**Finding Aid to The HistoryMakers® Video Oral History with Mark Smith**

**Overview of the Collection**

Repository: The HistoryMakers® 1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com

Creator: Smith, Mark

Title: The HistoryMakers® Video Oral History Interview with Mark Smith,

Dates: April 8, 2013

Bulk Dates: 2013

Physical Description: 6 MOV HD video files (2:48:07).

Abstract: Electrical engineer and competitive fencer Mark Smith (1956 - ) 1981 and 1983 U.S. National Fencing Champion and 1980 and 1984 U.S. Olympic fencing team member, is the Michael J. & Katherine R. Birck Endowed Professor of Electrical and Computer Engineering and Dean of the Purdue University Graduate School Smith was interviewed by The HistoryMakers® on April 8, 2013, in Lafayette, Indiana. This collection is comprised of the original video footage of the interview.

Identification: A2013_127

Language: The interview and records are in English.

**Biographical Note by The HistoryMakers®**

Professor of electrical and computer engineering and competitive fencer Mark J. T. Smith was born on May 17, 1956 in Jamaica Queens, New York. After receiving his B.S. degree in electrical engineering from the Massachusetts Institute of Technology in 1978, Smith enrolled at the Georgia Institute of Technology and graduated from there with his M.S. degree in electrical engineering in 1979 and his Ph.D. degree in electrical engineering in 1984.

As a collegiate athlete, Smith was selected as the most valuable player and captain of the Massachusetts Institute of Technology Varsity Fencing Team. He became the Intercollegiate Fencing Association Foil Team Champion in 1975, the Eastern Collegiate Athletic Conference Foil Champion in 1977, and the New England Foil and Sabre Champion in 1976 and 1978, respectively. Smith was the U.S. National Champion in 1981 and 1983, and served as a two-time member of the U.S. Olympic Team in 1980 and 1984. He received a Silver Medal in the 1983 Pan-American Games; was a member U.S. World Championship Fencing Teams in 1981 and 1982; and, competed three times in World University Games. In 1996, Smith was one of the final runners carrying the Olympic Torch in the Summer Olympic Games Opening Ceremonies in Atlanta, Georgia.

Smith joined the electrical engineering faculty at the Georgia Institute Technology in 1984. He worked at the Institute’s European campus in Metz, France from 1991 to 1993. He was appointed as the Executive Assistant to the President of Georgia Institute of Technology from 1997 to 2000. In January of 2003, Smith joined the faculty at Purdue University and was appointed as the Head of the School of Electrical and Computer Engineering. Smith was named Dean of the Purdue University Graduate School in 2009, and went on to become the Michael & Katherine Birck Endowed Chair in Engineering.

Smith is the owner of five patents and has authored or co-authored more than two hundred and forty scientific publications, including six international standards publications. He co-authored two introductory books:
"Introduction to Digital Signal Processing" and "Digital Filtering". In addition, he co-authored the graduate-level textbook, "A Study Guide for Digital Image Processing," and is co-editor of the book, "Wavelets and Subband Transforms".

Smith is a co-principal investigator of the American Indian Graduate Program funded by the Sloan Foundation and is a member of Purdue University’s NSF-funded ADVANCE program leadership team. He is a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), a past recipient of the IEEE Distinguished Lecturer Award, and was awarded the IEEE Processing Society Senior Award in 1992. Smith is also a past president of the Electrical and Computer Engineering Department Heads Association. In addition, he served as a member of the National Academies Army Board of Science and Technology and the Council of Graduate Schools (CGS) Board of Directors.

Mark J. T. Smith was interviewed by The HistoryMakers on April 8, 2013.

**Scope and Content**

This life oral history interview with Mark Smith was conducted by Larry Crowe on April 8, 2013, in Lafayette, Indiana, and was recorded on 6 MOV HD video files. Electrical engineer and competitive fencer Mark Smith (1956 - ) 1981 and 1983 U.S. National Fencing Champion and 1980 and 1984 U.S. Olympic fencing team member, is the Michael J. & Katherine R. Birck Endowed Professor of Electrical and Computer Engineering and Dean of the Purdue University Graduate School.

**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:**

Smith, Mark
Finding Aid to The HistoryMakers® Video Oral History with Mark Smith

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

**Subjects:**

African Americans--Interviews
Smith, Mark--Interviews

**Organizations:**

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

**HistoryMakers® Category:**

ScienceMakers

SportsMakers

**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 Mark Smith, April 8, 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 7/31/2013 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.
Mark Smith describes his family background. Smith’s mother, Joan Smith, was born in 1926 in New York City, and traced her ancestry to Alabama. She attended Hunter College and then Fordham University for graduate school, and spent her career as a social worker in New York. Smith describes his mother’s personality and her love for travel. Smith’s father, Windsor Smith, was also born in New York City in 1924, and traced his roots to North Carolina. After graduating from Jamaica High School, he was drafted into the U.S. Army and served in World War II. He fought in the South Pacific. Upon his return, he worked as a bus driver for the New York City Transit Authority. Smith describes his father’s calm and caring personality, and talks about his parents’ marriage of fifty years. He also describes his childhood memories of growing up in Queens, New York.

African American families--New York (State)--New York.
African American parents--New York (State)--New York.
United States.--Army--African Americans--20th century.
African Americans--Marriage.
Childhood--Queens (New York, N.Y.).

Mark Smith attended public schools in Queens, New York, until the seventh grade. Smith describes his early interest in his science classes, and his mischievousness in elementary school. Smith’s interest in science and engineering was further stimulated by the time that he spent with his cousin Roy, in his electronics workshop. He attended The Henley School in Holliswood, New York, until tenth grade, and describes his experience there. Smith then went on to attend John Bowne High School in Flushing, Queens, where he became interested in fencing. Smith describes his experience in school, his interest in television and action films, and his childhood in New York City, particularly his memories of the 1964 World’s Fair.

African Americans--Education--Queens (New York, N.Y.).
Transfer students.
John Bowne High School--Alumni and alumnae.
Fencing--Technique.
Fairs--New York (State)--New York--History.

Mark Smith attended John Bowne High School in New York, where he excelled in his studies, and also became involved in extracurricular activities such as fencing. After graduating from high school in 1974, Smith attended the Massachusetts Institute of Technology (MIT) to pursue his B.S. degree in electrical engineering. He describes his experience at MIT, where he built a stroboscope for his undergraduate thesis project. In 1978, Smith began his doctoral studies in electrical engineering at the Georgia Institute of Technology, focusing on the field of digital signal processing. Continuing to fence at MIT,
Smith competed and placed well in the NCAA and the national championships in 1978. He then qualified for the U.S. fencing team to compete in the 1980 summer Olympic games, but was unable to participate due to the U.S. boycott of the Moscow Olympics that year.

Massachusetts Institute of Technology--Students, Black.

Stroboscopes--Design and construction.

Fencing.

Electrical engineering--Study and teaching (Graduate)--Georgia.

Olympics--History--20th century.

Video Oral History Interview with Mark Smith, Section A2013_127_001_004, TRT: 4:28:30
2013/04/08

Mark Smith attended the Georgia Institute of Technology (Georgia Tech) to pursue his doctoral degree in electrical engineering. He worked in the field of digital signal decomposition under the tutelage of Thomas Barnwell. Smith describes his work on what became known as the Smith-Barnwell filter banks for sub-band coding. Smith continued his training as a fencer, and won the U.S. Fencing National Championships in 1981 and 1983. He talks about his experience on the U.S. fencing team in the 1984 summer Olympics in Los Angeles, California, and his decision to retire from professional fencing shortly thereafter. Smith earned his Ph.D. degree in 1984, and he and his wife had their first son in 1985. At the same time, Smith accepted an assistant professorship in electrical engineering at Georgia Tech. He describes his early research on the development and applications of a signal manipulation algorithm, and his work on image enhancement.

Georgia Institute of Technology--Doctoral students.

Signal processing--Digital techniques.

Fencers--United States.


Georgia Institute of Technology--Faculty--Employment.

Video Oral History Interview with Mark Smith, Section A2013_127_001_005, TRT: 5:28:44
2013/04/08

Mark Smith served at the Georgia Institute of Technology from about 1985 until 2003. He describes his research contributions in image morphing, and in the broader field of digital signal processing. He talks about his involvement with founding the EMERGE program at Georgia Tech, his role with the Institute of Electrical and Electronic Engineers (IEEE), and his service with the National Science Foundation (NSF). Smith also describes his experience at Georgia Tech’s campus in Lorraine, France, and his four-year role as the executive assistant to the president of the university. Smith was one of ten former Olympians to carry the Olympic torch during the 1996 Atlanta Olympics. He left Georgia Tech in 2003, to become the head of the electrical and computer engineering department at Purdue University. In 2009, Smith became the dean of the graduate school. He describes his research and administrative achievements at Purdue.

Signal processing--Digital techniques--Research.

Affirmative action programs--Georgia.

Electrical engineers--Intellectual life--20th century.

Georgia Institute of Technology--Administration.

Olympics--History--20th century.
Mark Smith talks about his efforts to increase minority STEM majors at Purdue University, and describes the vibrant African American and minority-student community on campus. He goes on to reflect upon his life’s choices, his career, and his legacy. Smith also talks about his wife and three children, and his parents’ support of his educational and athletic pursuits. Lastly, he describes his photographs.

Purdue University. Graduate School--Deans (Education).
Universities and colleges--Affirmative action programs--Indiana.
Purdue University--Students, Black.
African American families--Moving, Household.
Photograph collections.