Finding Aid to The HistoryMakers ® Video Oral History with Trachette Jackson

Overview of the Collection

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

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Creator: Jackson, Trachette, 1972-

Title: The HistoryMakers® Video Oral History Interview with Trachette Jackson,

Dates: October 22, 2012

Bulk Dates: 2012

Physical Description: 5 uncompressed MOV digital video files (2:11:38).

Abstract: Mathematician and math professor Trachette Jackson (1972 -), is the co-founder and

co-director of the Mathematics Biology Research Group at the University of Michigan. Jackson was interviewed by The HistoryMakers® on October 22, 2012, in Ann Arbor, Michigan. This collection is comprised of the original video footage of the interview.

Identification: A2012 184

Language: The interview and records are in English.

Biographical Note by The HistoryMakers®

Mathematician and professor of mathematics Trachette Jackson was born on July 24, 1972. She attended a large public high school and spent her summers at a math-science honors program hosted by Arizona State University where she developed her passion for mathematics. Jackson was an excellent student and graduated in the top twenty of her class. In 1994, she received her B.S. degree in mathematics from Arizona State University. Jackson earned her M.S. and Ph.D. degrees from the University of Washington in 1996 and 1998, respectively. Her Ph.D. thesis was entitled "Mathematical Models in Two-Step Cancer Chemotherapy." She completed postdoctoral positions with the Institute for Mathematics and its Applications at the University of Minnesota, and at Duke University.

In 2000, Jackson joined the faculty at the University of Michigan as an assistant professor in the mathematics department. She was promoted to associate professor in 2003. In 2006, Jackson was appointed as the co-principal investigator of the National Science Foundation (NSF)-funded University of Michigan SUBMERGE (Supplying Undergraduate Biology and Mathematics Education Research Group Experiences) program. SUBMERGE is an interdisciplinary program in math and biology that exposes undergraduates to experimental biology within mathematical modeling and gives exposure to quantitative analysis in biology courses. In 2008, she became a full professor in Michigan's mathematics department. Jackson is the co-founder, and is the co-director, of the the Mathematics Biology Research Group (MBRG). The group organizes lectures, conferences, and workshops for graduate students and postdoctoral researchers, among other activities. The main focus of her research in mathematical oncology is combining mathematical modeling and in vivo tumor vascularization to gain deeper understanding of tumor growth and the vascular structure of molecular, cellular and tissue levels.

Jackson has published numerous papers on the subject of mathematical oncology and her work has received international attention. In 2008, Jackson served as senior editor for the academic journal, *Cancer Research*, and has reviewed articles for the *Journal of Mathematical Biology* and the *National Academy of Sciences*. Jackson has received many awards including the Blackwell Tapia Award (2010) and the Arizona State University's Medallion

of Merit Award. Trachette Jackson is married to Patrick Nelson and they have two sons, Joshua and Noah.

Trachette Jackson was interviewed by *The HistoryMakers* on 10/22/2012.

Scope and Content

This life oral history interview with Trachette Jackson was conducted by Larry Crowe on October 22, 2012, in Ann Arbor, Michigan, and was recorded on 5 uncompressed MOV digital video files. Mathematician and math professor Trachette Jackson (1972 -), is the co-founder and co-director of the Mathematics Biology Research Group at the University of Michigan.

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:

Jackson, Trachette, 1972-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews Jackson, Trachette, 1972---Interviews

African American mathematicians--Interviews.

African American professors--Interviews.

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

University of Michigan

Occupations:

Mathematician

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 Trachette Jackson, October 22, 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 Trachette Jackson, Section A2012_184_001_001, TRT: 1:29:24

Trachette Jackson describes her family history. Her mother, Ernestine Jackson, was born February 27, 1954 in Monroe, Louisiana and was of African American and Indian descent. She was a homemaker. Her father, Isaiah Jackson, was born February 7, 1952, also in Monroe, Louisiana. He is retired from the Air Force and works with computers. Until her father retired from the Air Force, Jackson's family moved around frequently during her childhood, including living in Maine, Louisiana, Illinois, Texas, Italy and, finally, Arizona. She discussed how her upbringing shaped her personality and how she became interested in math and science.

African American families.

African American mothers--Louisiana.

African American fathers--Louisiana.

United States. Air Force.

Children of military personnel.

Video Oral History Interview with Trachette Jackson, Section A2012_184_001_002, TRT: 2:29:30?

Trachette Jackson talks about her memories of growing up in Italy. Around 1983, Jackson's family settled permanently in Mesa, Arizona, where she attended Powell Junior High School and Mesa High School. She describes her education during her formative years through college. During the summer of her junior year in high school, Jackson joined Arizona State University's Math Science Honor's Program. While there, Jackson met Joaquin Bustoz, who became her mentor and nurtured her mathematical talents by encouraging her to major in math, instead of engineering. It was also during this program where she was exposed to a multicultural academic environment for the first time. She graduated from Mesa High School in 1990 and attended Arizona State University on scholarship.

Childhood--Italy.

Education--Arizona.

Arizona State University.

Mathematics.

Mentoring in education.

Video Oral History Interview with Trachette Jackson, Section A2012_184_001_003, TRT: 3:29:45

Trachette Jackson graduated summa cum laude from Arizona State University in 1994, where she earned her B.S. degree in mathematics. She is the first person in her immediate family to have earned a college degree. Jackson then attended the University of Washington in Seattle, Washington, where she earned her master's and doctoral degrees in applied mathematics in 1996 and 1998, respectively. Her husband, Patrick Nelson, who she married in 1998, is also a mathematical biologist. While at the University of Washington, she worked under the mentorship of James Murray. Jackson's research interests focuses on the application of mathematical modeling to understanding biological processes, particularly cancer development. She describes her post-doctoral research at the

University of Minnesota and Duke University, leading up to the starting of her career at the University of Michigan.

Arizona State University.

University of Washington.

Marriage.

Mathematical models.

University of Michigan.

Video Oral History Interview with Trachette Jackson, Section A2012_184_001_004, TRT: 4:29:12

Trachette Jackson began working at the University of Michigan as an assistant professor of mathematics in 2000. She taught introductory calculus and introductory mathematical biology. Jackson's research focused on using mathematical methods in determining the rate at which cancer grows and spreads throughout the bloodstream. In 2003, she received the Alfred P. Sloan Foundation Research Fellowship and was promoted to associate professor at the University of Michigan. In 2005, she was awarded the James S. McDonnell Foundation Research Award. By 2008, Jackson was a full professor at the University of Michigan. She discusses her professional activities and describes some of the programs she has developed with the grant funding she has been awarded.

University of Michigan.

Mathematical models.

Cancer--Mathematical models.

Awards.

Mathematics--Scientific research.

Video Oral History Interview with Trachette Jackson, Section A2012_184_001_005, TRT: 5:13:47

Trachette Jackson is married to Patrick Nelson, who is also a mathematical biologist. They have two sons: thirteen year old Joshua Patrick and ten year old Noah Aaron. Her mother passed away a few years ago. Her brother and sister have writing careers. Jackson reflects on her career and discusses what she would like to accomplish in the future.

Marriage.

African American families.

Reminiscing.