

Finding Aid to The HistoryMakers® Video Oral History with Roscoe Giles

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Giles, Roscoe, 1949-
Title:	The HistoryMakers® Video Oral History Interview with Roscoe Giles,
Dates:	October 12, 2012
Bulk Dates:	2012
Physical Description:	7 uncompressed MOV digital video files (2:56:26).
Abstract:	Physicist and engineering professor Roscoe Giles (1949 -) was the first African American to earn a Ph.D. in Physics from Stanford University. He worked as a professor at MIT and Boston University, winning several teaching and education awards and was named one of the "50 Most Important Blacks in Research Science" in 2004. Giles was interviewed by The HistoryMakers® on October 12, 2012, in Boston, Massachusetts. This collection is comprised of the original video footage of the interview.
Identification:	A2012_170
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Physicist and professor of electrical and computer engineering, Dr. Roscoe C. Giles was born in 1949 in Oakland, California. He was raised in Berkeley, California until his family moved to Chicago, Illinois at age four. Giles attended University of Chicago Laboratory Schools from kindergarten to twelfth grade, graduating in 1966. Obtaining his B.A. degree in physics at the University of Chicago, Giles graduated with honors in 1970. Continuing his study of physics, he

went on to acquire his M.S. and Ph.D. degrees in physics from Stanford University in 1973 and 1975. Giles was the first African American to earn his Ph.D. degree in physics from Stanford University.

Giles worked as a research associate at Stanford Linear Accelerator Center (SLAC) until moving to the Center for Theoretical Physics at Massachusetts Institute of Technology (MIT) in 1976. In 1979, he became an assistant professor of physics at MIT. He moved to Boston University as an associate professor of electrical and computer engineering in 1985. In 1992, Giles was named Boston University Scholar-Teacher of the Year and he became the deputy director of the Boston University Center for Computational Science. During 1994 and 1995, Giles won Department of Energy Undergraduate Computational Science Education Awards. The Metacenter-Affiliated Resource in the New England Region (MARINER) project was established at Boston University in October 1995. Claudio Rebbi, Glenn Bresnahan, and Giles became co-directors of the National Science Foundation (NSF) funded the MARINER project.

In 1996, Giles won Boston University's College of Engineering Award for Excellence in Teaching. Giles started as a team leader for the Education Outreach and Training Partnership for Advanced Computational Infrastructure (EOT-PACI) in 1997. He co-chaired the Education Program for the Supercomputing 1997 Conference, benefiting a large group of diverse teachers and exposing thousands of conference attendees to the K-12 use of technology. In 1999, Giles was promoted as a full professor to the department of electrical and computer engineering at Boston University. His research focuses on distributed and parallel computer and supercomputer applications, simulations of large scale molecular systems, advanced computer architectures, computational science, and micromagnetics. In 2000, Giles won the Computing Research Association (CRA) A. Nico Habermann Award. The CRA awarded Giles efforts to increase the participation of underrepresented minorities in the computing disciplines, his service as a faculty advisor and mentor for the Minority Engineers Society, and his mentoring of high school, undergraduate, and graduate students. Giles founded and is the executive director of the Institute for African American eCulture which fights hi-tech inequality. During the Supercomputing Conference in Baltimore, Maryland in 2002, Giles was the first ever African American conference chairman. In 2004, the Career Communications Group selected Giles as one of the "50 Most Important Blacks in Research Science." Another NSF collaboration led by Giles was Engaging People in Cyberinfrastructure (EPIC) launched in 2005. Giles became the chair of the United States Department of Energy's Advanced Scientific Computing Advisory Committee (ASCAC) in 2010.

Dr. Roscoe Giles was interviewed by *The HistoryMakers* on October 12, 2012.

Scope and Content

This life oral history interview with Roscoe Giles was conducted by Larry Crowe on October 12, 2012, in Boston, Massachusetts, and was recorded on 7 uncompressed MOV digital video files. Physicist and engineering professor Roscoe Giles (1949 -) was the first African American to earn a Ph.D. in Physics from Stanford University. He worked as a professor at MIT and Boston University, winning several teaching and education awards and was named one of the "50 Most Important Blacks in Research Science" in 2004.

Restrictions

Restrictions on Access

Restrictions may be applied on a case-by-case basis at the discretion of The HistoryMakers®.

Restrictions on Use

All use of materials and use credits must be pre-approved by The HistoryMakers®. Appropriate credit must be given. Copyright is held by The HistoryMakers®.

Related Material

Information about the administrative functions involved in scheduling, researching, and producing the interview, as well as correspondence with the interview subject is stored electronically both on The HistoryMakers® server and in two databases maintained by The HistoryMakers®, though this information is not included in this finding aid.

Controlled Access Terms

This interview collection is indexed under the following controlled access subject terms.

Persons:

Giles, Roscoe, 1949-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews

Giles, Roscoe, 1949---Interviews

African American physicists--Interviews.

African American professors--Interviews.

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

University of Massachusetts at Boston.

Occupations:

Physicist

Engineering Professor

HistoryMakers® Category:

ScienceMakers|EducationMakers

Administrative Information

Custodial History

Interview footage was recorded by The HistoryMakers®. All rights to the interview have been transferred to The HistoryMakers® by the interview subject through a signed interview release form. Signed interview release forms have been deposited with Jenner & Block, LLP, Chicago.

Preferred Citation

The HistoryMakers® Video Oral History Interview with Roscoe Giles, October 12, 2012. The HistoryMakers® African American Video Oral History Collection, 1900 S. Michigan Avenue, Chicago, Illinois.

Processing Information

This interview collection was processed and encoded on 2/5/2020 by The HistoryMakers® staff. The finding aid was created adhering to the following standards: DACS, AACR2, and the Oral History Cataloging Manual (Matters 1995).

Other Finding Aid

A Microsoft Access contact database and a FileMaker Pro tracking database, both maintained by The HistoryMakers®, keep track of the administrative functions involved in scheduling, researching, and producing the interview.

Detailed Description of the Collection

Series I: Original Interview Footage

Video Oral History Interview with Roscoe Giles, Section
A2012_170_001_001, TRT: 1:28:47 2012/10/12

Roscoe Giles describes his family background. His mother, Virginia Elizabeth Gaines, was born in March of 1914 in Chicago, Illinois. After earning her degree in

Spanish from the University of Chicago, she became a teacher and school administrator. Giles' father, Roscoe Conkling Giles Jr., was born in March of 1919 in Chicago, Illinois. After receiving his degree from Dartmouth College in Hanover, New Hampshire, he worked as a court reporter and became the first African American court reporter in the Northern Illinois district. Giles' paternal grandfather, Roscoe Conkling Giles I, was the first African American to graduate from Cornell University's Medical School and the second president of the Alpha Phi Alpha Fraternity. Giles describes his parents' personalities, talks about his brother, Morris Giles, and shares his earliest childhood memories.

African American families.

African American mothers--Illinois--Chicago.

African American fathers--Illinois--Chicago.

University of Chicago.

Cornell University.

African American grandfathers.

Video Oral History Interview with Roscoe Giles, Section
A2012_170_001_002, TRT: 2:29:11 2012/10/12

Roscoe Giles grew up in the South Side Chicago neighborhoods of Hyde Park and Chatham. He attended St. Edmunds Episcopal Church until the age of thirteen, when he decided that he was no longer interested. Giles also talks about the sights, sounds and smells of his growing up, his interest in science fiction, and his experience at the University of Chicago Laboratory Schools, where he attended from elementary through high school. There, he participated in the science club, was president of the math club, and developed his interests in electronics.

Childhood--Illinois--Chicago.

Chicago (Ill.)--Social life and customs.

University of Chicago. Laboratory Schools.

Education--Illinois--Chicago.

South Side (Chicago, Ill.).

Video Oral History Interview with Roscoe Giles, Section

A2012_170_001_003, TRT: 3:28:33 2012/10/12

Roscoe Giles attended the University of Chicago Laboratory School from elementary school through high school. Randy Sandke, a jazz trumpeter and guitarist, and Sherry Lansing, the first woman to head a Hollywood studio, were among his peers. Despite his involvement in extracurricular activities, Giles' studies and scholarly interests took precedence over his participation in social events. After graduating from high school in 1966, Giles continued with his undergraduate studies at the University of Chicago, where he pursued his B.A. degree in physics. Giles graduated with honors in 1970 and went on to attend Stanford University, becoming the second African American to be admitted to their Ph.D. program in physics, after Bennett Robinson.

University of Chicago. Laboratory Schools.

Education, Secondary--Illinois--Chicago.

University of Chicago.

Stanford University. Department of Physics--Doctoral students.

Physics.

Video Oral History Interview with Roscoe Giles, Section
A2012_170_001_004, TRT: 4:30:18 2012/10/12

Roscoe Giles attended Stanford University on a John Hertz Foundation fellowship. He studied under the advisement of Sidney Drell at the Stanford Linear Accelerator Center (SLAC), where the first evidence of quarks and the psi particle were discovered. Giles' dissertation, entitled 'Quarks and Bubbles: The Dynamics of a Field Theory Model of Hadron Structure,' was in the area of theoretical physics and focused on the development of a bag model to interpret the nature of quark confinement. Giles describes his research and talks about his transition into the field of engineering. After receiving his Ph.D. in physics in 1975, Giles became a research associate at the Center for Theoretical Physics at the Massachusetts Institute of Technology. In 1985, Giles was appointed as an associate professor of electrical and computer engineering at Boston University.

Boston University. Center for Computational Science.

Boston University--Faculty.

Computational engineering.

American Physical Society.

United States. Department of Energy.

National Science Foundation (U.S.).

Video Oral History Interview with Roscoe Giles, Section
A2012_170_001_005, TRT: 5:28:53 2012/10/12

Roscoe Giles has served as the deputy director of the Boston University Center for Computational Science (CCS) since 1992, where he and his colleagues focused on developing parallel computing systems. In 1999, Giles became full professor of electrical and computer engineering at Boston University. Over the course of his career in computational engineering, Giles has been involved with several scientific communities, such as the American Physical Society (APS), and in 2002, he became the first African American to chair the international supercomputing conference. Giles has also been extensively involved with federally-funded education and outreach initiatives in the area of computer science and engineering, in partnership with the U.S. Department of Energy and the National Science Foundation (NSF). In 2001, Giles co-founded the Institute for African American e-culture, which was aimed at connecting African American computing professionals and advancing the diversity of the field.

Stanford University.

Drell, Sidney D. (Sidney David), 1926-

Stanford Linear Accelerator Center.

Theoretical physics.

Quarks.

Massachusetts Institute of Technology.

Boston University.

Video Oral History Interview with Roscoe Giles, Section
A2012_170_001_006, TRT: 6:29:20 2012/10/12

Roscoe Giles has dedicated himself to improving computer education, and to improving access to computer

education. He helped to launch Engaging People in Cyberinfrastructure (EPIC), an education and outreach program, and has chaired the Advanced Scientific Computer Advisory Committee. Giles believes that the future will bring more powerful supercomputers, even those that can work with millions of individual processors. He is hopeful that more minorities will pursue careers in science, but is concerned about government budget cuts to scientific programs. Giles encourages future scientists to persevere even in the face of difficulty. When he looks back over his career, Giles considers the students that he has mentored to be his legacy. In addition to his work as a professor, Giles is also a father of two, Raymond and Stephanie.

Computer science--Education (Higher).

Supercomputers.

Minorities in science.

Mentoring in science.

Reminiscing.

African American families.

Video Oral History Interview with Roscoe Giles, Section
A2012_170_001_007, TRT: 7:01:24 2012/10/12

Roscoe Giles talks about how he would like to be remembered.

Reminiscing.