

Combatting Systemic Oppression against Latinx in Science

Whitney Dean ~ LAS 1420 ~ ft9364@wayne.edu

Introduction

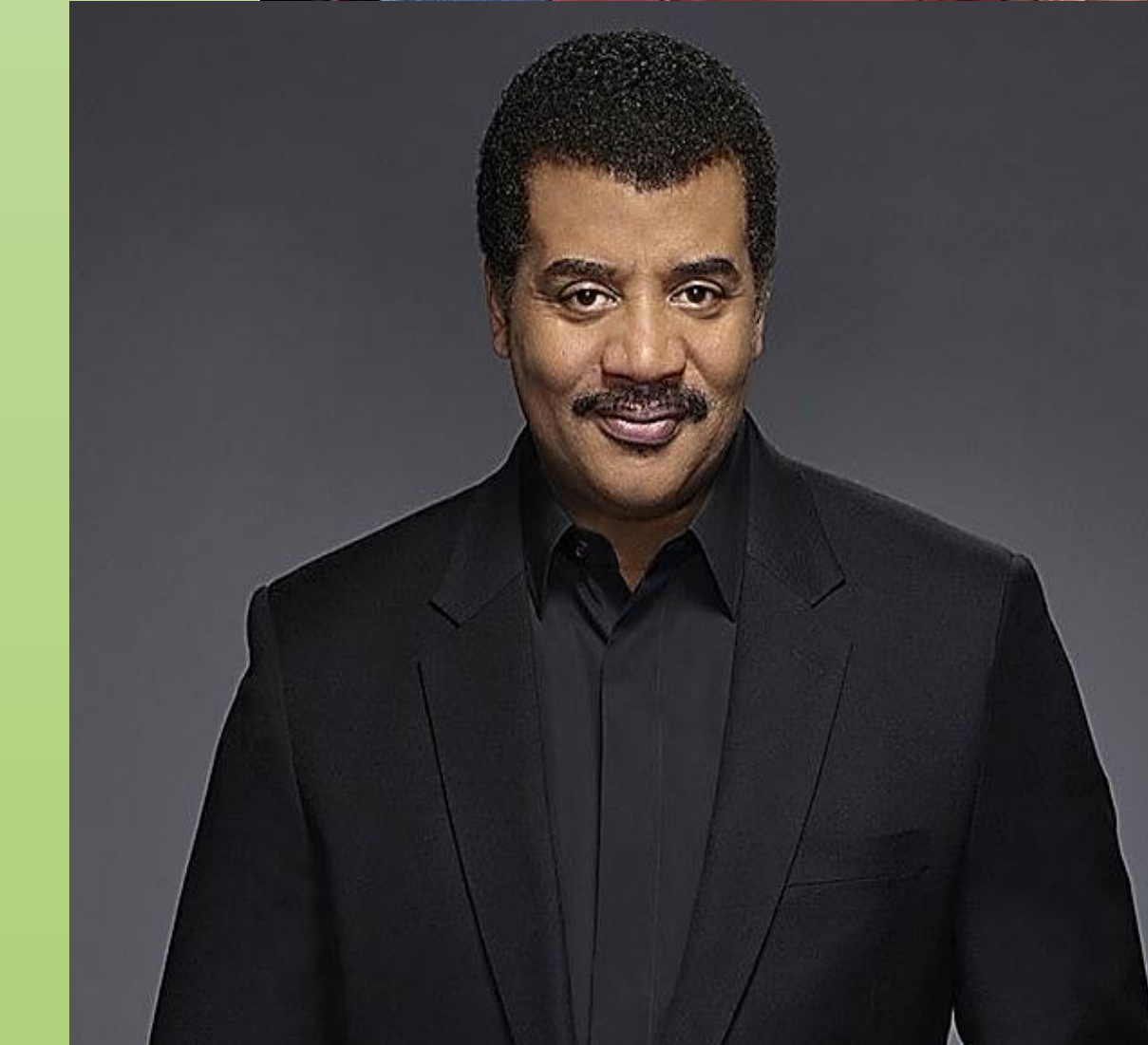
- Physics and astronomy are the least diverse disciplines within STEM programs

Number of Departments that have ...	Highest Degree Awarded			
	PhD	Master's	Bachelor's	Total
both African-American & Hispanic faculty	16	3	8	27
African-American faculty (and no Hispanic faculty)	18	10	45	73
Hispanic faculty (and no African-American faculty)	76	22	53	151
neither African-American nor Hispanic faculty	82	26	387	495
Total	192	61	493	746

This data originally dating back to 2012 was used in a 2016 publication and hasn't shown any recent improvement since then.

Research

- "While most in academia are cognizant of the fact that diversity is desperately lacking, they often don't recognize the barriers to entry faced by a more diverse population...The burden then disproportionately falls on those facing problems to not only highlight them but also find solutions to said problems. If a person is spending a significant amount of their time on such issues, in particular because they are directly impacted by them, they are forced to take away time that they could have spent on academic pursuits." ~ Interviewed quote from Dr. Nausheen Shah, Assistant Physics Professor at Wayne State University and board member of the departmental diversity committee SUPER.
- "I wanted to become something that was outside of the paradigms of expectation of the people in power... when you don't find blacks in the sciences and you don't find women in the sciences, I know that these forces are real and I had to survive them in order to get where I am today." ~ Dr. Neil deGrasse Tyson PhD, world renowned Afro-Latinx astrophysicist
- "If we don't make some very transformational changes in how we think about correcting this inequality, then we might as well just give up." ~ Dr. Gabriela Gonzalez PhD, director of LIGO technology, Professor at Louisiana State University, and chair of the new STEM Education Advisory Panel and advocate for women in science



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Research Question

How can the academic community stimulate growth from the Latinx community within physics and astronomy?

Method of Research

- Review of popular publications from the physics and astronomy community
- Multiple interviews with Wayne State astronomy and physics faculty
- Review of peer reviewed and academic publications

Conclusions

- Academia must advocate for employment of Latinx scientists and professors
- Latinx contributions from historic indigenous technology and current LIGO practices should be included in the curriculum for astronomy college classes
- Federal financial aid and scholarships for minorities in STEM and education fields should increase the chances of stimulating diversity

