2002). "The training, careers, and work of PhD physical scientists: Not simply academic." *American Journal of Physics*, 70, 1081-1092.

Schneider, B., <sup>+</sup>Swanson, C.B. & **Riegle-Crumb, C.** (1998). "Opportunities for learning: Course sequences and positional advantages." *Social Psychology of Education*, 2, 25- 53.

#### **BOOK CHAPTERS AND ENCYCLOPEDIA ENTRIES (peer-reviewed)**

**Riegle-Crumb, C.**, Morton, K. & <sup>+</sup>Blanchard, S. (2020). "Developing STEM ambitions: An examination of inequality by gender and race/ethnicity," pp 69-89 in *Girls and women of color in STEM: Navigating the double bind*. Edited by B. Polnick, B. Irby, & J. Ballenger. Charlotte, NC: Information Age Publishing Inc.

**Riegle-Crumb, C.** (2019). "Gender inequality in education: Outcomes and experiences," pp 41-53 in *Education & Society*. Edited by T. Domina, B. Gibbs, L. Nunn & A. Penner. LA: University of California Press.

**Riegle-Crumb, C.**, <sup>+</sup>Blanchard, S. & Morton, K. (2018). "Gender and racial- ethnic differences in educational outcomes," pp 131-152 in *Handbook of the Sociology of Education in the 21<sup>st</sup> Century*. Edited by B. Schneider & G. Saw. New York: Springer International Publishing.

Wiseman, A.W., Baker, D., **Riegle-Crumb, C.** & Ramirez, F. (2009). "Shifting gender effects: Opportunity structures, institutionalized mass schooling, and cross-national achievement in mathematics, " pp 395-422 in *International Perspectives on Education and Society, Volume 10: Gender, Equality and Education from International and Comparative Perspectives*. Edited by D. P. Baker and A. W. Wiseman, Emerald Group Publishing Limited.

<sup>†</sup>Pearson, J. & **Riegle-Crumb, C.** (2007). “Gender and education,” pp 1-4 in Volume IV in *Blackwell Encyclopedia of Sociology*. Edited by G. Ritzer, Blackwell Publishing.

**Riegle-Crumb, C.** (2007). “Gendered achievements in science,” pp 449-455 in *Gender and Education*. Edited by B. Bank, Greenwood Press.

**Riegle-Crumb, C.** (2005). “The cross-national context of the gender gap in math and science,” pp 227-243 in *The Social Organization of Schools*. Edited by L. Hedges and B. Schneider, Russell Sage Foundation Press.

## RESEARCH REPORTS

**Riegle-Crumb, C.,** Muller, C, Frank, K. & Schiller, K. (2005). National Longitudinal Study of Adolescent Health: Wave III Education Data. Carolina Population Center, University of North Carolina at Chapel Hill.

## BOOK REVIEWS

**Riegle-Crumb, C.** (2021). Review of *Black, Brown and Bruised: How Racialized STEM Education Stifles Innovation* by Ebony McGee. *Teachers College Record*.

**Riegle-Crumb, C.** (2015). Review of *Gender Differences in Aspirations and Attainment: A Life Course Perspective*, edited by I. Schoon and J.S. Eccles. *Sex Roles*, DOI 10.1007/s11199-015-0531-8

**Riegle-Crumb, C.** (2009). Review of *Removing Barriers: Women in Academic Science, Technology, Engineering, and Mathematics*, edited by J. Bystydzienski and S. Bird. *American Journal of Sociology*, 114(4), 1231-1232.

**Riegle-Crumb, C.** (2005). Review of Affirmative Action is Dead: Long Live Affirmative Action, by Faye Crosby. *Contemporary Sociology: A Journal of Reviews*, 34(3), 249-50.

## RESEARCH GRANTS

2023-2026    **Title:** *Measuring and Changing STEM Teacher Stress to Promote Effectiveness and Retention*  
                  **Source:** National Science Foundation (Noyce)  
                  **Role:** Co-Principal Investigator (PI= David Yeager, co-PIs: Matt Giani, Jeremy Jamieon, Michael Marder, UT Austin)

- 2020-2026 **Title:** *Improving the Teaching of Genetics in High School to Avoid Instilling Misconceptions about Gender Differences*  
**Source:** National Science Foundation (EHR Division)  
**Role:** Co-Principal Investigator (Collaborative Multi-site Project with Andrei Cimpian (co-PI) at NYU and Brian Donovan (PI) at BCBS).
- 2018-2022 **Title:** *Next Generation Engineers: Examining the Pathways of Adolescent Females in SWENext*  
**Source:** National Science Foundation (EEC Division)  
**Role:** Principal Investigator
- 2018-2021 **Title:** *Using Quantum Computing to Enhance STEM Education*  
**Source:** Office of Naval Research  
**Role:** Co-Principal Investigator (PI=Brian LaCour, Advanced Research Laboratory (ARL) at UT Austin)
- 2018-2020 **Title:** *The Developing Aspirations of Girls of Color Towards Computer Science: A Comparative Examination of the Role of Teachers, Peers, and STEM Stereotypes*  
**Source:** Women of Color in Computing Collaborative, The Kapor Center, University of Arizona  
**Role:** Principal Investigator
- 2016-2019 **Title:** *Engineering Identity, its Predictors, and its Impact on Retention across Educational Stages.*  
**Source:** National Science Foundation (EEC Division)  
**Role:** Co-Principal Investigator ((PI= Borrego, Engineering Faculty at UT; Additional Co-PIs: Luis Martin (UT) and Carolyn Seepersad (UT))
- 2014-2020 **Title:** *The Role of Academic Achievement and Social Inclusion in Broadening STEM Participation: Intended and Actual Attainment at the Intersection of Gender and Race/Ethnicity.*  
**Source:** National Science Foundation (HRD Division)  
**Role:** Principal Investigator
- 2014-2020 **Title:** *Early Career Transitions into STEM Employment: Processes Shaping Retention and Satisfaction.*  
**Source:** National Science Foundation (DGE Division).  
**Role:** Co-Principal Investigator (PI=Jennifer Glass (UT))
- 2014-2019 **Title:** *Peer Influences on Adolescents' Self-concept, Achievement, and Future Aspirations in Science and Mathematics: Does Student Gender and Race Matter?*  
**Source:** National Science Foundation (HRD Division).  
**Role:** Co-Principal Investigator (PI=Nilanjana Dasgupta, Psychology Faculty at University of Massachusetts, Amherst)



- 2013-2015    **Title:** *Developing STEM Aspirations: An Examination of Contextual Influences and Inequality by Gender and Race/Ethnicity*  
**Source:** Spencer Foundation  
**Role:** Principal Investigator
- 2010-2016    **Title:** *UTeach Engineering: Teaching Secondary Teachers to Deliver Design-Based Engineering Instruction.*  
**Source:** National Science Foundation (DUE-0831811)  
**Role:** Senior Personnel (PI=Dave Allen, Engineering Faculty at UT)
- 2008-2011    **Title:** *STEM in the New Millennium: Preparation, Pathways, and Diversity.*  
**Source:** National Science Foundation (DUE-7570)  
**Role:** Co-Principal Investigator (PI=Chandra Muller, UT)
- 2009-2012    **Title:** *Evaluation of Sally Ride Science Curriculum*  
**Source :** Imaginary Lines/Sally Ride Science  
**Role:** Co-Principal Investigator (PI=Chandra Muller)
- 2008            **Title:** *The Spectrum of Racial/Ethnic Inequality in High School: Levels of Course-taking and School Segregation.*  
**Source:** Faculty Summer Research Grant (SRA), UT Austin  
**Role:** Principal Investigator
- 2005-2008    **Title:** *Gender Differences in Science and Math: Diversity and the Role of Social Context*  
**Source :** National Science Foundation (HRD-0523046)  
**Role:** Co-Principal Investigator (PI=Chandra Muller)
- 2005-2006.    **Title:** *Examining Inequality at the Intersection of Gender and Race/Ethnicity: High School Achievement and Post-Secondary Matriculation.*  
**Source:** Texas Higher Education Opportunity Project (with funds from the Spencer and Ford Foundations)  
**Role:** Principal Investigator
- 2000-2002    **Title:** *Levels of Gender Inequality*  
**Source:** American Educational Research Association (AERA) Research Grant  
**Role:** Principal Investigator
- 1998-2000    **Title:** *International Gender Inequity in Math and Science Education*  
**Source:** AERA Dissertation Grant  
**Role:** Principal Investigator

## ADVISORY BOARDS FOR EXTERNALLY FUNDED RESEARCH GRANTS

- 2019-2022    **Title:** *The Development of Children's Gender Stereotypes about STEM*  
                  **Source:** National Science Foundation  
                  Principal Investigator: David Miller, American Institutes of Research
- 2019-2022    **Title:** *Getting Through the Gateway: Can Corequisite Algebra Improve STEM Progress and Degree Attainment at Community and Technical Colleges?*  
                  **Source:** National Science Foundation  
                  Principal Investigator : Lauren Schudde, University of Texas at Austin
- 2018-2021    **Title:** *A Design Research Partnership to Expand and Improve High School Computer Science Education for Underrepresented Urban Youth.*  
                  **Source:** National Science Foundation  
                  Principal Investigator : Kimberly Hughes, UTeach, UT Austin
- 2018-2021    **Title:** *The Role of Community Resources in Mexican-Origin Children's STEM Education*  
                  **Source:** National Science Foundation  
                  Principal Investigator : Tama Leventhal, Tufts University
- 2016-2019    **Title:** *A Synthesis of Social Science Research on the Relationship of K-12 School Race, SES, and Immigrant Status Diversity on Two- and Four-Year College STEM Outcomes*  
                  **Source:** National Science Foundation  
                  Principal Investigator: Roslyn Mickelson, UNC Charlotte

## HONORS AND AWARDS

- 2025 Outstanding Reviewer, Educational Researcher
- 2025 Top Cited Article, Journal of Engineering Education
- 2024 Top Cited Article, Science Education
- 2023 Elizabeth Gibbs Teaching Fellow, UT Austin
- 2022 Outstanding Reviewer, American Educational Research Journal (AERJ)
- 2018 Dean's Fellow, College of Education, UT Austin
- 2017 University Diversity Mentoring Fellowship Award, UT Austin

## 2013 University of Texas Regents' Outstanding Teaching Award

### INVITED PRESENTATIONS

"The Social Construction of Gender Inequality in STEM Fields". Invited talk for Center for Research on Educational Opportunity (CREO) Center. *University of Notre Dame*. April 2023.

"Examining How Gender Inequality in STEM is Socially Constructed." Invited panelist for "Schools and Inequality" Program, *Aarhus University, Denmark*. Virtual presentation, December 2022.

"Racial Inequality in STEM Fields". Invited Panelist for "The State of Anti-Black Racism in U.S. Science, Engineering, and Medicine: A Workshop". *National Academies of Sciences, Engineering and Medicine*. Virtual convening, December 2021.

"The Social Construction of Gender Inequality in STEM Education." Invited talk for the Institute of Education Sciences (IES) Predoctoral Interdisciplinary Training program (PIRT) Proseminar Series, *Steinhardt School of Culture, Education, and Human Development, New York University*. Virtual convening, December 2021.

"What Research Tells Us About Supporting the STEM Ambitions and Success of Girls and Women of Color." Invited Presentation at the *National STEM Collaborative: Women of Color STEM Entrepreneurship Conference*, organized by the Center for Gender Equity in Science and Technology (CGEST). Virtual conference, March 2021.

"The Social Contexts of STEM Inequality." Invited Presentation at the *National Academy of Science, Board of Science Education*. Irvine, CA, January, 2019.

"Examining the Social Contexts of STEM Classrooms: Teachers, Peers and, and Gendered Messages." Invited Presentation at the *Gender and STEM Network Biennial Conference*, University of Oregon, August, 2018.

"What is Fundamental Research?" Invited panelist at the *National Science Foundation ECR PI Convening for Fundamental Research in STEM Education: Progress, Issues, & the Future*. Alexandria, VA., September 2017.

"Communities, Classrooms, and Peers: Examining How Local Contexts Shape Female Students' STEM Intentions." Invited Presentation at the *American Physical Society (APS) April Meeting*, Washington, D.C., January, 2017.

"Investigating the Power of Peers: Exclusionary and Inclusionary Messages about Gender and STEM Fields." Invited Presentation at the *Gender Development Research Conference (GDRC)*, San Francisco, CA, October 2016.

"Women in STEM: A Panel Discussion across Social, Engineering, and the Natural

Sciences.” Invited presentation at the *University of Texas at Austin*, Austin, TX, November, 2015

“Gender and Racial/Ethnic Inequality in STEM Fields”.

Invited presentation at the *American Association of University Women (AAUW) National Convening on Gender Equity in Engineering and Computing*, Arlington, VA, October 2015.

“Gendered Expectations: Examining how Peers and Teachers Shape Students’ Intent to Pursue STEM Fields.” Invited presentation to the *Center for Research on Educational Opportunity (CREO)*, *University of Notre Dame*, South Bend, Indiana, March 2015.

“Examining Inequality in STEM Fields: Patterns by Gender and Race/Ethnicity.” Invited presentation to the *Scientific Management Review Board, National Institute of Health (NIH)*, Arlington, VA. July, 2014.

“Who Enters and Exits the Sciences? Exploring Trends over Time by Gender, Race/Ethnicity, and Social Class.” Invited presentation at the *Curry Education Research Lectureship Series* (sponsored by a training grant from the Institute of Education Sciences (IES)), *University of Virginia*, Charlottesville, VA, March 2012.

“Exploring Gender Equity in Science from High School to College.” Invited presentation at the *University of Texas Physics Education Forum*, Austin TX, November 2011.

## PRESENTATIONS AT PROFESSIONAL MEETINGS

**Riegle-Crumb, C.**, Rosetto, Irene. (2024, August). Do Gender Egalitarian Beliefs Predict Educational Attainment, and Early and Mid-life Employment for Women and Men? Paper presentation at the 2024 *American Sociological Association (ASA) Annual Meeting*, Montreal, Canada.

**Riegle-Crumb, C.**, Donovan, B., Cimpian, A. (2024, May). How Does Genetics Education Effect Young People’s Gender Essentialist Beliefs? Paper presentation at the National Science Foundation (NSF) ECR Annual PI Meeting, Washington, DC.

**Riegle-Crumb, C.**, <sup>+</sup>Burgess, C., Nguyen, U. (2024, April). Considering Race and Critical Consciousness among Women College Engineers. Paper presentation at the 2024 *American Educational Research Association (AERA) Annual Meeting*, Philadelphia, PA.

**Riegle-Crumb, C.**, <sup>+</sup>Lyra, F., <sup>+</sup>Agarwal, R., Nguyen, U. (2024, April). L A “Chilly Climate” with Engineering Faculty: Implications for Women’s Engineering Identity and Thoughts About Leaving. Paper presentation at the 2024 *American Educational Research Association (AERA) Annual Meeting*, Philadelphia, PA.

**Riegle-Crumb, C.,** +Nguyen, U., Russo-Tait, T., & +Lyra, F. (2023, April). Examining Gender Essentialist Beliefs and their Association with Beliefs about Engineering Among College Engineering Majors. Paper presentation at the 2023 *American Educational Research Association (AERA) Annual Meeting*, Chicago, IL.

Nguyen, U., & **Riegle-Crumb, C.** (2023, April). Examining the Association between Undergraduate Women's Gender Identities and their Sense of Relatedness to Engineering. Paper presentation at the 2023 *American Educational Research Association (AERA) Annual Meeting*, Chicago, IL.

+Nguyen, U. & **Riegle-Crumb, C.** (2022, June). Examining the Association between Peer Support and Young Women's Engineering Identity and Major Intentions. Paper presented at the *American Society for Engineering Education Annual Conference*, Minneapolis, MN.

+Nguyen, U., & **Riegle-Crumb, C.** (2022, April). All STEM Women Are Not the Same? Unpacking the Gender Identities of Women in Engineering. Paper presentation at the 2022 *American Educational Research Association (AERA) Annual Meeting*, San Diego, CA.

**Riegle-Crumb, C.,** +Russo-Tait, T., +Nguyen, U., & Doerr, K. (2022, April). Exclusionary and Inclusionary Experiences in College Engineering Classrooms: Implications for Women with Different Racial Identities? Paper presentation at the 2022 *American Educational Research Association (AERA) Annual Meeting*, San Diego, CA.

+Nguyen, U., & **Riegle-Crumb, C.** (2022, March). Gender Atypical? Examining the Gender Identities of Women in Engineering. Paper presentation at the 2022 *National Association for Research in Science Teaching (NARST) Annual International Conference*, Vancouver, BC, Canada.

+Russo-Tait, T., **Riegle-Crumb, C.,** +Nguyen, U., & Doerr, K. (2022, March 27-30). Examining Exclusionary and Inclusionary College Classroom Experiences: Effects on Women in Engineering Majors by Race/Ethnicity. Paper presentation at the 2022 *National Association for Research in Science Teaching (NARST) Annual International Conference*, Vancouver, BC, Canada.

+Russo-Tait, T., **Riegle-Crumb, C.,** +Doerr, K., & +Nguyen, U. "Individualistic or Systemic? High School Girls Make Sense of Gender Inequality in Engineering." Paper presented at Strand 11, National Association for Research in Science Teaching (NARST) Annual International Conference. April, 2021; Virtual conference.

+Nguyen, U., **Riegle-Crumb, C.,** +Russo-Tait, T., & +Doerr, K. "Pushing Past or Defending the Gender Boundary in Engineering: Who Supports or Deters Girls' Aspirations?" Paper presented for SIG : Committee on Scholars and Advocates for Gender Equity in Education; American Educational Research Association (AERA). April, 2021; Virtual conference.

**Riegle-Crumb, C.,** +Russo-Tait, T., +Doerr, K., & Nguyen, U. "Understandings of Inequality: How Female Adolescents With Engineering Aspirations View Women's

Underrepresentation.” Paper presented for Sociology of Education SIG, American Educational Research Association (AERA) Annual Meeting, April 2021; Virtual Conference.

+Nguyen, U., & Riegle-Crumb, C. “Who is a Scientist? Counter-Stereotypical Views and the STEM Major Intentions of Black and Latinx Students.” Paper presented at the virtual conference: *Women of Color in Computing: Barriers & Solutions in K-12 & Higher Ed*. Hosted by the Women of Color in Computing Collaborative (WOCCC), Kapor Center, Oakland, CA, August 2020.

+Nguyen, U., & **Riegle-Crumb, C.** “Next Generation Engineers? Examining Factors that Shape Young Women’s Engineering Identity and Intentions.” Paper presented for SIG : Research on Women and Education, American Educational Research Association (AERA) Annual Meeting, San Francisco, CA. (scheduled for April 2020; conference called due to pandemic).

+Nguyen, U., & **Riegle-Crumb, C.** “Developing Aspirations of Girls of Color Towards Computer Science and Other STEM Fields: The Role of Counter-Stereotypical Beliefs about Scientists.” Paper accepted for presentation at 4<sup>th</sup> Annual National STEM Collaborative Conference, Women of Color in STEM Entrepreneurship, Honolulu, Hawaii (scheduled for March 2020; conference called due to pandemic).

**Riegle-Crumb, C.,** & +Peng, M. “Gendered Beliefs about Math Ability: Considering the Prevalence and Consequences of Counter-stereotypical Beliefs among Male and Female Adolescents.” Paper accepted for presentation at the 2020 Biennial Network Gender and STEM Meeting, Sydney, Australia (scheduled for July 2020 ; conference canceled due to pandemic).

**Riegle-Crumb, C.** & +Nguyen, U. “Developing Aspirations of Girls of Color Towards Computer Science: The Role of STEM Stereotypes, Teachers, and Peers.” Paper presented at the WOC in Computing Collaborative Convening, Kapor Center, Oakland, CA, July 2019.

**Riegle-Crumb, C.** & Morton, K. “Examining Students’ Gendered Beliefs about Math and Implications for College Major”. Paper presented for Sociology of Education SIG, American Educational Research Association (AERA) Annual Meeting, Toronto, Canada, April 2019.

Morton, K. & **Riegle-Crumb, C.** “How School Racial Composition Predicts Content Coverage in 8th Grade Algebra.” Paper presented for Mathematics Education SIG, American Educational Research Association (AERA) Annual Meeting, Toronto, Canada, April 2019.

**Riegle-Crumb, C.,** Morton, K. & +Nguyen, U. “The Effects of Inquiry-Based Pedagogy on Students’ Attitudes in Math: An Examination by Race/Ethnicity and Gender”. Paper presented at the 40th Annual Conference of the North American Chapter of the

International Group for the Psychology of Mathematics Education (PME- NA), Greenville, South Carolina, November 2018.

**Riegle-Crumb, C.** & +Patrick, A. "Examining Gendered Patterns in Engineering Identity among Undergraduate Students." Presentation for Division C, American Educational Research Association (AERA) Annual Meeting, New York, April 2018.

+Buontempo, J. & **Riegle-Crumb, C.** "Examining High School Math Teachers' Beliefs about Student Learning and their Pedagogical Practices." Paper presented at SIG-Research in Mathematics Education, American Educational Research Association (AERA) Annual Meeting, New York, April 2018.

**Riegle-Crumb, C.,** Morton, K. & +Nguyen, U. "Inquiry-Based Pedagogy and Middle School Students' Math Attitudes: An Examination by Gender and Race/Ethnicity." Presentation for SIG for Research in Mathematics Education, American Educational Research Association (AERA) Annual Meeting, New York, April 2018.

**Riegle-Crumb, C.** & +Russo-Tait, T. "Planning to Stay or Go: Examining Female Students' Occupational Plans in STEM by Race/Ethnicity". Presentation for SIG-Sociology of Education, American Educational Research Association (AERA) Annual Meeting, New York, April 2018.

**Riegle-Crumb, C.,** + Russo-Tait, T. & +Takasaki, K. "Examining the Factors that Predict Female Students' Occupational Plans in STEM." Paper presented at the American Sociological Association (ASA) Annual Meeting, Montreal, Quebec, Canada, August 2017.

+Buontempo, J., +Morton, K. & **Riegle-Crumb, C.** "The Effects of Perceptions of Teacher Equity on Students' Outcomes in Mathematics." Paper presented at SIG for Research in Math Education Paper Session, American Educational Research Association (AERA) Annual Meeting, San Antonio, TX, May 2017.

+Patrick, A. & **Riegle-Crumb, C.** "Examining the Spatial Skills of High School Engineering Students: Considering the Role of Both In-school and Out-of-School Experiences." Paper presented at Division C of American Educational Research Association (AERA) Annual Meeting, San Antonio, TX, May 2017.

+Morton, K., **Riegle-Crumb, C.** & +Buontempo, J. "Perceptions of Equity in the Classroom: How Teacher Practices Shape Students' Attitudes and Achievement in Math." Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Pacific Grove, CA, February 2017.

**Riegle-Crumb, C.,** +Morton, K. & +Blanchard, S. "Gendered Expectations: Examining How Peers Shape Students' Intent to Pursue STEM Fields." Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Asilomar, CA, February 2016.

**Riegle-Crumb, C. & +Buontempo, J.** "Shifting STEM Stereotypes? The Role of Teacher Gender and Peer Gender Composition in Shaping the Views of Male and Female Students." Paper presented at the American Education Research Association (AERA) Annual Meeting, Chicago, Illinois, April 2015.

+Blanchard, S., & **Riegle-Crumb, C.** "*Reconsidering the Role of Perceptions of Science in Underrepresented Students' Expectations to Major in Science Fields.*" Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Asilomar, CA, February 2015.

**Riegle-Crumb, C., King, B. & +Moore, C.** "Do they stay or do they go? Examining the association between gender composition of field and men's and women's decisions to switch college majors". Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Asilomar, CA, February 2013.

**Riegle-Crumb, C. & King, B.** "Does gender matter? Men and women's persistence in postsecondary fields of study." Paper presented at the American Education Research Association (AERA) Annual Meeting, Vancouver, BC, April 2012.

+Buontempo, J., & **Riegle-Crumb, C.** "Mindsets towards math: Exploring implications for gender equity." Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Asilomar, California, February 2012.

**Riegle-Crumb, C.** "Differing Perceptions of Ability, Equality, and Opportunity." Invited Discussant for Paper Session at the American Education Research Association (AERA) Annual Meeting, New Orleans, LA, April 2011.

**Riegle-Crumb, C., +King, B., Grodsky, E. & Muller, C.** "The More Things Change the More They Stay the Same? Examining Equity in Academic Preparation and Entry into STEM College Majors Over Time". Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Asilomar, California, February 2011.

**Riegle-Crumb, C. & +King, B.** "Challenging the White Male Advantage in STEM: New Evidence of College Major Patterns by Gender and Race/Ethnicity." Paper presented at the American Education Research Association (AERA) Annual Meeting, Denver, Colorado, April 2010.

**Riegle-Crumb, C. & +Humphries, M.** "Teacher Assessments of Students' Math Ability: Relying on Evidence or Stereotypes. Paper presented at the Sociology of Education Association (SEA) Annual Meeting, Asilomar, California, February 2010.

**Riegle-Crumb, C. & +King, B.** "Who Enters and Exits the Sciences? New Evidence Concerning Gender, Race/Ethnicity, and Field." Paper presented at the American Sociological Association (ASA) Annual Meeting, San Francisco, California, August



2009.

**Riegle-Crumb, C.** "More Girls Go to College: The Academic and Social Factors Behind the Female Postsecondary Advantage Among Hispanic and White Students." Paper presented at the American Education Research Association (AERA) Annual Meeting, San Diego, California, March 2009.

**Riegle-Crumb, C. & Grodsky, E.** "The Intersection of Course-taking and Test Scores: Differences by Students' Race/Ethnicity and School Context." Paper presented at the American Education Research Association (AERA) Annual Meeting, New York, March 2008.

**Riegle-Crumb, C. & Callahan, R.** "The Academic Achievement of Latino Youth: Exploring the Role of Friends, Generational Status, and Gender". Paper presented at the American Educational Research Association (AERA) Annual Meeting, Chicago, Illinois, April 2007.

**Riegle-Crumb, C. & Callahan, R.** "The Academic Achievement of Latino Adolescents: Gender, Generational Status and Peers." Paper presented at the American Sociological Association (ASA) Annual Meeting, Montreal Canada, August 2006

**Riegle-Crumb, C. & Callahan, R.** "Friendship Networks, Social Capital, and Immigrant Students' Academic Achievement." Paper presented at the Sociology of Education Association Annual Meeting, Monterey, California, February 2006.

**Riegle-Crumb, C.** "The Path Through Math: Course-taking and Performance at the Intersection of Gender and Race/Ethnicity." Paper presented at American Sociological Association Annual Meeting, Philadelphia Pennsylvania, August 2005.

Cavanagh, S. & **Riegle-Crumb, C.** "Transitions and Trajectories: Early Pubertal Timing and Girls' Academic Careers". Paper presented at the American Sociological Association Annual Meeting, Philadelphia, Pennsylvania, August 2005.

**Riegle-Crumb, C.** "Add Health: New Educational Data". Data Workshop at the American Sociological Association Annual Meeting. Philadelphia, Pennsylvania, August 2005.

**Riegle-Crumb, C.** "The Gender Gap in High School Physics: Examining the Context of School Communities". Paper presented at the American Education Research Association Annual Meeting, Montreal, Canada, April 2005.

**Riegle-Crumb, C.** "A Gender Gap in the Importance of Friendship for Academic Success: Data and Findings from the Adolescent Health and Academic Achievement Study (AHAA)." Paper presented at the University of Chicago Demography Workshop, December 2004.

**Riegle-Crumb, C.** "An Introduction to Data from the Adolescent Health and Academic Achievement (AHAA) Transcript Study". Methodology Session at the

Add Health User's Conference, Bethesda Maryland, July 2004.

**Riegle-Crumb, C.** "Measuring Equity in Advanced High School Science". Paper presented at the American Sociological Association Annual Meeting, Atlanta, Georgia, August 2003.

**Riegle-Crumb, C.** "High School Educational Experiences and the Transition to College: A Focus on Latino Students". Paper presented at National Academy of Science (NAS) Conference on Latino Education, Newport Beach, California, August 2003.

**Riegle-Crumb, C.** "Levels of Gender Inequality: The Importance of Objective and Subjective Factors" Paper presented at the American Sociological Association Annual Meeting. Anaheim, California, August 2001.

**Riegle-Crumb, C.** "International Gender Inequity in Math and Science Education: The Importance of Gender Stratification Across Generations". Paper presented at the AERA Grants Program Doctoral Conference. October 2000, Washington D.C.

**Riegle-Crumb, C.** "Re-thinking the Generation Gap: The Relationship Between Adult Women's Status and Girls' Math and Science Education in International Context". Paper presented at the American Sociological Association Annual Meeting. Washington, D.C., August 2000.

Swanson, C. & **Riegle-Crumb, C.** "Choosing the Right Path: Course Sequences and Educational Success During High School and Beyond." Paper presented at American Sociological Association Annual Meeting, San Francisco, CA, August 1998.

## **NATIONAL SERVICE**

2025- Associate Editor, *Sociology of Education*

2020-2025 External Reviewer for Promotion and Tenure  
Arizona State University; New York University; Northwestern University,  
Texas A&M University; University of California, Davis; University of  
California, Irvine; University of California, Santa Barbara; University of  
California, Riverside; University of Notre Dame; Vanderbilt University

2021-2024 Committee Member (elected)  
National Academies of Sciences, Engineering, and Medicine.  
*Equity in K-12 STEM Education: Framing Decisions for the Future*

2022-2025 Editorial Board Member  
*Educational Researcher*

2022-2024	Grant Reviewer <i>Howard Hughes Medical Institute (HHMI)</i>
2019-2025	Editorial Board Member <i>American Educational Research Journal</i>
2020-2021	Chair, David Lee Stevenson Best Graduate Student Paper Award Section on Sociology of Education, American Sociological Association
2018-2021	Editorial Board Member <i>Journal of Research in Science Teaching</i>
2017-2018	Chair, Section on Sociology of Education American Sociological Association
2016-2017	Chair-Elect and Council Member, Section on Sociology of Education American Sociological Association
2015-2017	Board Member, Sociology of Education Association (SEA)
2014-2016	Chair, Sociology of Education Special Interest Group (SIG) American Educational Research Association (AERA)
2014-2016	Invited Member, Spencer Foundation, Small Grants Review Board
2013-2015	President, Sociology of Education Association (SEA)
2013-2016	Committee on Scholars & Advocates for Gender Equity in Education American Educational Research Association (AERA)
2013-2014	Chair of Nominating Committee, Section on Sociology of Education American Sociological Association
2012-2014	Editorial Board Member <i>Sociology of Education</i>
2011-2013	Treasurer, Sociology of Education SIG American Educational Research Association (AERA)
2012	Graduate Student Paper Committee, Sociology of Education SIG American Educational Research Association (AERA)
2011	Program Co-Chair for Section on Sociology of Education, American Sociological Association (ASA) Annual Meeting
2008-2011	Sociology of Education Section Council American Sociological Association (ASA)

- 2007-2009 Board Member, Sociology of Education Association (SEA)
- 2007, 2017 Invited Reviewer for the Institute of Education Statistics, National Center of Education Statistics (NCES)
- 2003-present Invited Reviewer for National Science Foundation (NSF)
- 1997-present Peer reviewer: *American Educational Research Journal (AERJ)*, *AERA Online*; *American Journal of Education (AJE)*, *American Journal of Sociology (AJS)*, *American Sociological Review (ASR)*, *Anthropology and Education Quarterly (AEQ)*, *Bulletin of Economic Research*, *Comparative Education Review*, *Contemporary Sociology*, *Educational Evaluation and Policy Analysis (EEPA)*, *Educational Researcher (ER)*; *Frontiers in Psychology*; *International Journal of STEM Education*; *Journal of Teacher Education*, *Journal of Research on Adolescence (JRA)*, *Journal of Research for Mathematics Education (JRME)*; *Journal of Research in Science Teaching (JRST)*; *Journal of Women and Minorities in Science and Engineering*; *Learning and Individual Differences*, *Personality and Social Psychology Bulletin*; *Proceedings of the National Academies of Science*; *Science Advances*; *Social Sciences*; *Social Science Research*; *Science Education*, *Sex Roles*, *Sociology of Education (SOE)*, *Social Forces*, *Sociological Perspectives*, *Social Problems*, *Social Psychology Quarterly (SPQ)* and *Urban Education*.

## **UNIVERSITY SERVICE**

- 2021-2024 Graduate School Continuing Fellowship Review Committee, *UT Austin*
- 2019-2020 Graduate Education Task Force, *UT Austin*
- 2014-2017 Faculty Grievance Committee, *UT Austin*
- 2014-2015 Campus Conversation Faculty Working Group on Curriculum, *UT Austin*
- 2009-2013 Admissions and Registration Standing Committee, *UT Austin*  
Chair (2012-2013); Vice Chair/Chair Elect (2010-2012)
- 2009-2011 Faculty Council, *UT Austin*

## **COLLEGE AND DEPARTMENT SERVICE**

- 2021-2022 Co-Chair, Faculty Search Committee, STEM Education, *UT Austin*
- 2020-2021 Member, Faculty Search Committee, College of Education  
Interdisciplinary Search for Scholar of Equity in Postsecondary  
Access, *University of Texas, Austin*
- 2020 Chair, Faculty Committee on Re-Appointment of Chair, College of  
Education, *University of Texas, Austin*
- 2020-2021 Co-Chair, Faculty Search Committee, STEM Education Search  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2017- Member, College of Education Research Courses Committee,  
*University of Texas, Austin*
- 2016-2017 Chair, Faculty Search Committee, STEM Education Search  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2016- Member, Executive Committee  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2013- Graduate Adviser, STEM Education  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2013- Member, Graduate Program Area Coordinators (GPAC) Committee  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2015-2016 Member, Faculty Search Committee, STEM Education Search  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2015-2016 Chair, Foundation and Common Courses Committee  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2014-2015 Member, Search Committee for Director of SMARTER (Statistics,  
Measurement and Research Design Techniques in Educational  
Research)  
College of Education, University of Texas at Austin
- 2013-2014 Chair, Faculty Search Committee, STEM Education Search  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2012-2013 Graduate Studies Committee (GSC) Secretary, STEM Education  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2011- Chair, Quantitative Sub-Committee  
Foundation and Common Courses Committee  
Department of Curriculum and Instruction, *University of Texas, Austin*

- 2010-2012 Undergraduate Fellowship Committee  
Science and Math Education Program Area  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2009-2012 UTeach Student Appeals Committee  
Colleges of Education & Natural Sciences, *University of Texas, Austin*
- 2009-2011 Fellowships and Awards Committee  
Chair (2010-2011)  
Department of Curriculum and Instruction, *University of Texas, Austin*
- 2009-2010 UTeach Steering Committee  
Colleges of Education & Natural Sciences, *University of Texas, Austin*
- 2006-2008 Faculty Advisor to Research Project : “Unbundling Youth, Family and  
Community Involvement in College Access: On the Ground in Austin,  
Texas.” Funded by the Bill and Melinda Gates Foundation