# Panel: Diversity in Cybersecurity Workforce

**Moderator**: Ambareen Siraj, Tennessee Tech University (TTU)

**Panel Members**:

Wesley McGrew, Mississippi State University (MSU)

Davina Pruitt-Mentle, ETPRO/CyberWatch

Rose Shumba, University of Maryland, University College

# Panel Overview

Despite the growing demand and tremendous opportunities in the job market, cybersecurity remains an area where there is significant shortage of skilled professionals not meeting the need of today's increasingly technological society, both nationally and regionally. Even worse, women's representation in this field is alarmingly low. According to studies, women are significantly underrepresented in the male-dominated field of cybersecurity.

The panel will address questions such as: –

- Why diversity matters?
- What are the challenges in recruiting and retaining underrepresented groups, especially women in cybersecurity careers?
- How can government, academia, and industry help to advance underrepresented groups in this field?

# Diversity Matters!

- "Diverse group almost always outperforms the group of the best by a substantial margin." – Scott E. Page
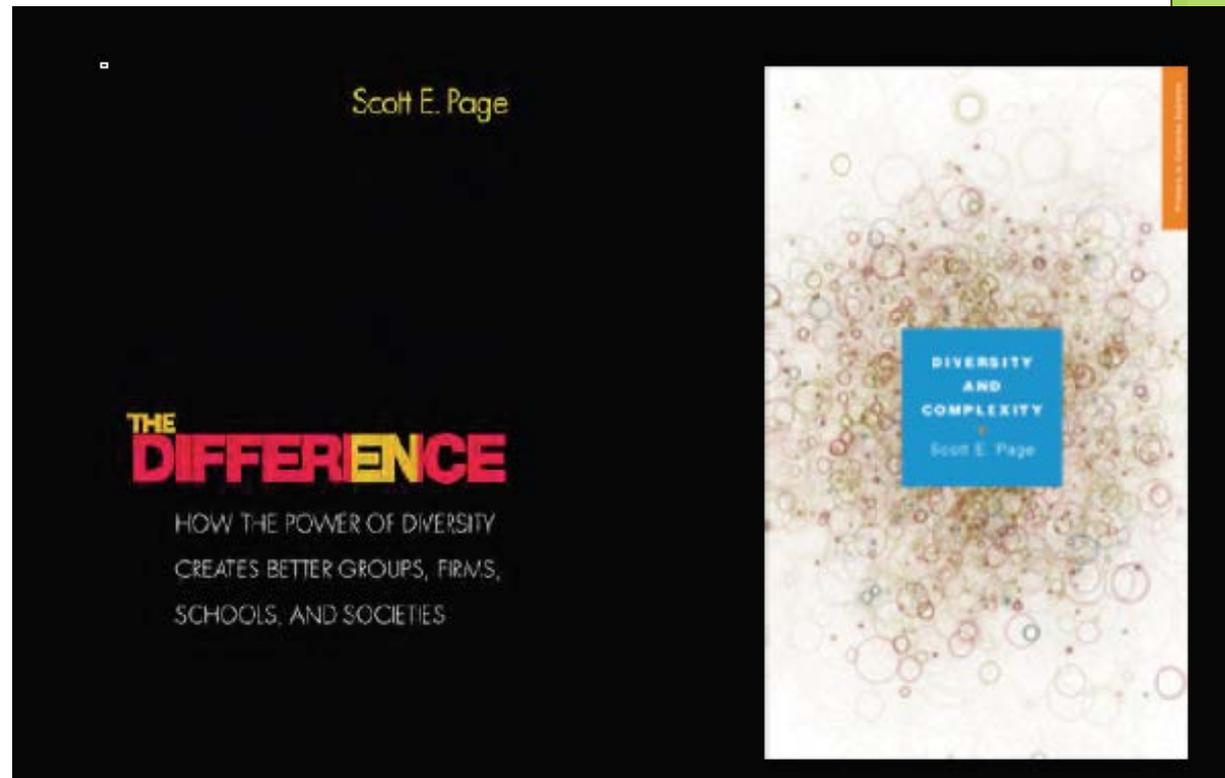
# Facts

- **Women**
  - 50% of US workforce
  - 25% of IT force
  - 8-13% of cybersecurity workforce
- **Hispanics**
  - 6.4% of IT workforce
  - 5% of cybersecurity workforce
- **African Americans**
  - 8.3% of IT workforce
  - 7% of cybersecurity workforce

# Challenges

- Lack of knowledge about cybersecurity
- Lack of awareness of opportunities
- Stereotypical notion
- Unconscious bias
- Lack of exposure to role models and mentors
- Lack of social support

# Some Initiatives

- Women in Computer Security Summer Camps and REU program at Mississippi State University's Center For Computer Security Research: http://security.cse.msstate.edu/
- Working Group on Cybersecurity, Women and Minorities: How to Succeed in the Career! (Rose Shumba at rosemary.shumba@umuc.edu or Carol Taylor at ctaylor@ewu.edu)
- ETPRO: http://edtechpolicy.org/etpro/
- CyberWatch K12 link: http://edtechpolicy.org/cyberk12/
- Community of Female security professionals www.womenscyberjutsu.com
- NICSS resource portal: http://niccs.us-cert.gov/home/women-minorities

# Time to Act!

- Spread the word out
- Break stereotypes/change perception
- Initiate and engage in directed efforts to recruit diverse groups
  - Create opportunities
  - Create a path that is more affordable and appealing to women
- Attract and engage through gender equitable environment
- Provide access to mentor network
- Provide access to resources
- Contribute to support community

# Women in Cybersecurity (WiCyS) Conference (NSF Award#1303441)

- [www.WiCyS.net](www.WiCyS.net)

- Organized by Tennessee Tech University, University of Memphis and Jackson State Community College

- **Conference Components:**
  - Distinguished speaker sessions
  - Technical presentations
  - Technical workshops
  - Poster competitions
  - Panel discussions
  - Lightning talks
  - Career fair

- To be held in Nashville, Tennessee, early April, 2014.