

# Building a Pipeline to Increase Minority and Male Representation in the Professions



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**Thursday, November 21, 11:30-12:00pm**  
**Session Number: 4547**  
**CC\232C**

# Speaker Disclosure

## **Dr. Yolanda Feimster Holt**

I have no relevant financial or nonfinancial relationship(s) within the products or services described, reviewed, evaluated or compared in this presentation.

I am an employed as a faculty member at East Carolina University and the university supported my presence here today.

## **Christopher E. Holt**

I have no relevant financial or nonfinancial relationship(s) within the products or services described, reviewed, evaluated or compared in this presentation.

I am a student at North Carolina Agricultural and Technical State University. The university supported my presence here today.

## Learner Outcomes:

1. Identify barriers to minority and male knowledge of CSDI graduate program and requirements.
2. Describe current program opportunities at your institution to include minority and male undergraduates in research
3. Identify systemic bias that creates barriers and impedes opportunities for minorities and males seeking to enter the professions

This work discusses the development and ongoing research collaboration between one researcher and an undergraduate CSDI program at a historically black university to:

- provide research opportunities for the HBCU students,
- develop an ongoing relationship between the programs,
- increase the number of minority and male students applying to and successfully completing graduate programs in CSDI.

## Communication Sciences and Disorders

### Minority and male representation

- In February 2016 ASHA president Noma Anderson wrote of the need to increase minority enrollment in speech-language-pathology and audiology programs through targeted identification, recruitment and admission of minority students. Explicit in her text was the use of a holistic approach to evaluate students for admission to the programs.

# How did you get here?



Where is this in the training manual?



# Ten years of Minorities and Males in CSDI

## 2008

- ASHA reported a total of 130,828 audiologists, SLPs and speech & hearing scientists
- By field, males make up the following percentages:
  - Audiology: 18.3%
  - SLPs: 4.2%
  - Both SLP & AuD: 26.7%
- ASHA also reports 6.8% (8,897) were classified as minorities

## 2018

- ASHA reported a total of 191,675 audiologists, SLPs and speech & hearing scientists
- By field, males make up the following percentages:
  - Audiology: 14.1% (more female AUD) ★
  - SLPs: 3.7% decrease
  - Both SLP & AuD: 17.6% decrease
- ASHA also reports 8.2% (15,737) were classified as minorities (Almost double the total number did not almost double the %)

# What are the barriers for Minority students and CSDI

- We hypothesize
  - A lack of program knowledge
  - Costare two possible barriers





# Cost

## Autumn Term 2019 - Spring Term 2020 Student Tuition and Fee Schedule Fees Per Semester

Columbus Campus - Graduate									
Audiology and Speech - Language Pathology									
Credit Hours	0.0-0.5	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0+
Instructional Fee	\$ 379.25	\$ 758.50	\$ 1,517.00	\$ 2,275.50	\$ 3,034.00	\$ 3,792.50	\$ 4,551.00	\$ 5,309.50	\$ 6,068.00
General Fee	\$ 11.50	\$ 23.00	\$ 46.00	\$ 69.00	\$ 92.00	\$ 115.00	\$ 138.00	\$ 161.00	\$ 184.00
Student Activity Fee	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50
Recreational Fee <sup>3</sup>	\$ -	\$ -	\$ -	\$ -	\$ 123.00	\$ 123.00	\$ 123.00	\$ 123.00	\$ 123.00
Student Union Facility Fee	\$ 4.65	\$ 9.30	\$ 18.60	\$ 27.90	\$ 37.20	\$ 46.50	\$ 55.80	\$ 65.10	\$ 74.40
COTA Bus Service Fee <sup>2</sup>	\$ 13.50	\$ 13.50	\$ 13.50	\$ 13.50	\$ 13.50	\$ 13.50	\$ 13.50	\$ 13.50	\$ 13.50
Learning Technology Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Program Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Ohio Resident Total</b>	<b>\$ 446.40</b>	<b>\$ 841.80</b>	<b>\$ 1,632.60</b>	<b>\$ 2,423.40</b>	<b>\$ 3,337.20</b>	<b>\$ 4,128.00</b>	<b>\$ 4,918.80</b>	<b>\$ 5,709.60</b>	<b>\$ 6,500.40</b>
Non-Resident Fee	\$ 737.00	\$ 1,474.00	\$ 2,948.00	\$ 4,422.00	\$ 5,896.00	\$ 7,370.00	\$ 8,844.00	\$ 10,318.00	\$ 11,792.00
<b>Non-Ohio Resident Total</b>	<b>\$ 1,183.40</b>	<b>\$ 2,315.80</b>	<b>\$ 4,580.60</b>	<b>\$ 6,845.40</b>	<b>\$ 9,233.20</b>	<b>\$ 11,498.00</b>	<b>\$ 13,762.80</b>	<b>\$ 16,027.60</b>	<b>\$ 18,292.40</b>

<sup>1</sup> See detail of selected rates for clinic, technology, and program fees charged by certain programs.

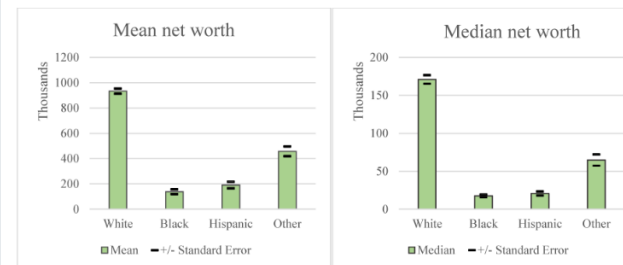
<sup>2</sup> The COTA fee goes to the Central Ohio Transit Authority for student bus pass.

<sup>3</sup> The recreation fee is a flat fee for four or more credit hours.

(registrar.osu.edu)

Figure 1: Net worth by race/ethnicity, 2016 survey

Thousands of 2016 dollars



Source: Federal Reserve Board, Survey of Consumer Finances.

Accessible version

The cost to attend a year of **graduate** school at Ohio State during the 2019-2020 year is estimated for **tuition & fees** to \$12,425 for **Ohio** residents and \$35,992 for out-of-state students.

Tuition and fees alone for two years at OSU would cost approximately \$24, 850.

In addition, data collected from the 2014 Federal Reserve shows that African Americans graduate college with on average \$23,400 in student loan debt (Scott-Clayton and Li 2016). Black students enter college later and accrue more debt \$32,047 compared to White peers \$ 18,685 (Bragg, 2016)

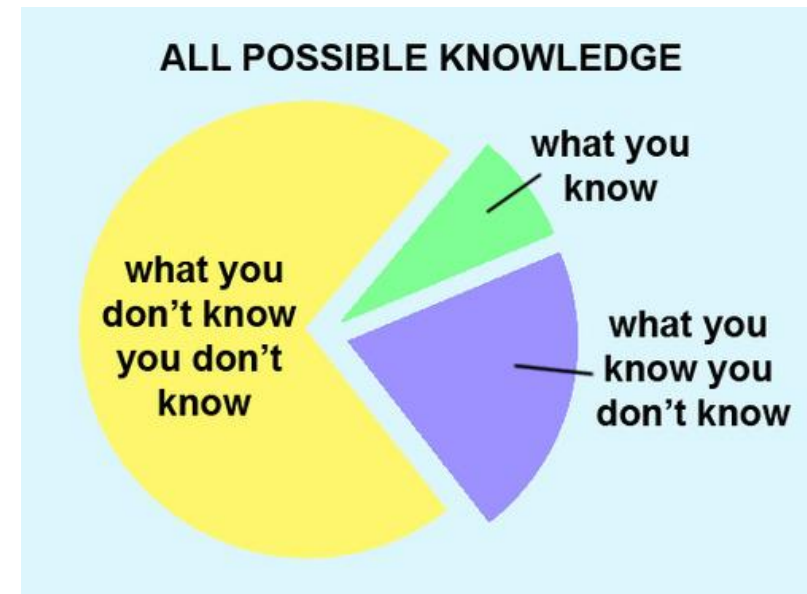


(Dettling et al., 2017)

# Program Knowledge



## One man's story



# Program Opportunities: Yes, YOU CAN

- Getting Started
- 3 days and a little pizza
  - Faculty Interest
  - An experiment
  - An IRB
  - A site
- Data Analysis and presentation
  - We're presenting a bit here today
  - Results from year 1
- Year 2 students



# Barriers and Systemic bias

- Access to family wealth #cost
- Do all your mentees look like you
- The GRE as a barrier
  - (Posselt, 2016) suggests “contrary to the recommendations of its developers [GRE scores], are often used as a mechanism to manage applications by setting cutoff scores to enable smaller applicant pools for committee review. ”

# Holistic Approach

Wilson 2019 describes Holistic (or whole-file) review is an emerging solution to bias, implicit and explicit,

- minimizes use of the triage strategy
- increases consideration of other components of the application package,
  - such as the personal statement,
  - letters of recommendation,
  - **evidence of research participation,**
  - productivity,
- *And* traditional quantitative metrics such as grade point average (GPA) and standardized test scores.

# Holistic Approach

Wilson (2019) reported that

- 1) use of GRE scores to decrease the total number of applicants to be reviewed for program admission significantly reduced the diversity of the applicant pool
- 2) the use of whole file (holistic review) “can be an effective tool to mitigate the variance of GRE scores” observed between different populations of applicants.
- 3) the men studied in the graduate engineering PhD program scoring in the lower quartiles of GRE V or Q scores finished degrees more often than those in the highest quartile.
- 4) The finding of lower scoring GRE students and program completing remained consistent for each of the four institutions in the study
- 5) Further GRE scores failed to predict time to degree or to identify students who would leave during the first year of their programs.
- 6) Wilson concludes finally.... “Our results suggests that GRE scores are not an effective tool for identifying students who will be successful in completing STEM doctoral programs.”



# Take Aways

- Your program already has the capacity to increase the presence of minority and male students in CSDI by
  1. Inviting them personally to learn about the programs. Begin at middle school career fairs and don't stop talking.
  2. Partner with HBCU's in your state. **Provide research opportunities.**
  3. Recognize the cost incurred by many minority students. Research opportunities lead to research collaborations and often opportunities for graduate school funding.

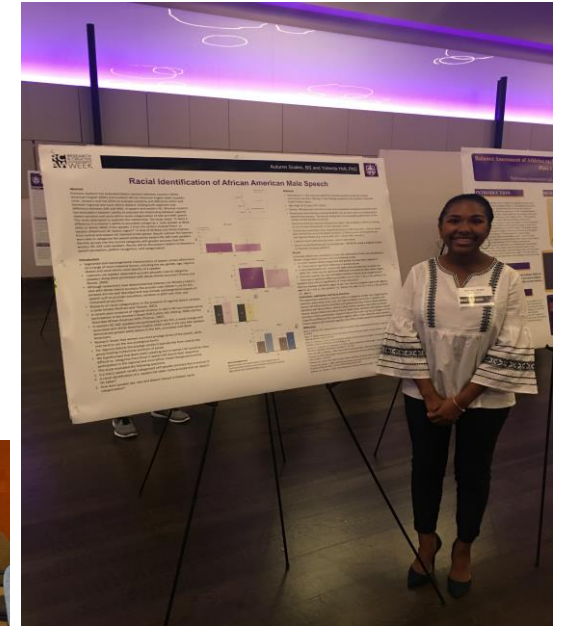
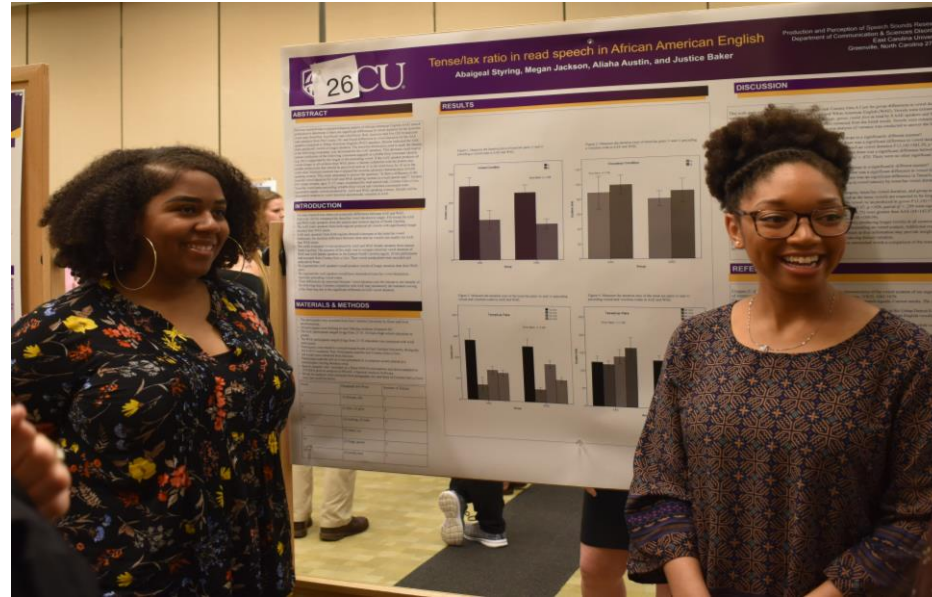
# Movin' on up



As a discipline, we've come quite far but we have a long way to go



# NCAT at ECU for Research and Creative Activities Day







# Selected References

American Speech-Language-Hearing Association. (2010). Highlights and trends: Member and affiliate counts, year-end 2008.

ASHA Multicultural Affairs and Resources. (n.d.). Retrieved November 2, 2019, from American Speech-Language-Hearing Association website: <https://www.asha.org/practice/multicultural/>

Battle, D. (2007). The power of passionate mentoring: Mentoring: The cycle of caring. *The ASHA Leader*, 12(2).

Braga, B. (2016). Racial and ethnic differences in family student loan debt. *Washington, DC: Urban Institute. Retrieved from <http://www.urban.org/sites/default/files/publication/82896/2000876-Racial-and-Ethnic-Differences-in-Family-Student-Loan-Debt.pdf>*.

Dettling, L. J., Hsu, J. W., Jacobs, L., Moore, K. B., & Thompson, J. P. (2017). *Recent trends in wealth-holding by race and ethnicity: evidence from the survey of consumer finances*. Board of Governors of the Federal Reserve System (US).

Griffin, K. A., Perez, D., Holmes, A. P., & Mayo, C. E. (2010). Investing in the future: The importance of faculty mentoring in the development of students of color in STEM. *New Directions for Institutional Research*, 2010(148), 95-103.

Harper, S. R., & Porter, A. C. (2012). Attracting Black male students to research careers in education: A report from the grad prep academy project. *Center for the Study of Race and Equity in Education*.

# Selected References

Jackson, B. A., & Reynolds, J. R. (2013). The price of opportunity: Race, student loan debt, and college achievement. *Sociological Inquiry*, 83(3), 335-368.

Luedke, C. L., Collom, G. D., McCoy, D. L., Lee-Johnson, J., & Winkle-Wagner, R. (2019). Connecting Identity with Research: Socializing Students of Color Towards Seeing Themselves as Scholars. *The Review of Higher Education*, 42(4), 1527-1547.

Palmer, R. T., Maramba, D. C., & Dancy, T. E. (2011). A Qualitative Investigation of Factors Promoting the Retention and Persistence of Students of Color in STEM. *The Journal of Negro Education*, 80(4), 491–504.

Papir-Bernstein, W. (2019). Leadership Trends: What Is Trending in Leadership Practices?. *Leadership in Speech-Language Pathology*, 149.

Petersen, S. L., Erenrich, E. S., Levine, D. L., Vigoreaux, J., & Gile, K. (2018). Multi-institutional study of GRE scores as predictors of STEM PhD degree completion: GRE gets a low mark. *PloS one*, 13(10), e0206570.

Posselt, J. R. (2016). *Inside graduate admissions*. Harvard University Press.

Scott-Clayton, J., & Li, J. (2016). Black-white disparity in student loan debt more than triples after graduation. *Economic Studies*, Volume 2 No. 3.



# Selected References

- Wilson, Z. S., Holmes, L., Degrauelles, K., Sylvain, M. R., Batiste, L., Johnson, M., & Warner, I. M. (2012). Hierarchical mentoring: A transformative strategy for improving diversity and retention in undergraduate STEM disciplines. *Journal of Science Education and Technology*, 21(1), 148-156.
- Wilson, M. A., Odem, M. A., Walters, T., DePass, A. L., & Bean, A. J. (2019). A Model for Holistic Review in Graduate Admissions That Decouples the GRE from Race, Ethnicity, and Gender. *CBE—Life Sciences Education*, 18(1), ar7.

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**Thank you for your time and  
attention**

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## Questions



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