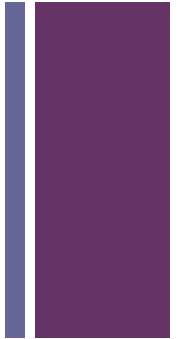


Succeeding in Physics

Sharon Fries-Britt, Ph.D.
University of Maryland,



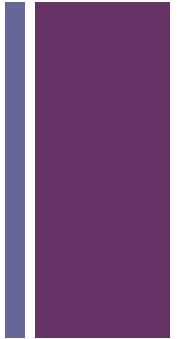
Brief Highlights of the larger Project



- Data collection NSBP and NSHP from 2005-2009
- Interested in the life cycle and “lived” experiences of students studying physics.
 - Persistence and success
 - Interactions with faculty and peers
 - Their interest in and commitment to physics
 - Role of family & key others
- UMCP team Long-term commitment developing a qualitative “data base” of URM students succeeding in the academy.

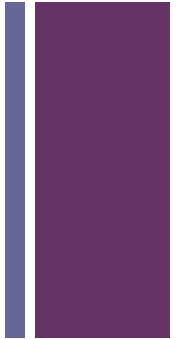


About the NSBP/NSHP Participants



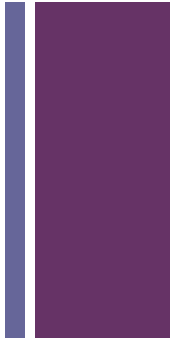
- 162 total (11 students participated multiple years)
- 84 graduate; 78 undergrads ; 104 males; 58 women
- 106 identify as Black (31 are non-native students)
- 5 identify Hispanic/Latino; 19 mixed race; 12 other
- They attend a wide range of institutional types public, private, HBCUs, TWI, highly selective.
- Most graduate students attended HBCU undergrad & TWI for grad.

+ Science Identity



- We examined themes that have emerged across the 5 years of the project.
- Some aspects of the themes are in published works from the project (see attached references)
- We are currently working on a manuscript that captures these science identity themes.

+ Factors Shaping A Science Identity



- Early exposure & introduction to science
 - Parents matter; many parents have degrees including advanced
- Sustained academic preparation over time
- K-12 teachers are very important. Affirm their academic ability and fortify good relationships.



Factors Shaping A Science Identity



- Access to other key role models
- Enter college prepared but things shift
 - Faculty and peer connections
 - Proving process
 - Access to research team of key Faculty
- Mechanisms for coping with set backs and barriers

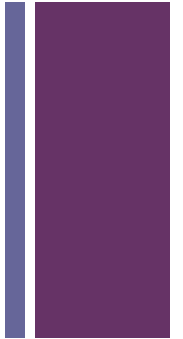
+ Factors Shaping a Science Identity



- Connecting to a larger purpose
 - The intersection of identities
 - Balancing science with other roles
- Committing to physics and being a scientist



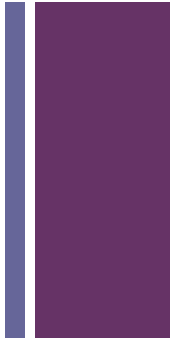
Sample of publications from the NSBP Project



- Fries-Britt, S. L., #Johnson, J. M., & #Burt, B. (2013). Black students in physics. The intersection of academic ability, race, gender and class. In T. L. Strayhorn (Ed.), *Living at the intersections: Social identities and Black collegians*. New York: Information Age Publishing, Inc.
- Fries-Britt, S. L., #Villarreal, R. C., #Elías McAllister, D., & #Blacknall, T. (2012). K-12 teachers: Important bridges to success for African-American students. *Journal of Women and Minorities in Science and Engineering*, 18(4).



Sample Publications Cont.



- Fries-Britt, S. L., #Burt, B., & #Franklin, K. (2012). Black males majoring in physics: How HBCUs are making a difference. In R. T. Palmer & J. L. Wood (Eds.), *Black men in Black colleges: Implications for diversity, recruitment, support, and retention* (pp. 71-88). New York: Routledge Press.
- Fries-Britt, S. L. & #Holmes, K. M. (2012). Prepared and progressing: Black women in physics. In C. R. Chambers & R. V Sharpe (Eds.), *Black female undergraduates on campus: Successes and challenges* (pp. 199-218). United Kingdom: Emerald Group Publishing Limited.
- Fries-Britt, S. L., #Younger, T. K., & #Hall, W. (2010). Underrepresented minorities in physics: How perceptions of race and campus climate affect student outcomes. In T. Elon Dancy (Ed.), *Managing diversity: (Re)Visioning equity on college campuses* (pp. 181-198). New York: Peter Lang Publishing, Inc.