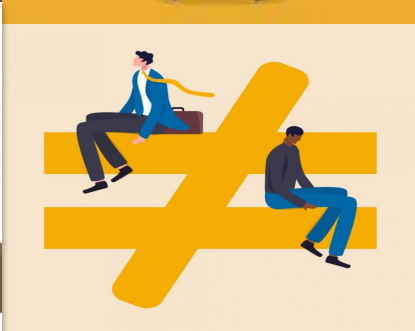


Where are all the Professors of Color?

Speakers: Lauren Cappiello, Jas Pannu

March 14, 2023



AHSIE
Alliance of Hispanic Serving Institution Educators

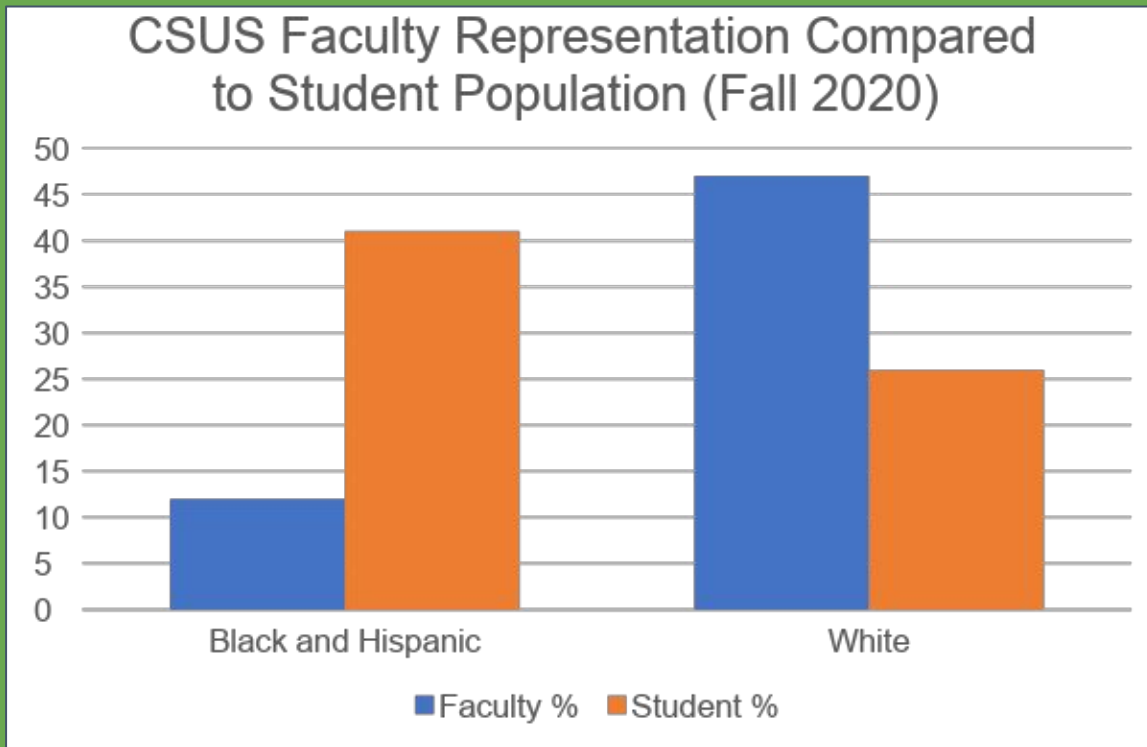


Warm Up

- What does your average class look like?
- What does your department look like?
- What does your institute look like?



Motivation and Importance



Why investigate?

- Diversity in academia is critical to the creation, application, and management of new knowledge.
- Faculty diversity often fails to reflect student diversity or diversity of the general population.

Motivating Questions

- Is there demographic variation in the pathway from PhD to academia vs. other employment sectors?
- By looking at federal data on PhD program outcomes, can we identify specific factors that are associated with these demographic variations?



Confidential Federal Data

- Survey of Earned Doctorates
- Survey of Doctorate Recipients

Research Question

Factors Mediating
Pathways to Equity
in Professoriate

Approach

Degree attainment → Factors
mediating time to doctorate degree

After Degree Attainment → Employment Type
academic, ←
non-academic

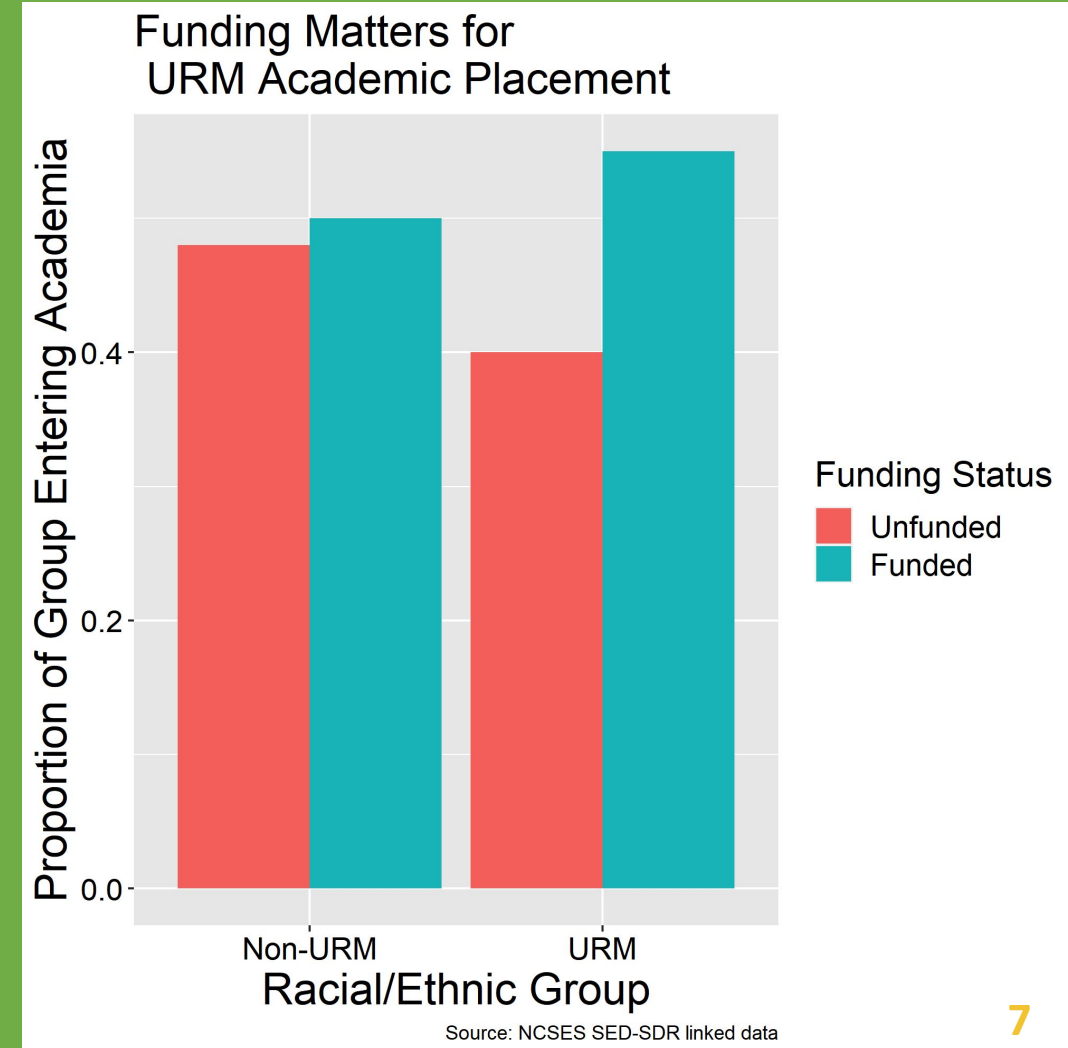
Equity in professoriate

- Gender and racial equity in employment and income

Funding Impacts on the Professoriate by Race/Ethnicity

Funding Matters for URM!

Unfunded Black and Hispanic students are less likely to enter the professoriate.



Funding is Consequential for URM's

Funding:

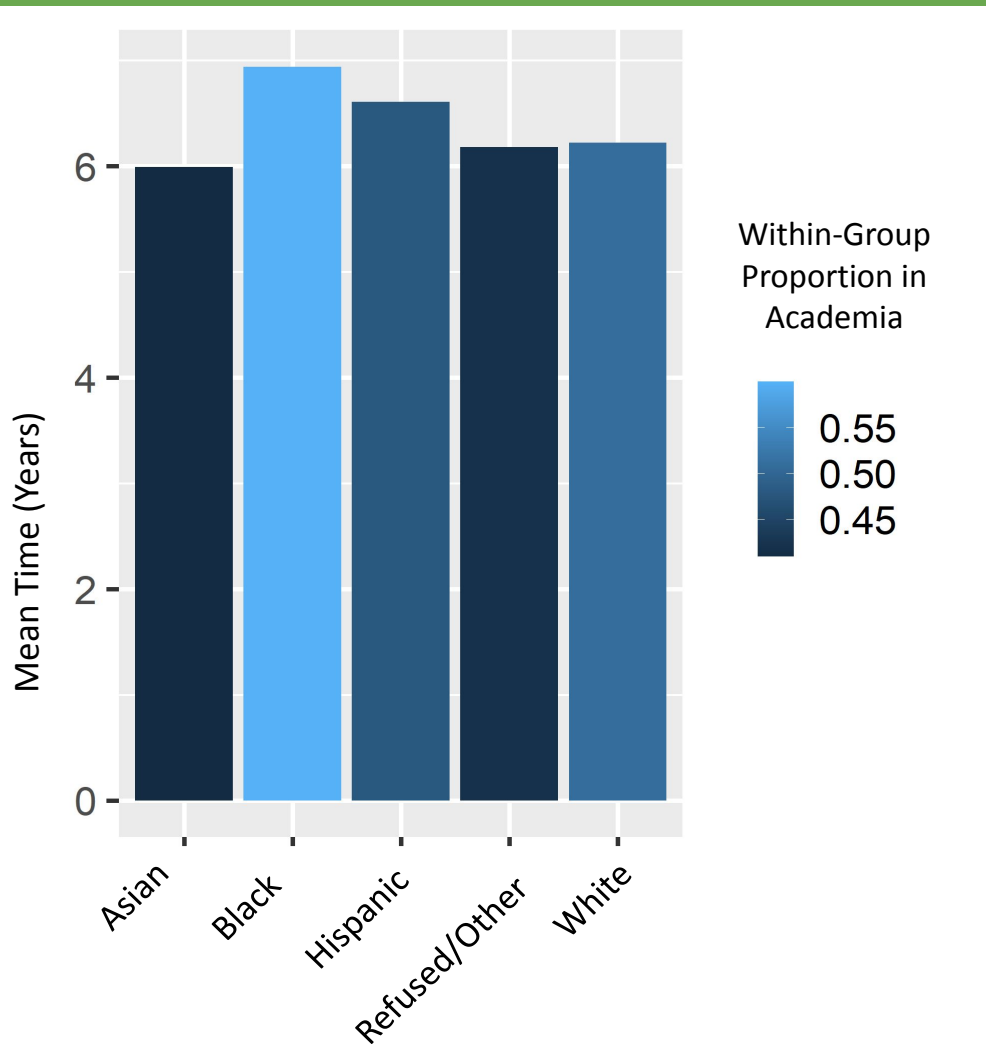
- Speeds up time to degree.
- Reduces debt accumulation.
- Feeds the pipeline to the professoriate.
- Increases earnings.

Lack of Funding:

- Delays time to the degree.
- Results in higher debt.
- Disrupts the pipeline from PhD to academia.
- Impacts earnings outcomes.

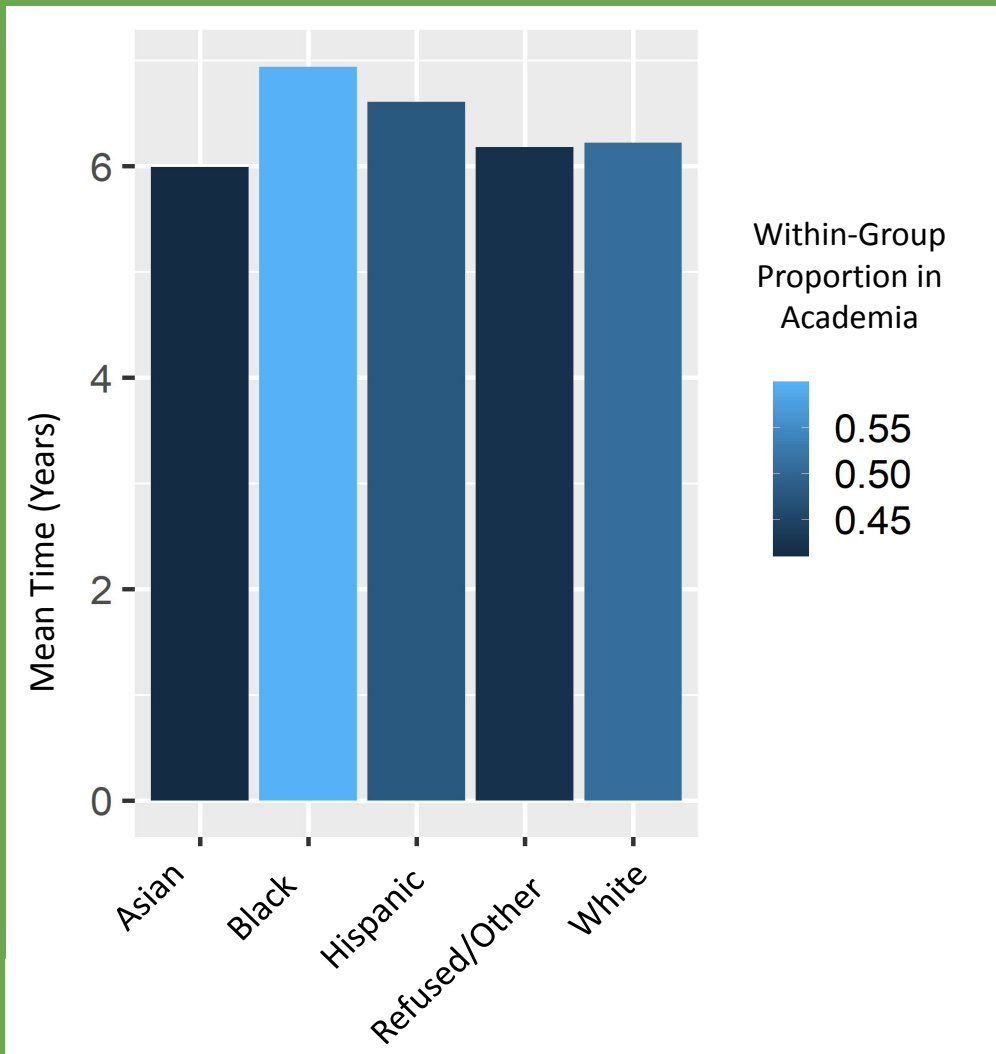


Time to Degree and Employment Type by Race



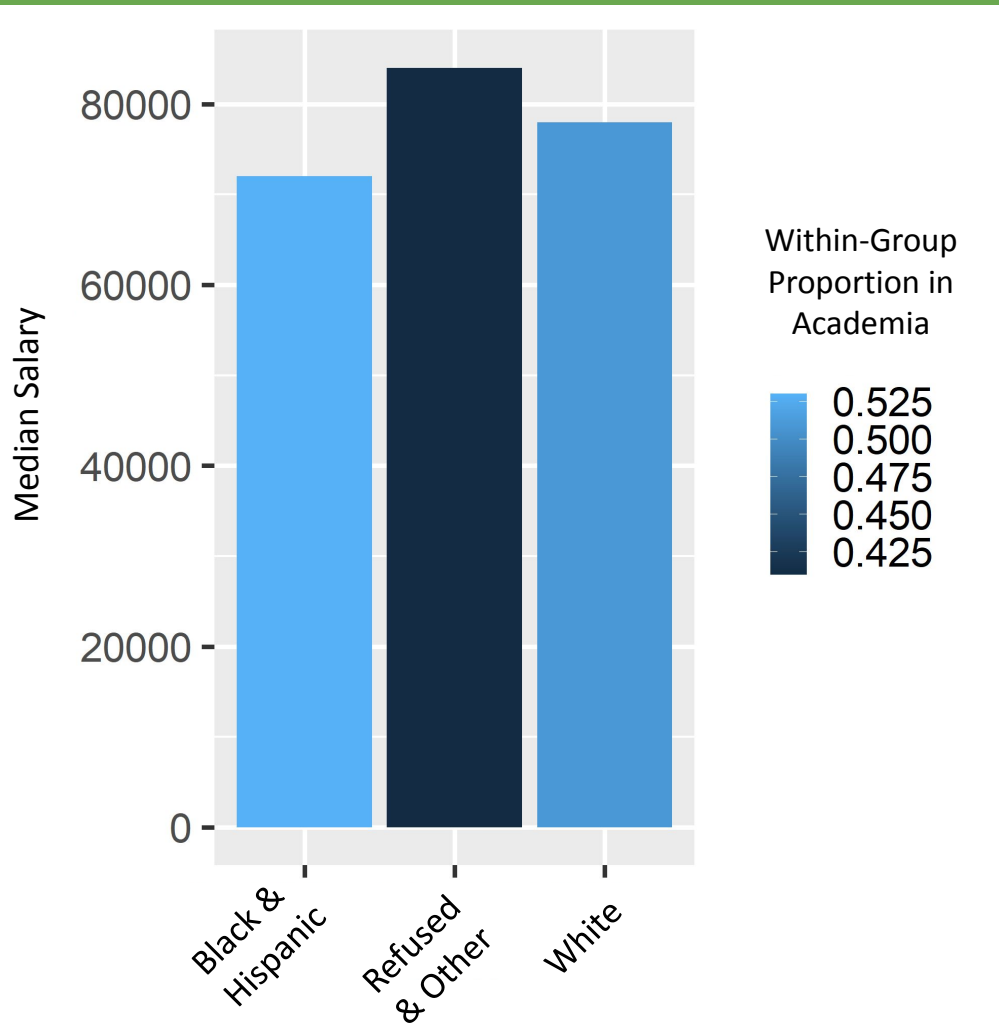
- On average, Asian students have the shortest time to degree, while Black students have the longest.

Time to Doctorate by Field



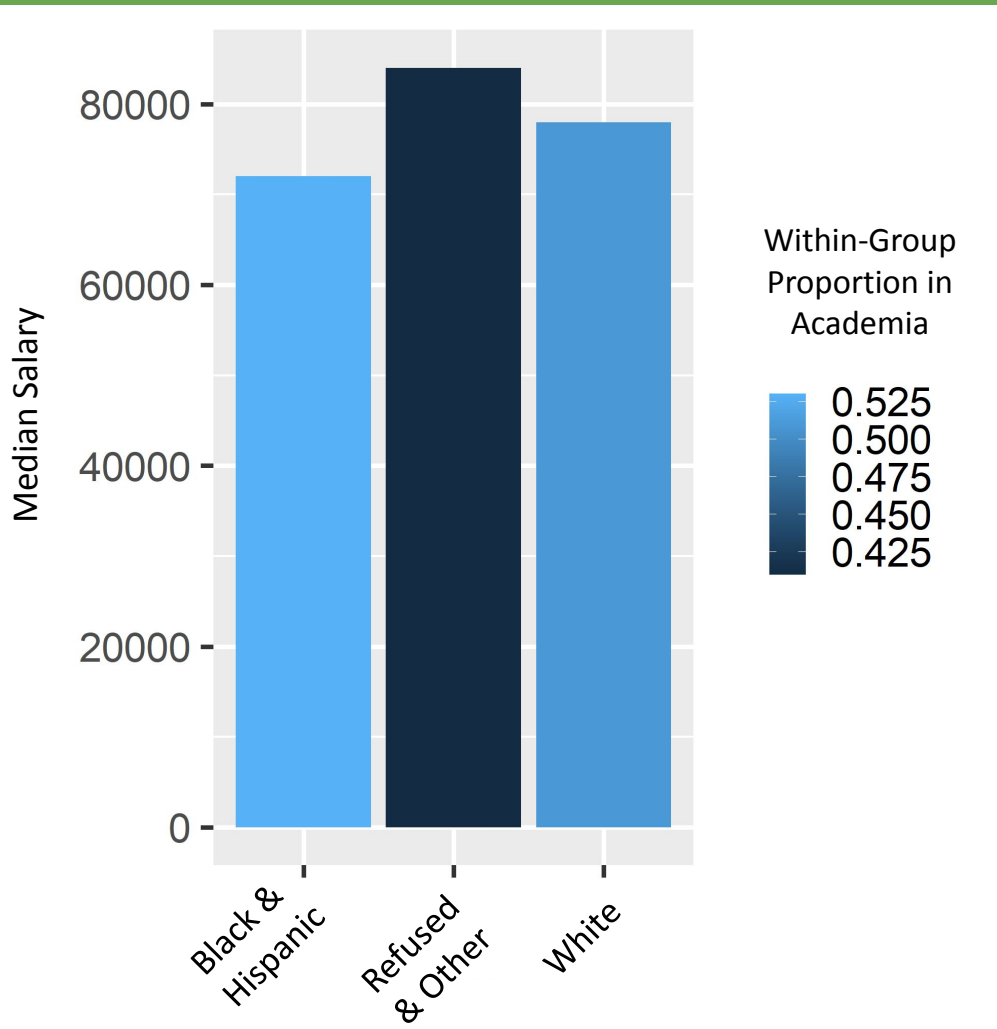
- This effect is strongest in Engineering.
- In Biology/Biomed, this difference is especially pronounced for Black students.
- In Mathematics, there are too few Black and Hispanic students to examine this effect.
- In Social Sciences, Hispanics take much longer, but Black students graduate faster than their white peers.

Salary & Employment Type by Race



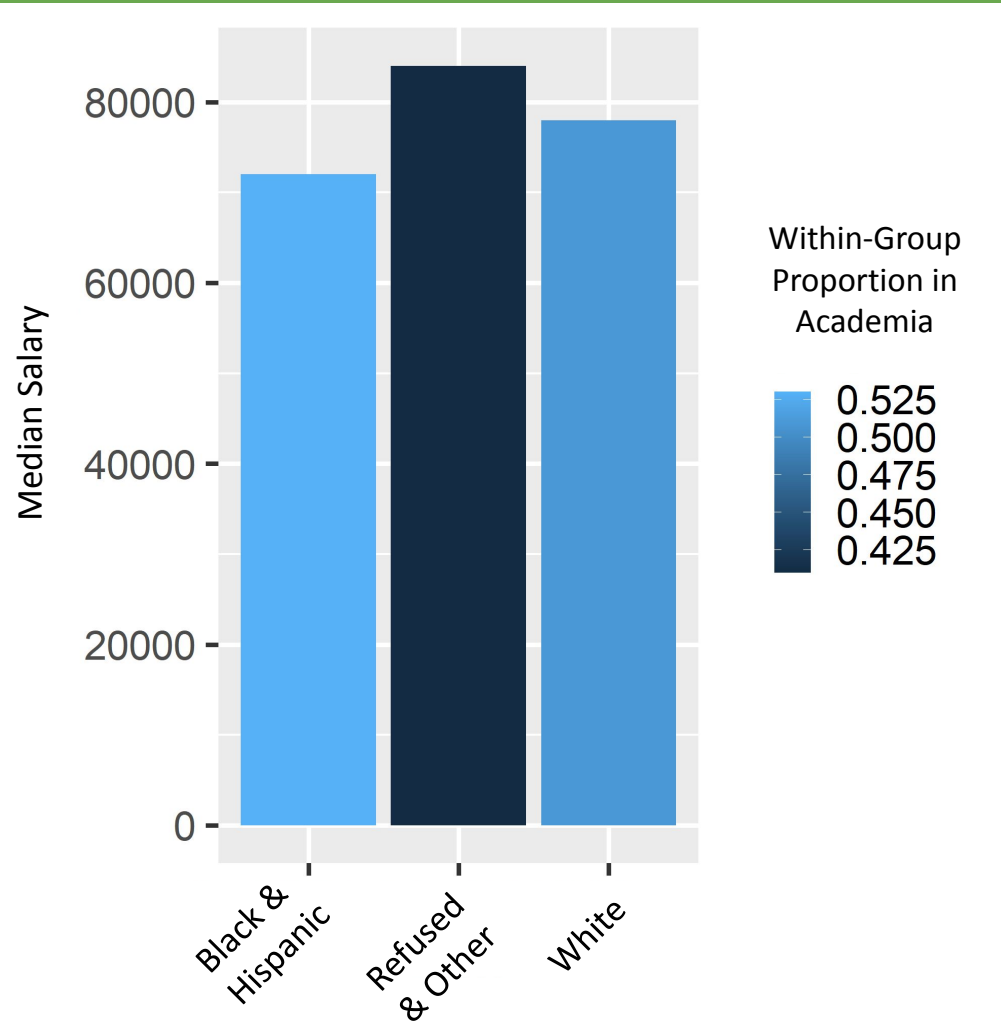
- Black & Hispanic graduates have the lowest average salary but are the most likely to be employed in academia.

Salary by Employer



- This effect is particularly noticeable in
 - University research institutions
 - Non-profits
 - Two-year colleges
- Hispanics make more than their peers in government.

Salary by Field



- This effect is especially noticeable in
 - Agriculture
 - Physical sciences
- In Engineering, Black graduates make less than their peers.
- Hispanic graduates make more than their peers in Health Sciences, Psychology, and Engineering.

Funding and the Pipeline

- Funding agencies must be intentional about funding URM.
- CSU Programs Addressing Future Faculty
 - The Chancellor's Doctoral Incentive Program (CDIP)
 - California Pre-Doctoral Program
 - Sally Casanova Scholars
 - Louis Stokes Alliance for Minority Participation (LSAMP)
- Other Programs
 - McNair Scholars Program



Acknowledgements

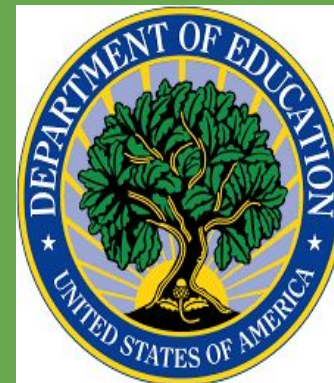
- We would like to thank the instructors and staff at Coleridge Initiative, UNCF, and *Excelencia* in Education

THANK YOU!



US Department of Education
Project INSPIRE: P031S150197

Project Directors: Lynn Tashiro and Joel Schwartz



Limitations



- No data on doctoral students who did not complete their program
- Large proportion of doctoral graduates end up in a postdoc position.
 - Based on the timing of the SDR (two or four years after earning PhD), we do not know the proportion of postdocs who eventually transition to a faculty position at a university.
- SDR limits analysis to doctoral graduates in the fields of science, engineering, and health.
- Potential bias in who responds to the SDR

References



Inequities in Opportunities

- Black students accumulate higher amounts of student loan debt. (Webber & Burns 2021; Pyne & Grodsky 2020; Boyer & Butner 2011)
- Black and Hispanic student parents are more likely to accumulate higher debt and not earn a degree. (Nelson, Froehner & Gault 2013)

Inequalities Persist

- Post-doctorate, Black females/males, and Hispanic males account for only 2% each of full-time professors; and Hispanic females accounted for only 1% (U.S. Department of Education, NCES 2020, 144).
- Black and Hispanic faculty annual earnings are significantly lower than White faculty, and Asian faculty, to a lesser degree. (Li & Koedel, 2017)

