

Finding Aid to The HistoryMakers® Video Oral History with Steven Richardson

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Richardson, Steven Leslie, 1953-
Title:	The HistoryMakers® Video Oral History Interview with Steven Richardson,
Dates:	July 14, 2012
Bulk Dates:	2012
Physical Description:	8 uncompressed MOV digital video files (3:37:05).
Abstract:	Physicist and engineering professor Steven Richardson (1953 -) is an expert on the subject of condensed matter physics and serves as a professor at Howard University's Department of Electrical and Computer Engineering. Richardson was interviewed by The HistoryMakers® on July 14, 2012, in Washington, District of Columbia. This collection is comprised of the original video footage of the interview.
Identification:	A2012_151
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Physicist and engineering professor Steven L. Richardson was born on July 22, 1953 in Brooklyn, New York. His father, Edward Alfred Richardson, was a subway conductor and his mother, Juanita Pearl Richardson, was a nurse. Richardson excelled in academics and pursued his interests in literature, science and mathematics at Brooklyn Preparatory High School. He attended Columbia University where he studied chemistry on a National Achievement Scholarship. He received advanced degrees from The Ohio State University: his M.S. degree in physics in 1981 and his Ph.D. degree in theoretical condensed matter physics in 1983. During his graduate studies, he was an International Business Machines (IBM) Minority Graduate Fellow and a Xerox Graduate Fellow. At Xerox, he discovered a new semiconductor surface for Gallium arsenide (GaAs), which he included in his Ph.D. dissertation.

Following graduation, Richardson was a Chancellor's Distinguished Postdoctoral Fellow at the University of California, Berkeley and in 1985, he was a Ford Foundation Postdoctoral Fellow at Lawrence Berkeley National Laboratory. In 1986, Richardson was hired to work at Eastman Kodak Company as a senior research scientist in the Solid State Science Laboratories. From 1987 to 1988, he took a temporary leave from Kodak to serve as program director for the National Science Foundation (NSF) Condensed Matter Theory Program. In 1989, he joined the Department of Electrical and Computer Engineering at Howard University as an associate professor and associate director of the Materials Science Research Center of Excellence. In 1995, Richardson was promoted to full professor. From 1997 to 2011, he served as a summer faculty fellow with the United States Navy-American Society for Engineering Education's Summer Faculty Program at the Naval Research Laboratory. Richardson's research utilized supercomputers to calculate the structural, electronic and vibrational properties of molecules. His research has been supported by many public institutions including, the Office of Naval Research, the U.S. Department of Energy (DOE) and the National Science Foundation.

Richardson is a member of the American Physical Society, American Chemical Society and the American

Association for the Advancement of Science. He has received the National Science Foundation Career Advancement Award and served as a Distinguished Sigma Xi National Lecturer. Richardson works in Washington, D.C.

Steven Richardson was interviewed by *The HistoryMakers* on July 14, 2012.

Scope and Content

This life oral history interview with Steven Richardson was conducted by Larry Crowe on July 14, 2012, in Washington, District of Columbia, and was recorded on 8 uncompressed MOV digital video files. Physicist and engineering professor Steven Richardson (1953 -) is an expert on the subject of condensed matter physics and serves as a professor at Howard University's Department of Electrical and Computer Engineering.

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:

Richardson, Steven Leslie, 1953-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews

Richardson, Steven Leslie, 1953---Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

Howard University

Occupations:

Physicist

HistoryMakers® Category:

ScienceMakers

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 Steven Richardson, July 14, 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 5/30/2023 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 Steven Richardson, Section A2012_151_001_001, TRT: 1:29:30
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Steven Richardson talks about his family background. His maternal family was from South Carolina and migrated to Pennsylvania due to the economic promise brought by the steel industry. His mother, Juanita Pearl Wilkins, was born in August of 1927 on Neville Island in Pittsburgh, Pennsylvania. She and her five siblings grew up in the small town of Coraopolis, located west of Pittsburgh. At the age of sixteen, she went along with her brother, an aspiring physician, to New York, where she attended the Lincoln School of Nurses and subsequently became a nurse. Richardson's father, Edward Alfred Richardson, was born in March of 1920 in Brooklyn, New York. After graduating from Abraham Lincoln High School, he went on to serve in the U.S. Army. He then worked at the U.S. Post Office for several years before beginning his thirty five-year career with the New York City Transit Authority.

African American families.

African Americans--Migrations--Economic aspects.

African American nurses.

Parents--Employment--United States.

Video Oral History Interview with Steven Richardson, Section A2012_151_001_002, TRT: 2:30:38
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Steven Richardson is the second eldest of his four accomplished siblings. He talks about his parents' personalities and considers himself to have taken after his dad's more reserved temperament, especially as he grew older. Richardson's family lived in the Breevort Projects in Brooklyn, New York. Despite the negative stigma associated with living in the projects today, Richardson maintains that he had a wonderful experience. His parents were very encouraging with regard to education, and sacrificed in order to put him in Catholic school. He attended Holy Rosary Grammar School. Richardson's mother went back to school to earn her B.S. degree in nursing from Long Island University. She then continued her graduate studies there and received her M.S. in healthcare administration before earning her second M.S. degree in public administration from New York University.

African American families--Brooklyn (New York, N.Y.)

Urban youth--United States.

Parents--Education--United States.

Video Oral History Interview with Steven Richardson, Section A2012_151_001_003, TRT: 3:29:41
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Steven Richardson attended Holy Rosary Grammar School in Brooklyn, New York through the eighth grade. He talks about his favorite teachers and his love for math and science, two of his favorite subjects. In 1966, Richardson graduated second in his class. Despite acceptances to some of the best science and math high schools in New York, such as the Bronx High School for Science, Richardson decided to attend Brooklyn Preparatory High School, where he received an academic scholarship. At Brooklyn Prep, Richardson acquired a solid background in math and science. He also enjoyed his courses in French, American literature, philosophy, English, and photography. After graduating in 1970, Richardson received a National Achievement Scholarship to attend Columbia University. He talks about his academic struggles, his studying regimen, his interest in chemistry, and his college professors.

Science--Study and teaching--New York (State)--New York.

Mathematics--Study and teaching--New York (State)--New York.

African American high school students--Scholarships, fellowships, etc.

African American college students--Scholarships, fellowships, etc.

Video Oral History Interview with Steven Richardson, Section A2012_151_001_004, TRT: 4:29:54
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Steven Richardson studied chemistry at Columbia University. After earning his B.S. degree in 1975, he enrolled at Wayne State University and took graduate courses in chemistry, math and physics. While there, his interest in physics grew profoundly, and he decided to transfer to Massachusetts Institute of Technology (MIT) to study physics, with a concentration in particle physics. However, an enlightening conversation with Shirley Ann Jackson, inspired him to switch his concentration to condensed matter physics. Richardson transferred schools one last time when his graduate advisor received a tenured position at Ohio State University. While at Ohio State, Richardson worked at Xerox, where he and his advisor discovered a reconstructed semiconductor surface for Gallium arsenide. Richardson's work with semiconductors has been incorporated in many technological advancements, including smaller, faster and more efficient electronics. Semiconductors have also influenced cloud storage technology.

African American college students--United States.

Jackson, Shirley Ann, 1946-

Mentoring in science.

Xerox Corporation.

Semiconductors--Technological innovations.

Video Oral History Interview with Steven Richardson, Section A2012_151_001_005, TRT: 5:32:02
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Steven Richardson received his Ph.D. degree in physics from Ohio State University in 1983. His advisor, Bruce R. Patton, encouraged him to be independent, take opportunities outside of school to enhance his research, and seek out collaborations with his peers and other faculty. In 1983, Richardson served as a Chancellor's Distinguished Postdoctoral Fellow at the University of California, Berkeley, where he worked under Marvin L. Cohen. In 1986, Richardson was appointed as a senior research scientist in the corporate research laboratory at Eastman Kodak. Growing disenchanted with Kodak's business model and lack of investment in long-term research, Richardson took a sabbatical to become a program director at the National Science Foundation in 1987. In 1989, Richardson retired from Kodak and left NSF to join the faculty at Howard University. After working in industry, government and academia, he most enjoyed academia.

Ohio State University.

Scientists--Intellectual life--20th century.

Cohen, Marvin L.

Eastman Kodak Company--Employees.

National Science Foundation (U.S.).

Video Oral History Interview with Steven Richardson, Section A2012_151_001_006, TRT: 6:29:26
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Steven Richardson was appointed as an associate professor of electrical engineering at Howard University in 1989. In 1995, he was promoted to a full professorship at Howard, where he teaches, engages in research, and is involved in Howard's pursuit for funding. While at Howard, Richardson has held visiting lectureships and fellowships at Bradley University, the Instituto Superior Tecnico y Institute de Engenharia de Sistemase Computadores (INESC) in

Portugal, the Scientific Research Honor Society, Emory University's Cherry L. Emerson Center for Scientific Computation, and the U.S. Navy Research Laboratory. Richardson talks about his professional activities, the various funding organizations in Washington, D.C., and Howard University's efforts to expand its graduate programs.

Howard University--Faculty.

Visiting teachers.

Universities and colleges--Graduate work--Evaluation.

Video Oral History Interview with Steven Richardson, Section A2012_151_001_007, TRT: 7:29:24
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Steven Richardson's greatest hope for the African American community is for there to be more concentrated efforts to encourage African Americans to pursue careers in the STEM areas. Richardson shares his concerns for the African American youth, talks about some of his students, and describes his teaching methods. He also reflects upon his career and legacy, talks about his family and upbringing, and how he would like to be remembered.

Science--Technology--Engineering--Mathematics--Vocational guidance.

African American youth--Education.

Teaching--methods.

Video Oral History Interview with Steven Richardson, Section A2012_151_001_008, TRT: 8:06:30
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Steven Richardson describes his photographs.

Photographs.