# Finding Aid to The HistoryMakers ® Video Oral History with James Curry

#### Overview of the Collection

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

info@thehistorymakers.com www.thehistorymakers.com

Creator: Curry, James H.

**Title:** The HistoryMakers® Video Oral History Interview with James Curry,

**Dates:** January 16, 2013

Bulk Dates: 2013

**Physical Description:** 6 uncompressed MOV digital video files (2:58:31).

**Abstract:** Mathematician James Curry (1948 - ) pioneering CRAY Supercomputer analyst, served

as associate director and professor of of applied mathematics at the University of

Boulder, Colorado. Curry was interviewed by The HistoryMakers® on January 16, 2013, in Arlington, Virginia. This collection is comprised of the original video footage of the

interview.

**Identification:** A2013 033

**Language:** The interview and records are in English.

## Biographical Note by The HistoryMakers®

Mathematician James Curry was born in 1948 in Oakland, California. Curry became interested in mathematics at age twelve, after seeing fascinating symbols and equations in a physics book. He was determined to learn calculus and received a lot of support from his high school math teacher. Curry was also curious about computers after working with one that was donated to his high school. In 1976, Curry received with his B.S. degree in mathematics from the University of California, Berkeley. He also attended graduate school the University of California, Berkeley, graduating with his M.S. degree in mathematics in 1976 and his Ph.D. degree I mathematics in 1976.

Upon graduation, Curry was awarded consecutive postdoctoral fellowships to study the Massachusetts Institute of Technology and the National Center for Atmospheric Research in Boulder, Colorado. In 1981, Curry began scientific investigations with the CRAY High Performance Computing System. His research was supported with the Minority Research Initiation grant from the National Science Foundation. He investigated the role of computers in helping people to understand complicated topics like weather monitoring and mathematics theory. Curry's research focused on developing ways to solve nonlinear equations using a computer. He worked with scientists who study the ocean and atmosphere, such as Warren Washington, and helped them to answer questions about their work using mathematics and computers. In 1990, Curry joined the faculty at the University of Colorado, Boulder as associate professor of applied mathematics. Curry was promoted to full professor of mathematics at the University of Colorado in 1991; and, in 2008, he was appointed associate director of the program in applied mathematics. Curry has also worked as a project officer at the National Science Foundation, where he managed the distribution of federal funding to programs from the Division of Mathematical Science, Applied Mathematics Division.

Curry's seminal research with the CRAY supercomputer has been widely-published in academic journals including, *Communications in Mathematical Physics* and *Communications in Applied Nonlinear Analysis*. In addition to research and writing, Curry has contributed to STEM education via The Curriculum Project, which has

been successful in addressing critical issues involving minority participation in mathematics.

James H. Curry was interviewed by *The HistoryMakers* on January 16, 2013.

## **Scope and Content**

This life oral history interview with James Curry was conducted by Larry Crowe on January 16, 2013, in Arlington, Virginia, and was recorded on 6 uncompressed MOV digital video files. Mathematician James Curry (1948 - ) pioneering CRAY Supercomputer analyst, served as associate director and professor of of applied mathematics at the University of Boulder, Colorado.

#### 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:

Curry, James H.

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

## Subjects:

African Americans--Interviews Curry, James H.--Interviews

African American mathematicians--Interviews.

## **Organizations:**

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

University of Colorado, Boulder

## **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 James Curry, January 16, 2013. 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 James Curry, Section A2013\_033\_001\_001, TRT: 1:29:03?

James Curry, who was born in 1948 in Oakland, California, describes his family background. Curry's mother, Henrie Andrews, was born in Brookshire, Texas in 1916, to Abe and Elizabeth Andrews. She attended school until the sixth grade, and was among the first generation in her family to receive an education. Curry's father, James Curry, was born in 1913 in Katy, Texas, and raised by his grandmother, following the death of his own mother. Curry and his parents moved from Texas to California in the 1940s, where his father worked as a cook with the Southern Pacific Railway. Curry describes his parents' lives in Texas, and his visits to his grandparents' homes as a young boy.

African American families.

African American mothers--Texas.

African American fathers--Texas.

Southern Pacific Railroad Company.

African American grandparents--Texas.

Video Oral History Interview with James Curry, Section A2013\_033\_001\_002, TRT: 2:29:06?

James Curry grew up in West Oakland, California, with his parents and his sister, Gloria, who was one year older than him. Curry and his sister were very close-knit, and attended Cole Elementary School and Lowell Junior High School together. They split up in high school, when Curry decided to attend Oakland Technical High School. His family suffered a huge personal loss when his sister died in a drowning accident while she was on a high school skiing trip. Curry's high school counselor, Edward L. Dry, motivated him to follow Gloria's path and attend college after graduating from high school. Curry remembers studying math with his sister. He was a voracious reader as a teenager, and enjoyed comic books, science fiction and books about math.

Childhood--California--Oakland.

Education--California--Oakland.

African American sisters.

Death of siblings.

Mentoring in education.

Video Oral History Interview with James Curry, Section A2013 033 001 003, TRT: 3:29:46?

As a teenager, James Curry was greatly influenced by the language and the science in comic books and science fiction books and series. He attended Cole Elementary School and Lowell Junior High School, where his favorite subject was math. Curry's first exposure to computers and programming was in the early 1960s, while he was in the ninth grade at Oakland Technical High School. Curry describes his mentors, Mary Perry Smith and Edward L. Dry, who encouraged him to attend college and aim for higher education. After graduating from high school in 1966, Curry pursued his B.S. degree in mathematics at the University of California, Berkeley, where he was mentored by Don Sarason and Calvin Moore.

Comic books and children.

Education--California--Oakland.

Mathematics.

Mentoring in education.

University of California, Berkeley.

Video Oral History Interview with James Curry, Section A2013\_033\_001\_004, TRT: 4:32:09?

After graduating from high school in 1966, James Curry pursued his B.S. degree in mathematics at the University of California, Berkeley, where he was mentored by Don Sarason and Calvin Moore. Although Curry attended Berkeley at the height of political activism of the 1960s, he remained focused on earning his degree. Curry was also mentored by physicist Harry Morrison, who introduced him to the African American scientific community at Berkeley. After earning his bachelor's degree in 1970, Curry stayed at Berkeley to pursue his Ph.D. in non-linear differential equations, under the tutelage of Oscar Lanford. Over the course of his career, Curry has been influenced by several prominent scientists and HistoryMakers, including Harry Morrison, Warren Washington, Jim Donaldson and Raymond Johnson.

University of California, Berkeley.

Mathematics.

Mentoring in science.

Morrison, Harry, 1937-

Washington, Warren M.

Video Oral History Interview with James Curry, Section A2013\_033\_001\_005, TRT: 5:28:28?

James Curry completed his thesis research on finite dimensional normal approximations to Boussinesq equations in 1976, and earned his Ph.D. in mathematics from the University of California, Berkeley. After spending a year teaching at Howard University in Washington, D.C., Curry began a post-doctoral position at the National Center for Atmospheric Research in Boulder, Colorado. Soon afterwards, he accepted a position at the University of Colorado, and from 1978 to 1979, spent two years on leave at the Massachusetts Institute of Technology. While at MIT, Curry worked with Ed Lorenz, who pioneered chaos theory and coined the term 'butterfly effect'. Curry has been on the faculty at the University of Colorado for thirty-five years, and also collaborates with the NCAR, where he was influenced by Warren Washington. Curry's research at the NCAR has focused on applying his mathematical skills to develop atmospheric models.

Boussinesq approximation.

Finite element method--Mathematics.

University of California, Berkeley.

Howard University.

National Center for Atmospheric Research (U.S.).

University of Colorado, Boulder.

Massachusetts Institute of Technology.

Washington, Warren M.

Video Oral History Interview with James Curry, Section A2013 033 001 006, TRT: 6:29:59?

James Curry reflects upon his legacy. Over the course of his thirty-five years on the faculty of the applied mathematics department at the University of Colorado, Curry has taught extensively and mentored several doctoral students. He has also served in administrative roles as associate chairman, chairman, and associate director of the department. In his early years of research at the National Center for Atmospheric Research (NCAR), Curry worked with the Cray-1 supercomputer to perform experiments in complex dynamical systems. He believes that his legacy lies in his role as a mentors and in striving to increase the student-base in math and science. Curry believes that education is the key to the future, and wants to be remembered for making a difference in people's lives.

University of Colorado, Boulder.

Mathematics.

Mentoring in science.

National Center for Atmospheric Research (U.S.).

Supercomputers.

Reminiscing.