

Promoting Community Ownership and Women
Participation in Science and Technology Education
and Development in Africa and Update on
Economic, Social and Cultural Council of the AU
(ECOSOCC) and WHADN

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Historical Survey of African-American Women in Science

- Not allowed to a formal education before the Civil War
- Mary Jane Patterson 1862 first African-American woman to earn a bachelor of science degree
- Rebecca Lee (Crumpler) is the first African-American woman to earn a formal medical degree
- Between 1800 and early 1900s a small number of Black Females earned bachelor degrees
- 1920s few earned graduate degrees
- 1921 three Black Women earned Ph.D. degrees in economics, English & German (none in Science)

Source: Sisters In Science by Diann Jordan

Historical Survey of African-American Women in Science

- 1922 Bessie Coleman is the first African-American aviator
- 1926 The National Technical Association is founded to advance careers and education for black engineers and scientists
- 1948 Marie Maynard Daly is the first African-American Woman to earn a Ph.D. in chemistry
- Evelyn Boyd Granville & Marjorie Browne earn Ph.D.s in mathematics
- 1952 Yvonne Clark Young is the first black woman to earn a B.S. in mechanical engineering

Source: Sisters In Science

Total Number of Doctorates In USA In Science & Engineering by Race & Gender in @2000

	Science (All Disciplines)	Engineering (All Disciplines)
Number of Doctorates	14,508	2,556
Black Women	379	25
Black Men	266	58
White Women	5,177	329
White Men	6,360	1,549

Source: Sister In Science by Diann Jordan

Personal Experiences Discussion

- Undergraduate period at Tuskegee Institute (Tuskegee University)
- Undergraduate period at the University of California at Berkeley
- Graduate school at MIT

Survey of 100 CEOs of Corporations by Bayer Corporation

- Women make up 25% of science, technology, engineering, mathematics (STEM) workforce
- 78% of executives are worried about the danger of U.S. losing its global predominance in science & technology
- 74% **are not** concerned about their company's shortage of women and underrepresented groups in STEM positions in their organizations
- 57% are concerned about their company's ability to attract and retain STEM talent

In Summary

Current Environment

- Both industrialized and developing countries have a shortfall in STEM talent
- Education is one of the highest priorities in developing countries
- A major global battleground has become the competition for STEM talent
- Much work needs to be done