

Daphne Martschenko, PhD

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RESEARCH INTERESTS

Postgenomic Era; (Bio)ethics; ELSI Research; Genetics and Society; Racial and Socioeconomic Inequality; Responsible Conduct of Research; Mixed-methods

AREAS OF TEACHING COMPETENCE

ELSI; Responsible Conduct of Research; Science, Technology, and Society; Genetics and Society; Sociology; Sociology of Education; Classical/Modern/Critical Social Theory; Mixed-methods; (Bio)ethics

SKILLS

Mixed-methods Research; Thematic Analysis; Nvivo Qualitative Software; Secondary Data Analysis; Descriptive Statistical Analyses and Regression; R Statistical Programming; Russian (Intermediate-Advanced); Modern Standard Arabic (Classroom-Study); Public Speaking; Media Trained

EDUCATION

Cambridge University: Magdalene College

Cambridge, UK

- **PhD**, July 2019: Education

Dissertation: [The New Borderland: A Mixed-methods Examination of Teacher Perceptions of Intelligence, Race, and Socioeconomic Status in Relation to Behavior Genetics](#)

Advisors: Anna Vignoles (University of Cambridge), Jo-Anne Dillabough (University of Cambridge)

Examiners: Prudence Carter (University of California Berkeley), Ben Alcott (University of Cambridge)

- Culture, Politics, and Global Justice Research Group (CPGJ); Race, Empire, and Education (REE) Research Collective and Reading Group

Cambridge University: Homerton College

Cambridge, UK

- **MPhil** (with distinction), October 2015: Politics, Development, And Democratic Education.

Thesis: *Survival of the 'Gifted and Talented' The Narrative of Minority Underrepresentation, a Mixed-Methods Approach*

Stanford University

Stanford, CA

- **B.A.** (with distinction), June 2014: Anthropology (medical); Slavic Studies
Phi Beta Kappa; GPA 3.88/4.0

RESEARCH/FIELD EXPERIENCE

Postdoctoral Research Fellow, Stanford University

August 2020-Present

- Identify ethical, legal, and social considerations arising from genetics research and clinical practice and related policy recommendations to address these issues.
- Advocate for and facilitate cross-disciplinary research efforts that promote socially responsible communication of social and behavioral genomics.

Steering Committee, The Hastings Center & Geisinger

March 2020-Present

- Steering committee member for interdisciplinary and collaborative three-year grant project entitled "Wrestling with Social/Behavioral Genomics: Risks, Potential Benefits, and Ethical Responsibility"
- Consider the risks and potential benefits of social/behavioral genomics research, the history of eugenics and scientific racism, and health equity
- Lead community engagement aspects of the project, including the formation of a community advisory board

Team Lead, University of Chicago

August 2019-September 2020

- Oversaw team conducting research and data analysis at the Center for RISC - an innovation lab committed to addressing some of society's most intractable issues; Under the mentorship of Professor Steven Levitt, coauthor of *Freakonomics*

- Served as lead on project to introduce data science into K12 math curriculum and project working with Cook County Sheriff's Office
 - Coordinated day-to-day logistics and enhance office communication and workflow
- Research Analyst**, University of Chicago *2019-August 2019*
- Conducted research and analysis at the [Center for RISC](#)
 - Employed radical innovation to bring new perspectives to addressing pressing social issues in education, health care, and criminal justice reform; Worked with non-profits and government stakeholders to translate ideas into reality. Key projects included:
 - Advocating for teaching data science in school-based education; conducting secondary data analysis of efficacy of current US mathematics education for workforce productivity and a survey of American adults experiences using high school math after graduation
 - Balancing advancements in technology with key ethical considerations to improve individual well-being and mental health
- Doctoral Dissertation Fieldwork**, *September 2016-May 2017*
- [The New Borderland: A Mixed-methods Examination of Teacher Perceptions of Intelligence, Race, and Socioeconomic Status in Relation to Behavior Genetics](#)
- Mixed-methods fieldwork: Focus groups in a PreK-8 public charter school on the West Side of Chicago, IL and a PreK-8 private gifted education school in north-west suburbs of Chicago, IL; National survey of PreK-12 teachers in the U.S.; Interviews with behavior genetics researchers and bioethicists in the US, UK, New Zealand, Australia, and Europe
- Research Assistant**, *Cambridge University*, Cambridge, UK *May 2018-September 2018*
- Collated data in preparation for analysis on LEGACY project, a multi-focus research study that explores learning gain in higher education through different longitudinal and cross-sectional mixed methodologies
- MPhil Dissertation Fieldwork**, *January 2015-June 2015*
- Survival of the 'Gifted and Talented' The Narrative of Minority Underrepresentation, a Mixed-Methods Approach*
- Mixed-methods fieldwork: Interviews with teachers and administrators in Virginia about racial-minority underrepresentation in gifted education; Semiotic Methods; Secondary Data Analysis and Program Evaluation

ACADEMIC PUBLICATIONS

Published

- **Martschenko, D.** (2020). Embodying Biopolitically Discriminate Borders: Teachers' Spatializations of Race and Power. *Discourse: Studies in the Cultural Politics of Education*
<https://doi.org/10.1080/01596306.2020.1813089>
- **Martschenko, D.** (2020). 'The Train Has Left the Station': The Arrival of the Biosocial Sciences in Education. *Research in Education*
<https://journals.sagepub.com/doi/10.1177/0034523720914636>
- **Martschenko, D.** (2019). 'DNA Dreams' Teachers' Perceptions on the Role and Relevance of Genetics for Education. *Research in Education*
<https://journals.sagepub.com/doi/full/10.1177/0034523719869956>
- **Martschenko, D.** (2019). *The New Borderland: A Mixed-Methods Examination of Teacher Perceptions of Intelligence, Race, and Socioeconomic Status in Relation to Behavior Genetics* (Doctoral Thesis). University of Cambridge
<https://doi.org/10.17863/CAM.40448>
- **Martschenko, D.**, Domingue, B., Trejo, S. (2019). Genetics and Education: Recent developments in the context of an ugly history and an uncertain future. *AERA Open*
<https://journals.sagepub.com/doi/full/10.1177/2332858418810516>

Submitted

- Kweon, H., Burik, C. A. P., Linner, R. K., Vlaming, R. de, Okbary, A., **Martschenko, D.**, Harden, K. P., DiPrete, T. A., & Koellinger, P. D. (2020). Genetic Fortune: Winning or Losing Education, Income, and Health. In *Tinbergen Institute Discussion Papers* (No. 20-053/V; Tinbergen Institute Discussion Papers). Tinbergen Institute. <https://ideas.repec.org/p/tin/wpaper/2020053.html>
- **Martschenko, D.** (2021). Normalizing Race in Gifted Education: Public Education, Genomics, and Spaces of White Exceptionalism. *Sociological Theory*
- **Martschenko, D.** (2021). The Elephant in the Room: Social Responsibility in the Production of Sociogenomics Research. *Biosocieties*
- Williamson, B., Jasinska, K., **Martschenko, D.**, et. al (2021). Individual Differences. UNESCO Mahatma Gandhi Institute for Education for Peace and Sustainable Development (MGIEP)

In Progress

- **Martschenko, D.** (2021). Adversarial Collaboration: Interrogating Complicities and Challenges in a Historically-Burdened Field. *Sociology of Health and Illness*
- **Martschenko, D.** (2021). 'Different Signs in Different Students': Minority Underrepresentation in Gifted Education. *Critical Studies in Education*

SELECT MEDIA PUBLICATIONS

Hastings Center Bioethics Forum

- January 2020: [Transcending Borders in the Ethical Oversight of Human Genome Editing](#)

BOLD-Blog

- May 2019: [What does genetics mean for educational equity?](#)

Faculty of Education Research Students' Association

- January 2019: [The Challenges of Research Access and Accessible Research](#)
- November 2017: [Race, Education, and Empire: A Research Collective](#)
Reposted by The Sociological Review
- February 2017: [Historically Burdened Concepts in Education](#)

Culture, Politics, and Global Justice (2019)

- January 2019: [Breaking Down Academic Silos: An Example From a Historically-burdened Field](#)

The Independent, London, United Kingdom

- January 2018: [The IQ Test Wars: Why Screening for Intelligence is Still So Controversial](#)
- Republished from The Conversation UK October 2017

The Conversation UK, London, United Kingdom

- October 2017: [The IQ Test Wars: Why Screening for Intelligence is Still So Controversial](#)
- January 2017: [Biosocial Science: The murky history of the nature and nurture debate](#)
- July 2016: [Can genes really predict how well you'll do academically?](#)
- April 2016: [Genetics: What it is that makes you clever and why it's shrouded in controversy](#)

Center for Genetics and Society, Berkeley, California

- October 2016: [Collaborative Science on Historically Burdened Concepts: Intelligence, Genetics, Race & Socio-economic Status](#)

SELECT INVITED SPEAKER EVENTS

ELSI Friday Forum, CERAS ELSI Hub

December 2020

- Panel participant in "Addressing Racism in Research and Clinical Practice" alongside Rhea Boyd, MD and Robert D. Steiner, MD

Race in Science, Technology, and Medicine, Stanford University

October 2020

- Invited speaker series; Discussed the social and ethical implications of social and behavioral genomics for public education

Summer DEMSEM: Population Science in Critical Perspective, University of Wisconsin

May 2019

- Seminar Presentation: The New Borderland: Genetics at the Schoolhouse Door
- Panel Participant: The Use and Production of Demographic Research

Polygenic Prediction and Its Application, Social Science Genetic Association Consortium

November 2018

- Presentation: "Adversarial Collaboration in the Context of an Ugly History and an Uncertain Future"

SELECT CONFERENCE PRESENTATIONS AND PAPERS

American Society for Bioethics & the Humanities

October 2020

- **Panel** (organizer): Polygenic Scores and Equitable Education - Threats and Possibilities

American Educational Research Association Annual Meeting, AERA, New York, USA

April 2018

- **Symposium** (organizer): "Dystopian DNA? Public Education, Genetics and the Popular Imagination" including Prudence Carter, Oliver Rollins, and Claire Crawford.
- **Formal Paper**: "DNA Dreams: Behavior Genetics and the Re-inscription of Bio-determinism in Education."

Comparative and International Education Society, CIES, Mexico City, MEX

March 2018

- **Symposium** (co-organizer): "Risk, Nation And The 'Stranger': Mapping The Cartographies And Policies Of Exclusion And Segregation In Public Educational Spaces"
- **Formal Paper** (unable to attend): "Normalizing Race in Gifted Education Through Biopower: Public Education, Segregation, and Spaces of White Exceptionalism."

- Symposium investigated against a background of rising xenophobia, austerity, and global political conflict, the experiences, perceptions and negotiations of an array of education stakeholders who are negotiating these forces, and work in educational institutions with colonial histories.
- Race, Empire, and Education**, *University of Cambridge Faculty of Education*, Cambridge UK February 2018
- **Panel** (organizer): “What does it mean to be human? The crisis of humanism in education.”
 - **Formal Paper**: “Genetics and Popular Imagination.”
- Social Theory Beyond Whiteness**, *British Sociological Association*, Cambridge, UK September 2017
- **Formal Paper**: “Decoloniality” panel session: “Normalizing Race in Gifted Education Through Biopower: Public Education, Segregation, and Spaces of White Exceptionalism.”
- Kaleidoscope Conference**, *University of Cambridge Faculty of Education*, Cambridge, UK June 2017
- **Formal Paper**: “Teacher philosophies on student ability and the relevance of genetics for school-based education.”
- National Association of Fellowship Advisors**, *Cambridge University*, Cambridge, UK May 2016
- **Research Presentation** to the National Association of Fellowship Advisors UK Tour group.

SELECT MEDIA APPEARANCES

- The Genetics Podcast**, Forthcoming
- Discuss social and behavioral genomics on education-related behaviors and outcomes and how to enact socially-responsible communication of research findings.
- Washington Post**, December, 2020
- [Algebra II just doesn't add up when you figure how little it means to most students](#)
- Freakonomics Radio**, October 2019
- [America's Math Curriculum Doesn't Add Up](#) (Ep. 391) discusses the need for data science education in K12 math curriculum and strategies for bringing about change
- Nature**, October, 2019
- [The promise and peril of the new science of social genomics](#)
- Science Daily**, February, 2019
- [As genetic data expand, researchers urge caution in how predictors of education outcomes are used](#)
- This Cambridge Life**, May 2018
- [The star rower whose research examines teachers' perceptions of intelligence](#)
- Drive Time Podcast**, Voice of Islam April 2018
- [IQ Tests- How Intelligent Are You?](#) segment discusses the ugly history behind the study of intelligence and IQ testing and historical and current uses of IQ tests in a segment titled
- Anthill Podcast**, The Conversation UK September 2018
- [Inheritance](#) discusses the ugly history behind the study of intelligence and the necessity of adversarial collaboration
- Afternoon Drive Show**, TalkRadio UK February 2018
- Interviewed about the ugly history behind the study of intelligence and IQ testing and historical and current uses of IQ tests
- BBC Sport** March 2016
- [Boat Races 2016: Daphne Martschenko has travelled a long way to reach Cambridge](#)

UNIVERSITY SERVICE

- Organizer**, *Race, Empire, and Education Research Collective* January 2017-Present
- Organize reading list, term calendar, and session facilitators for [research collective](#) interested in the role of race and empire within education
- Co-founder**, *International Black Radicalism Research Group*, Cambridge, UK May 2018-June 2019
- Co-founded graduate [research group](#) funded by the Cambridge University Centre for Research in the Arts, Social Sciences, and Humanities.
 - Organize bi-weekly reading groups and speaker events focused on the historical and present outlook of international black radicalism.
- Workshop Coordinator**, *Cambridge University*, Cambridge, UK November 2014
- Organized and led an open methodologies workshop on racial disparities in education for Politics, Development, and Democratic Education MPhil; applied critical social and race theory.

TEACHING / ADVISING EXPERIENCE

- Instructor**, *Ringle English Tutoring*, Seoul, KR November 2016-January 2019

- Instruct English to business professionals and university students from South East Asia through 1:1 online classes; offer essay and CV editing services.

Instructor, *Air Tutors*, Los Angeles, USA *April 2018-October 2018*

- Tutor Los Angeles area high school students in Sociology and English through 1:1 online classes.

Teaching Assistant, *Cambridge University Faculty of Education*, Cambridge, UK *October 2017-June 2018*

- Instructed “Introduction to Sociology Part I” and “Introduction to Sociology Part II” courses.
- Worked to develop students’ understandings of classical sociological theorists in Part I and intersectional, feminist, and decolonial sociological frameworks in Part II.

Advisor, *Partners in Academic Excellence*, Stanford, USA *September 2012-June 2014*

- Oversaw incoming freshmen undergraduate students at Stanford University in their transition to collegiate-level academics and athletics.

Advisor, *Black Recruitment and Orientation Committee*, Stanford, USA *September 2012-June 2014*

- Mentored incoming racially-defined minority freshmen undergraduate students at Stanford University in their transition to the academic, social, and cultural environment of Stanford.

ORGANIZATION & LEADERSHIP

Director and Committee Member, *Camp Phoenix*, Oakland, CA *Summer 2013-Present*

- Serve on Marketing and Analysis and Program Evaluation committees of [Camp Phoenix](#), a non-profit academic sleep-away summer camp for low-income youth in the Bay Area; Analyze funding and donor data and evaluate the impact of Phoenix’s academic programming on student achievement.
- Worked as Summer Director in 2018, overseeing a staff of 50 and a cohort of 80+ children; Oversaw program finances, scheduling, staff training, and communications.
- Employed as a counselor (2013), senior counselor and teaching assistant (2014-15), Operations Director (2016).

Special Issue Editor, *Research in Education Journal* *June 2018-August 2020*

- Guest edited Special Issue [Education, Biosocial Sciences, and the Popular Imagination](#). The issue examines the threats and possibilities to equitable public education posed by contemporary research in the biosocial sciences.

President, *Cambridge University Women’s Boat Club*, Cambridge, UK *May 2017-June 2018*

- Led the Cambridge University Women’s Boat Club in preparation for 2018 Boat Race against Oxford.
- Oversaw rowing program, club administration, fundraising and media communications.

Captain, *Stanford University Women’s Rowing*, Stanford, California *May 2013-June 2014*

- Led Stanford Women’s Rowing to its first Pac-12 Championship
- Oversaw program culture and ethos

CURRENT AFFILIATIONS

American Society for Human Genetics (ASHG)

American Society for Bioethics and Humanities (ASBH)

- *Affinity Groups*: Ethical, Legal & Social Implications; Race & Culture/Ethnicity

British Educational Research Association (BERA)

American Educational Research Association (AERA)

- *SIG Affiliations*: Social Context of Education; Critical Examination of Race, Ethnicity, Class, and Gender in Education; Mixed Methods Research; Survey Research; Research on Giftedness, Creativity, and Talent; Survey Research

GRANTS, FELLOWSHIPS, HONORS

2018	Visiting Scholar, <i>Hastings Center and Yale Interdisciplinary Center for Bioethics</i>
2015-18	Schultz Bursary Award, Cambridge Trust Scholarship, <i>Cambridge University</i>
2017	Bye-Fellowship Finalist, <i>Magdalene College, Cambridge University</i>
2015	Santander Award for MPhil Distinction, <i>Cambridge University</i>
2014-15	Horobin Award, <i>Homerton College, Cambridge University</i>
2014	Phi Beta Kappa, NCAA Postgraduate Scholarship, Donald M. Kennedy Award for Academic and Athletic Excellence, Pac12 Champion <i>Stanford University</i>
2012-14	Pacific Coast Conference (Pac-12) All-Academic Rowing Team, Collegiate Rowing Coaches Association Scholar Athlete Award
2012, 2014	First Team All American (Rowing), First Team All-West Region, Pac-12 First Team
2011-14	Dean’s Award for Academic Excellence, <i>Stanford University</i>