



## 2021 Virtual HBCU-UP/CREST PI- PD Meeting



- Broadening Participation Research

# John H. Hopps Research Scholars Project Morehouse College

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# Project Overview

- A quasi-experimental, regression discontinuity design (RDD),
- Three-year intervention integrates research and education through projects and activities;
- We test the effects of a linked, interdisciplinary learning community on achievement, retention, and persistence among a Black male cohort of STEM undergraduates who may be at-risk for academic difficulty.
- The selection for the intervention or control group is determined by a score of “predicted academic difficulty,” which is a measure on the College Student Inventory survey (CSI).
- The CSI is designed to identify the strengths and challenges of incoming students for the purpose of early intervention; and captures students’ self-reports on items relating to "Academic Determination," "General Coping Ability," "Receptivity to Support Services," and "Social Motivation."



# Best Practices/Successes

- Project participants will engage in a variety of supportive activities during the first three years of college, such as working closely with scientists, engaging in supplemental learning opportunities with faculty, planned tours of National labs, summer internships, personal advising and mentoring.
- Project Participants will also register for 2 Interdisciplinary Linked STEM with humanities or STEM with social science courses beginning in the fall of the sophomore year to be completed by the end of the junior year.



# Implications

- Establish an innovative approach to undergraduate STEM education.
- Enhance the STEM teaching/learning experience.
- Demonstrate how this innovative approach contributes to student success and overall support in undergraduate STEM education.
- This study links research and education, and advances understanding of factors associated with improving achievement and retention in STEM.
- The project advances discovery and understanding of STEM achievement and persistence in the discipline, while promoting teaching and learning.

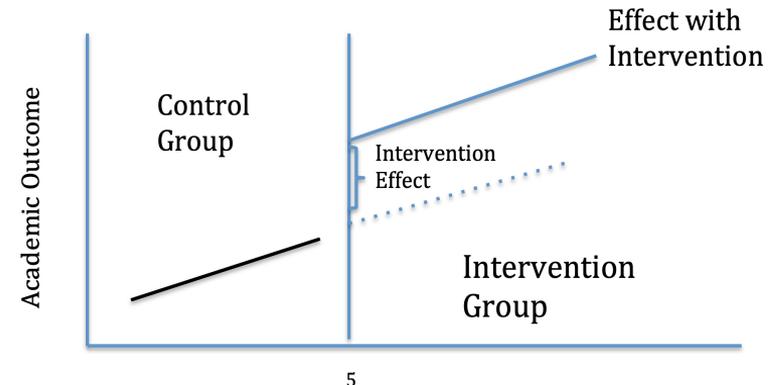


# Identified Gap(s) for Future Collaboration or Enhancement

## Where do we go from here?

- A gap remains in the literature, and thus in our knowledge of efficacious approaches to abate or prevent difficulty or underachievement among a general population of Black male STEM students, prior to them experiencing dire straights.
- We need more investigation into the application of regression discontinuity design as a method.

## Regression Discontinuity Design



A cut score of 5 and above on Predicted Academic Difficulty measure (1-9) is eligible for intervention group

