

Women of Color in Computing Research Collaborative ***Request for Proposals: Exploratory and Experimental Studies***

Project Background

Women of color¹ comprise a substantial and critical segment of the United States population, yet they remain vastly underrepresented in computing education and the workforce, and often overlooked in research and interventions to increase diversity in computing. To address the underrepresentation of women of color across the computing landscape, the [Kapor Center](#) and the [Center for Gender Equity in Science and Technology](#) at Arizona State University have partnered to launch the [Women of Color in Computing Researcher/Practitioner Collaborative](#). The purpose of the collaborative is to develop, test, scale, and disseminate strategies, programs, and interventions to increase the participation and persistence of women of color in the computing ecosystem. Specifically, this initiative aims to accomplish this by building a robust foundational body of research on the participation of women of color across the computing pipeline, identifying obstacles and barriers unique to women of color in computing, exploring the efficacy of interventions to improve the outcomes for women of color in computing, and disseminating effective strategies to a broad group of stakeholders.

To build a robust body of research on data trends, barriers, and interventions to increase the participation of women of color in computing, this collaborative will support three types of research projects, each of which will have a specific dissemination strategy:

- Landscape Data and Trends
- Exploratory/Experimental Intervention Research Projects
- Senior Fellows Program

Funding Opportunity: Exploratory and Experimental Research on Interventions for Women of Color in Computing

In this request for proposals, **the Collaborative invites proposals for exploratory and/or experimental studies examining strategies, interventions, or practices with the potential to improve the outcomes for underrepresented women of color** (e.g., Black, Latinx, Native American/Alaskan/Hawaiian, Pacific Islander, Southeast Asian) in higher education, the technology workforce, entrepreneurship, and venture capital. The collaborative aims to fund 3-4 exploratory studies with the potential to demonstrate effective outcomes and have promise for dissemination and scaling. Where possible, the study teams should include practitioners as well as researchers to ensure an applied perspective to the intervention and any potential future dissemination of findings. The exploratory studies will aim to address **one** of the following priority areas:

- (1) Increasing engagement, persistence, and completion of computing degrees in higher education:** This research funding area seeks to support explorations of the efficacy of innovative classroom, curricular, instructional, programmatic, or psychosocial interventions that can lead to higher rates of engagement and persistence for women of color in computing majors. Strategies

¹ A broad definition is used to define “women of color” which includes individuals who identify as female and as a member of a racial/ethnic group other than white (specifically, Black/African-American, Latinx/Hispanic, Asian, Native American/Alaskan Native, Native Hawaiian/Pacific Islander). Underrepresented women of color are distinguished in this project as women from racial/ ethnic groups who are traditionally underrepresented in computing education, degree completion, the tech workforce, and entrepreneurship/VC, in comparison to their representation in the U.S. population and representation among potential pools of candidates (e.g., the total labor force, CS degree-earners).

can be explored across higher educational settings, including traditional 4-year colleges, community colleges, and other computing education pathways.

(2) Increasing participation and retention within the technology workforce: This research funding area aims to support exploratory studies of interventions and strategies to improve recruitment, hiring, retention, and promotion of women of color in the technology workforce. Strategies can include research on AI, machine learning interventions to mitigate bias and increase hiring rates, inclusion strategies (e.g. ERGs), and mentorship and sponsorship, among other strategies.

(3) Increasing access to capital, launching of tech ventures, and participation in venture capital: This research funding area seeks to support investigations of innovative interventions that can increase tech entrepreneurship among women of color, support women of color in raising capital and growing their businesses, and increase the number of women of color in venture capital. Strategies could include entrepreneurship education pathways, pitch competitions/startup weekends, incubators/accelerators, mentorship, and funding strategies specific to women of color (funds, crowdsourcing).

The expected deliverables for each funded study will be a summary of results within 1 year, presentation at a WOC in Computing research convening, and/or other products or reports. Regular (bi-monthly) check-ins between grantees will be expected to maintain communication, ensure projects are completed on time, and to provide advisement, technical assistance, and support, as needed.

Budget: The collaborative will fund up to **3 1-year awards at \$20K each, with one award made per priority area**. The budget is reflective of the scope of work intended for these projects: they are intended to be short-term and exploratory, with the potential to lead to a larger intervention study in Y2. The project budget should include travel to 1 convening, research assistants and other staffing needs, and materials. The project cannot include overhead/indirect costs over 7%.

Submission Guidelines: Individuals and teams are invited to submit exploratory proposals by **October 22, 2018** at 23:59pm AoE to [this link](#). The following information should be included in all submissions:

- **Project Narrative:** The project narrative should include a title, the proposed priority area, a *literature review* which summarizes the empirical or theoretical literature which supports this proposed strategy or intervention (500-1000 words); a description of the *proposed intervention/strategy* that you aim to examine, how it will be implemented, in what context, and what outcomes you aim to achieve (500-1,000 words); summary of *research methodology*, including research question, data collection methods, analytical procedures (500-1,000 words); *project timeline* which includes a high-level summary of the timeline leading up to project completion (500 words max, could be in table format).
- **Budget:** The budget should include an Excel spreadsheet with spending categories and line items (e.g., Category: Personnel; Line Item: Name, Position, Cost Allocation) totalling to \$20,000. Indicate other sources of supplementary funding, if applicable. The budget narrative should be a 500-1,000 word accompanying document which describes each line item and category and relevance to the proposed project.
- **Curriculum Vitae:** A CV, biographical sketch or resume for all principal investigators should be included to provide a summary of the experience of the research team.

University-based applicants should be aware of their Institutional Review Board and Sponsored Projects guidelines. Please direct any questions about the RFP or proposal submission process to researchgrants@kaporcenter.org.

Review Process and Panel:

Proposals are due by **October 22, 2018** and will be reviewed by a panel of researchers, including the WOC in Computing Advisory Board. Proposals will be evaluated on the following criteria: **Innovation** of the proposed intervention to reduce barriers for women of color; **Research design** which presents a rigorous approach to data collection and analysis; Feasibility for the research to be conducted within the program timeline and completed within 1 year; and Experience of the Team to complete the proposed research and inclusion of practitioners to provide applied perspective. Applicants will be notified in early November and funds will be disbursed in late November 2018.

Statement of Non-Discrimination

We are seeking applicants with a personal commitment to fairness, social justice, and innovation — values that are prevalent in our culture. We are committed to representation and inclusion, and we welcome applicants with diverse perspectives and backgrounds.

About the Women of Color Research Collaborative

The Women of Color in Computing collaborative, lead by the Kapor Center Research team and the Center for Gender Equity in Science and Technology, Arizona State University, is an exciting partnership between researchers and practitioners to develop, test, and scale strategies, programs, and interventions to increase the participation and persistence of women of color in the technology ecosystem. Through this collaborative, academic researchers will work side-by-side with educators, diversity, equity, and inclusion practitioners, tech industry leaders, and venture capitalists to translate emerging research findings into actionable practices and inform strategies which can be scaled broadly to ensure women of color are included as leaders and creators in the rapidly growing technology ecosystem.

Learn more about the Collaborative at: wocincomputing.org and download our landscape data brief at: <https://www.wocincomputing.org/wp-content/uploads/2018/08/WOCinComputingDataBrief.pdf>