Overview of the Collection

Repository: The HistoryMakers® 1900 S. Michigan Avenue Chicago, Illinois 60616
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Creator: Walton, Donnell

Title: The HistoryMakers® Video Oral History Interview with Donnell Walton,

Dates: July 11, 2013

Bulk Dates: 2013

Physical Description: 5 Uncompressed MOV video files (2:09:54).

Abstract: Physicist Donnell Walton (1966 - ) serves as manager of Worldwide Applications Program at Corning, Inc. where he authored fifteen patents and over sixty technical papers. Walton was interviewed by The HistoryMakers® on July 11, 2013, in Corning, New York. This collection is comprised of the original video footage of the interview.

Identification: A2013_174

Language: The interview and records are in English.

Biographical Note by The HistoryMakers®

Physicist Donnell Thaddeus Walton was born on November 8, 1966 in Mt. Clemens, Michigan. He was one of three children born to Antoinette Williams. Walton attended North Carolina State University and graduated with his B.S. degree in physics and electrical engineering in 1989. Donnell went on to enroll in the University of Michigan where he studied under Dr. Walter Lowe and graduated with his Ph.D. degree in applied physics in 1996. He was awarded a postdoctoral fellowship with AT & T Bell Laboratories in Murray Hill, New Jersey under its Creative Research Fellowship Program (CRFP).

In 1996, Walton was hired as an assistant professor at Howard University where he taught in the physics department until 1999. Walton was then recruited by Corning, Inc. and assigned to the research and development department where he performed and led research in fiber amplifiers and lasers. After serving as project manager of science and technology from 2004 to 2008, he joined Corning, Inc.’s Gorilla Glass team where he was named senior applications engineer. While there, Walton developed products for the burgeoning information and technology sector and worked to extend the applicability of Gorilla Glass. In 2010, Walton was named manager of the Worldwide Applications Program at Corning, Inc. In addition, he has authored fifteen patents and over sixty technical papers in scholarly, peer review journals including 'Optics Express' and 'Optics Letters.'

Walton’s professional affiliations include memberships in the Society of Information Display, the Optical
Society of America, and the American Physical Society. In 2013, Walton received the “Outstanding Technical Contribution to Industry Award” from 'U.S. Black Engineer and Information Technology.' Walton lives in Painted Post, New York with his wife, Robin Walton. They have two children: Nina Walton and Donnell Walton, Jr.

Donnell Thaddeus Walton was interviewed by 'The HistoryMakers' on July 10, 2013.

**Scope and Content**

This life oral history interview with Donnell Walton was conducted by Larry Crowe on July 11, 2013, in Corning, New York, and was recorded on 5 Uncompressed MOV video files. Physicist Donnell Walton (1966 - ) serves as manager of Worldwide Applications Program at Corning, Inc. where he authored fifteen patents and over sixty technical papers.

**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:**

Walton, Donnell

Crowe, Larry (Interviewer)
Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews
Walton, Donnell--Interviews

African American physicists--Interviews.

Organizations:

HistoryMakers® (Video oral history collection)
The HistoryMakers® African American Video Oral History Collection
Corning Incorporated

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


Processing Information

This interview collection was processed and encoded on 8/7/2014 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, July 11, 2013

Video Oral History Interview with Donnell Walton, Section A2013_174_001_001, TRT: 1:28:34 2013/07/11

Donnell Walton describes his family background. Walton’s mother, Antoinette Marie Williams was born in Nashville, Tennessee in 1939. His father, James Robert Lee, was born in New Haven, Michigan in the 1930s. Walton was raised in New Haven by his maternal grandparents, Demalia Thompson Williams and Thad Williams, until his grandmother’s death when he was thirteen years old. He then went to live with his grandfather’s sister in Charlotte, North Carolina. He describes his close relationship to his grandparents, and their strong influence in his life. Walton also describes his relationship with his biological parents, and his half-sisters. He shares his memories of growing up in New Haven, attending Greater New Hope Missionary Baptist Church, and his visits to Detroit, Michigan in the 1970s. Walton started elementary school at Frank Lemon Elementary School, and describes his love for school. As a young boy, he was interested in reading and sports.

African American families.
African American mothers--Tennessee.
African American fathers--Michigan.
Grandparents as parents.
Childhood--Michigan.
Baptists.


In this section of the interview, Donnell Walton describes his experience in school, and his motivation to study hard. Walton began running track and playing football in the ninth grade, and was also involved in boxing in the Police Athletic League. He talks fondly of his grandmother buying him his first computer. After his grandparents’ deaths, Walton moved to Charlotte, North Carolina in 1982, to live with his great-aunt. There, he attended South Mecklenburg High School, and continued to play football. He talks about the mentorship of the school’s guidance counselor, Ms. Dorothy Floyd, who influenced his decision to attend college, and facilitated his entry
into the Minority Introduction to Engineering (MITE) summer program at the Massachusetts Institute of Technology (MIT). Walton describes how he developed an interest in science and later, in physics. He began his undergraduate studies at North Carolina State University, on academic and track scholarships.

Education--North Carolina.

High school athletes.

Death.

Mentoring in education.

Massachusetts Institute of Technology.

North Carolina State University.


In 1984, Donnell Walton began his undergraduate studies at North Carolina State University, where he decided to major in electrical engineering and physics. Upon graduating from college in 1989, Walton received an AT&T Cooperative Research Fellowship Program, which funded his doctoral studies in physics at the University of Michigan, following a summer at Bell Laboratories. Walton describes his rich experience at Bell Labs, where he was mentored by physicists Walter Lowe and Earl Shaw. He also describes his Ph.D. dissertation research on optical fiber lasers, under the tutelage of HistoryMaker Herbert Winful. In 1996, Walton was recruited as an assistant professor in the physics department at Howard University, where he was immersed in teaching, research and service. In this section of the interview, Walton discusses the research infrastructure at Howard University, and reflects upon the important place of scientists such as Ernest Everett Just in African American history.

North Carolina State University.

Electrical engineering.

Physics.

University of Michigan.

Bell Telephone Laboratories.

Howard University.

Mentoring in science.


From 1997 to 1999, Donnell Walton served on the faculty of the physics department at Howard University. He talks about his contributions at Howard University, and reflects upon the research programs and funding at historically black colleges and universities (HBCUs) in the United States. In 1999, Walton was recruited as a research scientist at Corning,
Incorporated, where he was initially involved in the development of high-powered fiber lasers. Since the decline of the telecommunications boom, Walton has been involved in driving the commercialization of Corning’s Gorilla glass product, which has fast become a mainstay of screens on smart phones and other electronic devices. In this section of the interview, Walton talks about the details of the development of Gorilla glass, and its applications in the manufacturing sector. He also talks about the diversity of the workforce at Corning.

Howard University.
Physics.
Corning Incorporated.
Wireless communication systems.
Digital electronics.
Diversity in the workplace.

Video Oral History Interview with Donnell Walton, Section A2013_174_001_005, TRT: 5:15:50 2013/07/11

Donnell Walton has worked at Corning, Incorporated since 1999. His work there has included marketing for the commercialization of Corning’s Gorilla Glass product. He describes the concept of native damage resistance, a property of Gorilla glass. He also talks about Corning’s market base, its competitors, its investment in research and development, and its involvement in educational and mentoring programs for minorities. Walton shares his advice for young scientists and engineers who want to pursue careers in industry. In this final section of his interview, he also reflects upon his legacy, shares how he wants to be remembered, describes his hopes and concerns for the African American community and talks about his family.

Corning Incorporated.
Digital electronics.
Computer engineering.
Wireless communication systems.
Reminiscing.
African American families.