

# Finding Aid to The HistoryMakers® Video Oral History with Herman Brenner White, Jr.

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## Overview of the Collection

<b>Repository:</b>	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
<b>Creator:</b>	White, Herman Brenner, 1948-
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Herman Brenner White, Jr.,
<b>Dates:</b>	November 13, 2006
<b>Bulk Dates:</b>	2006
<b>Physical Description:</b>	7 Betacame SP videocassettes (3:16:00).
<b>Abstract:</b>	Physicist Herman Brenner White, Jr. (1948 - ) has worked as a staff scientist at the Fermi National Accelerator Laboratory for over three decades, and is known for his particle physics work regarding mesons and quarks. White was interviewed by The HistoryMakers® on November 13, 2006, in Chicago, Illinois. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2006_141
<b>Language:</b>	The interview and records are in English.

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## Biographical Note by The HistoryMakers®

Physicist Herman Brenner White was born in Tuskegee, Alabama on September 28, 1948. He attended Macon County public schools and developed a great interest in science at an early age. Growing up so close to the Tuskegee Institute, White was able to talk to the professors there about science. In 1966, he graduated from the Tuskegee Institute High School. He decided to attend Earlham College in Richmond, Indiana for his undergraduate studies where he obtained his B.A. degree in physics in 1970. During graduate school at Michigan State University, White split his time at Michigan State's Cyclotron Laboratory in East Lansing, Michigan and the Argonne National Laboratory in Argonne, Illinois. As an award for excellent graduate research, White became an Alfred P. Sloan Foundation Fellow and was sent to study in Geneva, Switzerland at the CERN European Laboratory for Particle Physics in 1972. He found a new passion there and shifted his research areas from nuclear and acceleration physics to particle physics. In 1974, he received his M.S. degree in physics from Michigan State University.

White was initially a neutrino physicist at the Fermi National Accelerator Laboratory (Fermilab) and has held various positions there since 1974. Fermilab is the highest energy particle accelerator in the world where White has been a senior scientist. He was a university fellow in physics from 1976 to 1978 at Yale University. He taught physics again starting in 1987 during his doctoral studies at Florida State University and received his Ph.D. degree in 1991. At Fermilab he has collaborated on numerous high-energy particle physics experiments in addition to the design of high-energy particle beam and detector systems. One notable collaboration was when White worked as a kaon researcher and diplomat with Universidad Autonoma de San Luis Potosi in Central Mexico.

White has been an adjunct physics professor at North Central College in Naperville, Illinois. In addition to his earlier fellowships, White was selected as an Illinois Industrial Research Corridor Fellow for North Central College in 1994. He has served on various physics communication and advisory panels for governmental agencies and the American Physical Society and has been a member of the American Physical Society's Public Face of

Physics Team.

Herman White was interviewed by *The HistoryMakers* on November 13, 2006.

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## Scope and Content

This life oral history interview with Herman Brenner White, Jr. was conducted by Linda Williams on November 13, 2006, in Chicago, Illinois, and was recorded on 7 Betacame SP videocassettes. Physicist Herman Brenner White, Jr. (1948 - ) has worked as a staff scientist at the Fermi National Accelerator Laboratory for over three decades, and is known for his particle physics work regarding mesons and quarks.

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## 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®.

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## 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.

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## Controlled Access Terms

This interview collection is indexed under the following controlled access subject terms.

### Persons:

White, Herman Brenner, 1948-

Williams, Linda (Interviewer)

Hickey, Matthew (Videographer)

### Subjects:

African Americans--Interviews

White, Herman Brenner, 1948- --Interviews

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African American physicists--Interviews

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## Organizations:

HistoryMakers® (Video oral history collection)

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The HistoryMakers® African American Video Oral History Collection

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Fermi National Accelerator Laboratory

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## Occupations:

Physicist

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## HistoryMakers® Category:

ScienceMakers

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## 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 Herman Brenner White, Jr., November 13, 2006.  
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).

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## 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.

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## Detailed Description of the Collection

## Series I: Original Interview Footage

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_001, TRT: 0:29:58 ?

Herman Brenner White, Jr. was born on September 28, 1948 in Tuskegee, Alabama. He and his sister, Zepherine White Finch, were raised in Tuskegee and spent summers with their extended family in nearby rural areas. White's mother, Susie Mae Fort White, was a nursing assistant at John Andrew Hospital run by the Tuskegee Medical Institute. His father, Herman B. White Sr., a religious and disciplined man, served in the military, worked at the Moton Air Fields and at the Tuskegee Veteran's Hospital. All of his grandparents were farmers in Alabama. White and his older sister attended John Adams Elementary School and Washington Public School. White describes growing up in the segregated but intellectually self-sufficient Tuskegee community. His family attended the Mount Olive Missionary Baptist Church, where he learned responsibility as a junior usher. White attended the Tuskegee Institute High School.

African American families--Alabama--Tuskegee.

African American churches--Alabama--Tuskegee.

African American communities--Alabama--Tuskegee.

Hospitals--Alabama--Tuskegee.

Moton Field..

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_002, TRT: 0:30:05 ?

Herman White remembers his childhood. One of his earliest memories is playing in the woods near his house with his dog. He remembers the sights, sounds, and smells of growing up at his grandparents' farm and Christmastime at his house. In school, White was quiet and spent a lot of time studying. He was known for running organizations smoothly, though he never sought out leadership positions. White was the class president, chair of the photography club, and editor of the year book. He was also in the choir, in the science club, a member of the honor society, participated in some dramatic arts, and played football. White had several excellent high school teachers and felt that these teachers taught all the students to be competitive in the newly desegregated world.

African American high school students--Alabama.

African American children--Education (Secondary)--Alabama--Tuskegee.

High school students--United States--Societies, etc.

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_003, TRT: 0:30:06 ?

Herman White discusses his childhood experiences at church. His family attended Mount Olive Missionary Baptist Church, a prominent church in the community. The church was the center of the community, and the ministers were the leaders in the community. Some notable members of White's community were Eugene Harrison Sr. and Lucius Amerson. During the Civil Rights Movement, White and his parents decided that finishing high school on time and going to college was more important than losing his senior year of school to participate with the first group of black students to integrate Tuskegee High School. White felt his role in the Civil Rights Movement was being an exceptional student and proving through excellent academic achievement that blacks deserved equal rights and equal access to education.

African American churches--Alabama--Tuskegee.

Civil rights movements--Alabama--History--20th century.

School integration--Alabama--Tuskegee.

African American police chiefs--Alabama--Tuskegee.

Amerson, Lucius D., 1933-.

Younge, Sammy, 1944-1966.

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_004, TRT: 0:29:50 ?

Herman White recalls enjoying growing up so close to Tuskegee Institute where he was able to talk to the professors about science. He became interested in nuclear engineering at age sixteen. White decided to attend Earlham College where he studied nuclear physics instead. In graduate school at Michigan State University, he studied nuclear physics. Under the mentorship of Dr. Henry Blosser, White worked at the Michigan State's Cyclotron Laboratory and completed his M.S. degree. He then received an Alfred P. Sloan Foundation fellowship to go Switzerland to study at the CERN European Laboratory for Particle Physics. He found a new passion there and shifted his research areas from nuclear and acceleration physics to particle physics. Nuclear physics deals with protons and neutrons whereas particle physics deals with the quarks/partons that make up protons or neutrons.

Tuskegee Institute.

Earlham College.

Nuclear physics--Study and teaching.

Michigan State University.

European Organization for Nuclear Research.

Particles (Nuclear physics)--Research.

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_005, TRT: 0:29:27 ?

Herman White describes his particle physics work breaking apart protons and neutrons with high energy beams. High energy beams are necessary to overcome the energy that holds the proton and neutron together. Quarks/partons do not allow themselves to be completely dissociated from the other quarks/partons. Fermilab only conducts high energy particle physics activities and is not a multi-discipline laboratory because it is the highest energy particle accelerator in the world and has been since the summer of 1972. At the CERN European Laboratory for Particle Physics, White worked with prominent physicists and Nobel Prize Laureate Murray Gell-Mann. Fermilab was named for Enrico Fermi a tremendous theoretical as well as an experimental physicist. White and Raymond J. Stefanski created a formula to measure how many neutrino particles come from kaons and pions, which are mesons. Mesons are the particles that make up quarks.

Particles (Nuclear physics)--Research.

European Organization for Nuclear Research.

Gell-Mann, Murray.

Fermi National Accelerator Laboratory.

Fermi, Enrico, 1901-1954.

Florida State University. Aaron, Hank, 1934-

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_006, TRT: 0:29:34 ?

Herman White talks about how Illinois Senator Everett Dirksen worked to have the Fermilab located in Illinois. White's first experiment at the Fermilab took ten

months and his longest experiment took ten years. White feels his most difficult and successful experiment was on kaons of the tevatron. White is working to obtain public support and funding for an international linear collider. He feels that the public should support this kind of research so we can solve problems now and in the future. White hopes that society will see scientists as heroes just as they see athletes and entertainment stars as heroes. He describes how scientific training could help politicians make better decisions.

Fawell, Harris W. (Harris Walter), 1929-

Fermi National Accelerator Laboratory.

Particles (Nuclear physics)--Research.

Science--Study and teaching (Higher).

Video Oral History Interview with Herman Brenner White, Jr., Section A2006\_141\_001\_007, TRT: 0:17:00 ?

Herman White explains that accelerators are located underground to protect nature and the public from radiation that may be caused during experiments. Also, if the experiments are done underground than no radiation from the sun can accidentally affect the experiments. White notes that physics is a popular B.S. degree for African Americans but they typically get their graduate degrees in engineering. This is because there is a better chance of job security as an engineer than as a physicist. White would like to be remembered for being a reasonable person to work with and doing "good" science. White would like his legacy to be that of an innovator, from conducting orchestras to learning neutrino physics to teaching students. He hopes these innovations were important.

Science--Study and teaching (Higher)--United States.

African Americans--Education (Higher).

Colliders (Nuclear physics).

Particle accelerators.