

## Virtual Visiting Scholars

**2024-2025**



**Autumn Asher BlackDeer, PhD**  
Assistant Professor at the University of Denver

*Institutional Pushout of Women Faculty of Color in STEM: A Meta-Synthesis of Counterstories*

While the majority of research on women of color in STEM has focused on lack of representation, even less is known about retention – or the lack thereof. Institutional pushout is the phenomenon in which women of color are systematically pushed out of their faculty positions or pulled to better opportunities elsewhere, both of which represent failures in retention. Through an intersectional qualitative meta-analysis, this project illuminates the lived experiences and counterstories of women faculty of color within STEM academia to develop scientific understanding of the factors contributing to pushout and the process of how this pushout occurs.



**Kilan Ashad-Bishop, PhD**  
Assistant Professor at the University of Miami and Co-Founder of STEMNoire

*Bridging the Gap: A Meta-Synthesis on the Experiences and Retention of Black Women in Academic STEM Research Careers (Collaborative Project with Dr. Arielle Miller)*

This study examines research on Black women in doctoral STEM education to determine the factors influencing their decisions to pursue academic research careers. Using thematic synthesis and guided by community cultural wealth and positionality theory, it aims to uncover systemic and interpersonal challenges contributing to their attrition from academic STEM research careers post-PhD. The study explores how perceptions of institutional climate, barriers, and support structures influence career choices. By elucidating key themes, the findings will inform targeted interventions to advance equity in STEM by enhancing the recruitment, retention, and advancement of Black women in the STEM professoriate.



**Arielle Miller, PhE, PE**  
Research Scientist at CORE Futures Lab at Howard University

*Bridging the Gap: A Meta-Synthesis on the Experiences and Retention of Black Women in Academic STEM Research Careers (Collaborative Project with Dr. Kilan Ashad-Bishop)*

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**Karen Colbert**

General Education Department Chair at Keweenaw Bay Ojibwa Community College

*Two-Eyed Seeing: Leveraging Tribal College Identity and STEM Culture to Understand Gender Equity*

This project examines how the unique identities and mission statements of Tribal Colleges and Universities (TCUs), deeply rooted in Native cultures, languages, and traditions, influence gender equity among faculty in STEM fields. Although 52% of TCU faculty are female, STEM courses are predominantly taught by male faculty who are non-native. Utilizing the Two-Eyed Seeing framework, this meta-synthesis will identify culturally responsive strategies and highlight the unique experiences of TCU faculty. By addressing systemic issues and integrating Indigenous perspectives, the research aims to provide actionable recommendations to enhance gender equity in TCU STEM departments and serve as a framework for other institutions.



**Chanda Prescod-Weinstein, PhD**

Associate Professor at University of New Hampshire

*The Cosmos is a Black Aesthetic*

This meta-synthesizes that ultimately forms part of the academic-trade crossover book, *The Cosmos is a Black Aesthetic*. The book argues that part of how Black people formulate a sense of self is through exploration of the cosmos at all scales, leading to a cosmic aesthetic as a central theme in Black knowledge production. The book also explores science as a Black episteme and what it means to bring Black ethical sensibilities into physics/astronomy. This argument requires meta-analyses of scholarship about racialized and other ascribed physicist and astronomer identities.

## 2023-2024



**Brooke Coley, PhD**

Assistant Professor at Arizona State University Polytechnic and Founding Executive Director at Center for RARE JUSTICE

*Racing Against the Clock: A meta-analysis of publication timelines across STEM equity research in STEM education outlets*

The role of metrics is quite established in the tenure and promotion process with research, teaching, and service servicing as the primary realms for which individuals are evaluated. As it relates to research, publications play a significant role in the attainment of tenure and promotion to associate faculty ranks. This work conducts a meta-analysis of peer-reviewed journal manuscripts from 2019-2024 and investigates a specific nuance of publication in seeking to determine how topical area along the continuum of equity work influences timeline to publication.



**Jessica Gold, PhD**

Postdoctoral Researcher at Northeastern University

*Bringing the people back in: a meta-analysis of equity work(ers) in academic institutions*

Analyzing meta-data and text from academic journals, higher education news outlets, and national news sources, this project investigates how and which equity workers in higher education institutions are represented in published literature aiming to reveal trends and gaps in visibility.

## 2022-2023



### **Erin Winterrowd, PhD**

Associate Professor of Psychology and Director of the Women's and Gender Studies Program at Regis University

#### *Academic Motherhood: A Mixed-method Review of the 'Child Penalty' for Women of Color in STEM*

One factor deterring junior scientists from pursuing careers in academia is the perception that women in STEM must compromise between family and career goals. But is this still the case? The attention to work-family navigation in the academy has only heightened since the beginning of the COVID-19 pandemic as gender and racial inequities have been laid bare. The current project aims to take advantage of this attention to working mothers and gendered racism in higher education by summarizing the recent literature on the impact of academic motherhood, particularly for women of color, on success as a scientist.



### **Sue Rosser, PhD**

Provost Emerita at San Francisco State University

#### *Towards a Better Understanding of the Experiences of FB/FT STEM Faculty: A Systematic Review and Qualitative Meta-synthesis of the Literature through Intersectional Lenses of Gender and Race/Ethnicity*

Limited research has focused on the experiences of foreign-born/foreign-trained (FB/FT) faculty compared to the United States-born/United States-trained (USB/UST) faculty, and even fewer have used the intersectional lens of gender to explore issues faced by FB/FT women faculty compared to either FB/FT men faculty or USB/UST women faculty in STEM departments. This systematic review and meta-synthesis of extant qualitative literature on FB/FT faculty using intersectional lenses of gender and of race/ethnicity should provide valuable information that might be used to determine policies and practices tailored to better enhance inclusion, career success and retention of both FB/FT and USB/UST faculty of all genders and race/ethnicities.

## 2021-2022



### **Dawn Culpepper, PhD**

Associate Director and Research Assistant Professor at University of Maryland

#### *Advocates, Allies, or Bystanders: Applying Intersectional Perspectives to Bystander Intervention Trainings in the Academic Workplace*

Merely raising individual awareness of implicit bias can reinforce, rather than mitigate, its impact in the academic workplace. Many ADVANCE programs have launched bystander intervention programs, or trainings aimed at giving faculty members from majority groups (i.e., individuals who identify as White and/or men) skills and strategies to disrupt gender bias. Yet, questions about the goals, content, and potential application of such interventions remain. The goal of this qualitative meta-synthesis is to consider the potential limitations and possibilities of developing bystander intervention trainings with an intersectional lens. Drawing from a vast literature on empirical studies of bystander interventions and allyship in fields like sociology, social psychology, behavioral economics, and social justice education, this synthesis will provide insights to practitioners and researchers about how to develop, implement, and study intersectionally-minded bystander engagement programs.



**Rachele Hendricks-Sturup, DHSc**

Research Director of Real World Evidence at Duke-Margolis Center for Health Policy

*Industry-academia Partnerships in STEM: A Meta-synthesis of Literature and Evidence Gaps on Gender and Gender Intersectionality*

Industry-academia partnerships are a paradigm of and pathway to success for many academics in science, technology, engineering, and math (STEM). Yet, some studies have exposed a significant gender gap in industry-academia partnerships, creating the need to conduct a systematic literature review to describe evidence and evidence gaps on the role of gender and gender intersectionality within industry-academia partnerships in STEM. Dr. Hendricks-Sturup's project consists of meta synthesis of scholarly literature to identify, define, and understand underlying themes at the intersection of gender and industry-academia partnerships in STEM and examine how those themes exist or might vary across various STEM disciplines ("research topic").



**Rodica Lisnic, PhD**

Sociologist in the Department of Sociology and Criminology at the University of Arkansas

*Strategies of Persistence among Women of Color in STEM: A Meta-Ethnography of Qualitative Findings*

The purpose of this project is the explorative compilation of persistence strategies women of color in STEM use to navigate the tenure and promotion processes. This study focuses on intersectional, and inter-ethnic differences in persistence strategies by analyzing and interpreting findings from literature about how Black, Asian, Latina, and Indigenous women faculty persist despite systemic barriers in STEM fields. The findings will be interpreted through the prisms of gendered and racialized organizations, and intersectionality frameworks. Meta-ethnography will be used as a methodological tool to analyze 46 publications collected through the Systematic Literature Review (SLR) protocol covering 14 bibliographic databases representing various disciplines. The analytical interpretation of the findings will subsequently guide formulation of policy recommendations to assist higher education institutions in attracting and retaining women of color faculty in STEM fields.

## 2020-2021



**Ramón Barthelemy, PhD**

Assistant Professor at University of Utah in Salt Lake City

*LGBT+ Faculty and Students in STEM: Policies to Support Success and Inclusion*

Historically, gender and sexual minority (GSM) and LGBT+ persons have been excluded from many discourses, analyses, and research conducted on issues of gender. This dates back to the beginning of the women's rights movement where lesbian and transgender women were explicitly excluded from activism and policy advocacy. This meta-synthesis offers an important resource for future work by combining and integrating the existing disparate work on GSM persons in STEM with the larger education and workforce literature.





**Ramon Goings, EdD**

Assistant Professor at University of Maryland, Baltimore County

*Examining How Race/Ethnicity and Gender is Explored in Research on STEM Contingent Faculty*

Given the current and forthcoming faculty and administrator salary reductions, furloughs, and hiring freezes, universities will continue to rely on, and in some ways increase their use of, contingent faculty as a price saving vehicle. However, it is important for institutions of higher education to understand the barriers and supports STEM contingent faculty face, particularly those from marginalized populations. This meta-synthesis explored not only how we discuss the intersection of race/ethnicity and gender in research on STEM contingent faculty, but also provided insights on best practices to support STEM contingent faculty in all of their intersectional identities.



**Joya Misra, PhD**

Professor of Sociology and Public Policy at the University of Massachusetts, Amherst

*Gender, Intersectionality, Workload and Leadership in STEM Departments*

This project aimed to address intersectional inclusion in decision-making and leadership, as well as over-inclusion in service. This qualitative meta-analysis synthesized existing research on workload, decision-making and leadership, considering how race and nationality intersect with gender, to answer: (1) Are there gender differences in faculty influence and leadership? (2) How do these differences relate to workload imbalance? (3) How do these differences impact faculty careers, including retention and advancement? The goal was to connect these two literatures, and consider how to structure interventions to address these barriers. Service work is a form of leadership – yet the overrepresentation of White women and women of color in lower-level service work has not led to an overrepresentation of these women in leadership at higher levels. Addressing this puzzle through a meta-analysis generated new insights.



**Kimberly Scott, EdD**

Professor and Founding Executive Director of the Center for Gender Equity in Science and Technology at Arizona State University

*Analysis of Funding Trends Addressing Girls/Women of Color and STEM: An Intersectional Approach*

This meta-analysis focused on funding trends targeting girls/women of color and STEM. The primary goal was to apply intersectionality as an analytical strategy to discover how funding agencies reinforce or challenge majoritarian narratives of girls/women of color in STEM. Using computational topic modeling, data visualizations were created to meet the following objectives: 1) Illustrate how well-known and well-intentioned funding practices address race-ethnic-gender disparity in STEM through funding mechanisms; 2) Illuminate how and when funding agencies emphasize the disparity of girls/women of color in STEM; and 3) Identify methods funders can successfully invest in the RGTM initiatives using different lexicons.

## 2019-2020



**Allison Mattheis, PhD**

Associate Professor at California State University Los Angeles

*An Integrative Intersectional Meta-analysis of Understandings of Gender in STEM Higher Education Research*

This work comprises an integrative meta-synthesis of the ways that gender is defined as a variable or identity characteristic in extant research on gender in STEM instruction and mentorship in higher education, how it is considered in combination with other social identities, and what interventions are most commonly proposed to address issues of underrepresentation. By analyzing research published since 2010 in approximately 30 relevant journals and employing different disciplinary and epistemological perspectives, promising exemplars were identified and a set of guidelines informed by intersectionality were developed to guide future research.



**Beth Mitchneck, PhD**

Professor Emerita, University of Arizona

*Synthesizing Research on Gender Biases and Intersectionality Citation Analysis and Practices*

Citation analysis tools count the number of citations a research paper or author receives and serve as a proxy for research impact. Since research has shown the ways individuals choose what and who to cite are influenced by factors unrelated to the quality of the research, it is time to assess the efficacy of analysis tools. Dr. Mitchneck conducted a meta-synthesis of the literature on citation analysis and social influences over citation practices to document effects of gender and intersectionality. Indices reinforce barriers to advancement for scholars from underrepresented groups; publicizing inequities is the first step to addressing them.



**Teresa Nelson, PhD**

Professor at Simmons University, Research Director at MIT Innovation Initiative, and Founder of The Impact Seat

*Academic Entrepreneurship in STEM: A Meta-synthesis on the Intersection of Gender*

A sequence of institution-building acts in the United States 1930-1980 set an infrastructure to facilitate the partnership of university faculty with government and private industry for the purpose of science invention and subsequent commercialization. Today academic entrepreneurship is increasingly the heart of science invention with entire industries like the internet and biotechnology rooted in faculty accomplishment. Rising demand since the 1960s for STEM gender equity intersects and complicates this institutional success story. This meta-synthesis compiles research from multiple fields to present the state of knowledge on women and gender, with an intersectionality concern, as regards faculty participation in academic entrepreneurship.

## 2018-2019



**Cara Margherio, PhD**

Assistant Director of the UW Center for Evaluation & Research for STEM Equity (CERSE)

*Centering Women Faculty of Color in a Meta-Synthesis of Research on Mentoring*

Mentoring is one area of research in which the experiences of women faculty of color are often subsumed within the larger category of women faculty. This project synthesized the features that emerge as most salient to address the mentoring needs of women faculty of color. Ultimately, this work illustrates how shifting the focus changes our understanding of what needs are met by mentoring and what is necessary for mentoring to be beneficial.



**Ethel Mickey, PhD**

Postdoctoral Research Associate at the University of Massachusetts, Amherst

*Implications for Career Success Resulting from STEM Faculty Networks*

Faculty networks shape academic career success by providing collaboration opportunities, access to material resources, and access to implicit informal knowledge. Despite the theorized benefits of social networks, there is ever-increasing evidence that women's marginalization and exclusion from networks may, in part, contribute to their underrepresentation in STEM. This project explored the gender differences in faculty network characteristics and how gender differences in faculty networks contribute to and explain gendered variations in faculty career outcomes, including productivity, retention, and advancement.