

Finding Aid to The HistoryMakers® Video Oral History with Wendell Hill

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Hill, Wendell T.
Title:	The HistoryMakers® Video Oral History Interview with Wendell Hill,
Dates:	September 12, 2012
Bulk Dates:	2012
Physical Description:	8 uncompressed MOV digital video files (3:44:47).
Abstract:	Physicist Wendell Hill (1952 -) was known for his extensive research in atomic, molecular and optical physics at the University of Maryland. Hill was interviewed by The HistoryMakers® on September 12, 2012, in Washington, District of Columbia. This collection is comprised of the original video footage of the interview.
Identification:	A2012_226
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Physicist and Professor Wendell T. Hill, III was born in 1952 in Berkeley, California to Wendell Hill, Jr. and Marcella Washington Hill, who met at Drake University in the 1940s. In the 1960s his father was the Chief Pharmacist at in the Orange County Medical Center, now the University of California Irvine Medical Center, and finished his career as the dean of Howard University's College of Pharmacy in the 1990s. Hill III's mother was a mathematics teacher who finished her career at the University of the District of Columbia. Hill III graduated from Villa Park High School in Orange, CA in 1970. He earned physics degrees from the University of California, Irvine (B.A., 1974) and Stanford University (Ph.D.,

1980), where he was an IBM pre-doctoral fellow.

Hill was a National Research Council postdoctoral fellow at the National Bureau of Standards, now the National Institute of Standards & Technology (NIST) from 1980 to 1982, after which he joined the faculty of the Institute for Physical Science and Technology (IPST) at the University of Maryland. In 1985 Hill was awarded a National Science Foundation (NSF) Presidential Young Investigator Award, now known as a Presidential Early Career Award. Holding appointments in Physics and the Institute for Physical Science and Technology, Hill became a full professor in 1996 and a Fellow of the Joint Quantum Institute in 2006. Hill has guest-worker status at NIST and Lawrence Livermore National Lab and has held visiting positions at the Université de Paris, Orsay in France, the Instituto Venezolano de Investigaciones (Venezuela) and JILA (University of Colorado). He directed the Laboratory for Atomic, Molecular & Optical Science, and Engineering at the University of Maryland between 1999 and 2002 and was the Program Director of the Atomic, Molecular and Optical (AMO) Physics program at NSF from 2010 to 2012.

Hill's research focus is laser-matter interaction under extreme conditions – ultra-fast, ultra-intense and ultra-cold. Hill has written numerous scientific articles within AMO physics, co-authored the textbook entitled *Light-Matter Interaction* that explains the underlying principals of AMO research and penned the opening chapter entitled “Electromagnetic Radiation,” for the *Encyclopedia of Applied Spectroscopy*.

Hill is a fellow of the American Physical Society (APS) and the National Society of Black Physicists (NSBP) as well as an active member of the Optical Society of America (OSA). He has served on numerous society committees including the APS Council and Executive Board, the APS Division of Laser Science executive committee, and the OSA Technical Council; he has chaired the National Academy of Science's Committee on AMO Science along with several program and award committees. His interest in improving the diversity in physics has him serving on the National Advisory Board of the APS Minority Bridge Program; the goal of the program is to increase significantly the number of “underrepresented minorities” earning a physics Ph.D. over the next decade.

Professor Hill and Patricia, his wife, live in Maryland and have three children, Nayo, Eshe and Safiya.

Professor Wendell T. Hill, III was interviewed by *The HistoryMakers* on September 12, 2012.

Scope and Content

This life oral history interview with Wendell Hill was conducted by Larry Crowe on September 12, 2012, in Washington, District of Columbia, and was recorded on 8 uncompressed MOV digital video files. Physicist Wendell Hill (1952 -) was known for his extensive research in atomic, molecular and optical physics at the University of Maryland.

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:

Hill, Wendell T.

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews

Hill, Wendell T.--Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

University of Maryland at College Park. Institute for Physical Science and Technology

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 Wendell Hill, September 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 Wendell Hill, Section
A2012_226_001_001, TRT: 1:30:42 2012/09/12

Wendell Hill talks about his family background. His maternal grandfather, Peter Clarence Washington, served as president of Jarvis Christian College in Texas. His grandmother, Rosa Washington, worked in the library at the University of California, Berkeley. Hill's mother, Marcella Elaine Washington, was born in September of 1927 in Bloomington, Illinois. She attended Drake University in Iowa and later became a math teacher in Los Angeles, California. Hill traces his paternal grandmother's ancestry back into the 1700s. Her name was Mildred Bailey and her father's father, Steven Bailey, was the half-brother to Frederick Douglass. Hill's father, Wendell Hill Jr., was born in December of 1924 in Philadelphia

Pennsylvania. He attended Drake University, where he met his wife, and later became a pharmacist.

African American families--United States, Western.

Jarvis Christian College--Presidents.

Douglass, Frederick, 1818-1895--Family.

Drake University--Alumni and alumnae.

Husband and wife--United States.

Video Oral History Interview with Wendell Hill, Section
A2012_226_001_002, TRT: 2:30:00 2012/09/12

Wendell Hill was born and raised in Southern California. Hill talks about his family, his earliest childhood memories and describes his childhood neighborhood. He attended Burnside Elementary School in Los Angeles, California. With his mother working as a teacher and his father trained as a pharmacist, they were both very involved with his schooling. Hill's favorite subject was math and while he always enjoyed going to school, he did not always feel that he was treated fairly. Prior to entering the fifth grade, Hill's family moved to the City of Orange in Orange County, California, where his father served as chief pharmacist at the Orange County Medical Center. He attended Taft Elementary School. Hill found the social environment of Orange County to be much less friendly than he experienced in Los Angeles.

Childhood--California, Southern.

Education, Elementary--Parent participation--California--Los Angeles.

Education, Elementary--Social aspects--California.

Moving, households--California.

Orange County (Calif.)--Ethnic relations.

Video Oral History Interview with Wendell Hill, Section
A2012_226_001_003, TRT: 3:29:30 2012/09/12

Wendell Hill's family moved to The City of Orange in Orange County, California prior to his entering the fifth grade. Due to the unwelcoming and politically conservative environment, Hill became more withdrawn. He attended Taft Elementary School and Peralta Junior High School. He loved math because of its objectivity and

because his math teachers could not easily deny his proficiency in the ways that teachers of the humanities could. Hill also loved playing baseball and playing the clarinet. In 1966, Hill attended Villa Park High School, where he played baseball, was a member of the Key Club, and played in the band. He was also intrigued with the United States exploration of outer space.

Bashfulness in children--United States.

Mathematics--Study and teaching (Primary)--California.

African American high school students--California.

Video Oral History Interview with Wendell Hill, Section
A2012_226_001_004, TRT: 4:30:21 2012/09/12

Wendell Hill graduated from Villa Park High School in 1970. He wanted to attend the University of California, Los Angeles, but his mother was opposed. Instead, Hill attended the University of California. He hoped to be able to connect with the black community through cultural channels, such as music, but he found that to be quite difficult. Hill talks about his struggle to integrate into the Black community, as well as how he reconciled his faith with science. Hill initially entered U-C, Irvine as a math major. However, after taking courses in physics and calculus concurrently, he became inspired by their synchronicity and decided to change his major to physics.

African American college students--Social life and customs.

Student adjustment--United States.

Physics--Study and teaching (Higher)--California.

Video Oral History Interview with Wendell Hill, Section
A2012_226_001_005, TRT: 5:29:31 2012/09/12

Wendell Hill graduated from the University of California, Irvine in 1974 with his B.S. degree in physics. He decided to attend Stanford University to pursue his Ph.D. degree in physics. While there, he continued to explore his identity as a Christian and as a scientist. Under the advisement of Arthur Schawlow, his dissertation research was focused in the area of laser physics. After receiving his Ph.D. degree in 1980, Hill joined the National Bureau of Standards (now known as the National Institute of Standards and

Technology, or NIST) as a post-doctoral researcher in the radiation physics division.

Physics--Study and teaching (Higher)--California.

Religion and science.

African Americans--Doctoral students--California.

Schawlow, Arthur L., 1921-1999.

National Institute of Standards and Technology (U.S.)

Video Oral History Interview with Wendell Hill, Section
A2012_226_001_006, TRT: 6:30:47 2012/09/12

Wendell Hill was appointed as an assistant research scientist at the University of Maryland's Institute for Physical Science and Technology in 1982. While there, he held visiting appointments at the Instituto Venezolano de Investigaciones in Venezuela, the National Institute of Standards and Technology, and the University of Paris in France. His experiences abroad, in particular, exposed him to the vast economic disparities facing underdeveloped countries' access to quality scientific infrastructure and equipment. In 1986, Hill transitioned into teaching after being appointed as an assistant professor of physics at the University of Maryland. After being promoted to associate professor in 1990, Hill took a sabbatical to serve as a visiting fellow at the University of Colorado, where he worked with cold atoms. Hill talks about his other professional activities at the University of Maryland and his textbook, "Light-Matter Interaction."

Physicists--Intellectual life--20th century.

Infrastructure (Economics)--Scientific aspects.

Universities and colleges--United States--Faculty.

Science--Textbooks--United States.

Video Oral History Interview with Wendell Hill, Section
A2012_226_001_007, TRT: 7:31:38 2012/09/12

Wendell Hill's current research interests fall within the areas of atomic, molecular and optical (AMO) physics. He is particularly interested in ultrafast dynamics and quantum control; ultra-intense laser-matter interaction and high-energy density physics; and atom optics and quantum information science. Hill shares his hopes and concerns for the African American community, reflects on his

legacy and life choices, and talks about his family.

Atomic, molecular, and optical physics--Research.

Cold atoms.

Lasers in physics.

Video Oral History Interview with Wendell Hill, Section

A2012_226_001_008, TRT: 8:12:18 2012/09/12

Wendell Hill talks about how he would like to be remembered and describes his photos.

Photographs.