

# Finding Aid to The HistoryMakers® Video Oral History with Edwin Cooper

---

## 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>	Cooper, Edwin L. (Edwin Lowell), 1936-
<b>Title:</b>	The HistoryMakers® Video Oral History Interview with Edwin Cooper,
<b>Dates:</b>	April 27, 2011 and November 30, 2012
<b>Bulk Dates:</b>	2011 and 2012
<b>Physical Description:</b>	11 uncompressed MOV digital video files (5:23:08).
<b>Abstract:</b>	Biologist and biology professor Edwin Cooper (1936 - ) was a leader in the fields of invertebrate immune systems and comparative immunology. He conducted research at the University of California, Los Angeles for more than forty years. Cooper was interviewed by The HistoryMakers® on April 27, 2011 and November 30, 2012, in Los Angeles, California. This collection is comprised of the original video footage of the interview.
<b>Identification:</b>	A2011_033
<b>Language:</b>	The interview and records are in English.

---

## Biographical Note by The HistoryMakers®

Biologist and immuno-biology professor Edwin Cooper was born on December 23, 1936, in Houston, Texas. Cooper attended Jack Yates High School, graduating with honors in 1957. He won the first prize in a state art contest, for which his ceramic vase was sent to the national competition at the Carnegie Art Institute. Although Cooper was interested in art, he was more attracted to the field of biology, studying butterflies, earthworms, and other animals as a youth. Cooper pursued his interest in biology at Texas Southern University, where he earned his B.S. degree in 1957 with honors. Continuing his studies in biology, Cooper earned his M.S. degree in biology from Atlanta University in 1959 and his Ph.D. degree from Brown University in 1963.

Upon completing his doctorate, he became an assistant professor of anatomy at the University of California at Los Angeles School of Medicine in 1964 and attained full professorship by 1973. Cooper taught immunology around the world, beginning with an exchange program (sponsored by the Agency for International Development) with the Instituto Politecnico Nacional in Mexico City, Mexico. He later received a prestigious Guggenheim Fellowship to the Karolinska Institute in Stockholm, Sweden in 1970, while maintaining his position at UCLA. Cooper founded the Division of Comparative Immunology of the American Society of Zoologists in 1975 and was a founding editor of the International Journal of Developmental and Comparative Immunology, and its society, the International Society of Developmental and Comparative Immunology. He has founded similar national groups in Japan and Italy. From 1989 to 1993, Cooper served as the vice chair for UCLA's Department of Anatomy and Cell Biology. He became the founding editor in chief of "Evidence Based Complementary and Alternative Medicine" in 2004.

Throughout his professional career, Cooper's research has been at the forefront of the discoveries made in the field of immunobiology, better known as comparative immunology following the publication of the first textbook and many others related to comparative immunology: he is credited with having established that discipline. His

research on invertebrate immune systems and the evolution of immune systems has been published in several immunology journals including the Journal of Biological Chemistry and the Proceedings of the National Academy of Sciences. From studying chronic allograft rejection in earthworms to the identification of characteristics of the fish, amphibians and other invertebrates, Cooper shifted the focus of his work to better understand vertebrate and human disease. The products of terrestrial and marine invertebrates are useful in certain diseases as was discovered in ancient cultures like in China and India.

The impact of Cooper's work has been recognized; Cooper has received five honorary degrees internationally, including one from his alma mater, Brown University, in 1988. He has also been awarded other international prizes in the sciences, such as the Alexander von Humboldt Prize in Germany, The Eleanor Roosevelt Award for Cancer Research to work with the Ludwig Institute for Cancer Research in Switzerland, and the S.M. Nabrit Achievement Award in Science from Atlanta University.

Cooper and his wife, Helene, have two adult children.

Edwin Cooper was interviewed by *The HistoryMakers* on April 27, 2011.

---

## Scope and Content

This life oral history interview with Edwin Cooper was conducted by Larry Crowe on April 27, 2011 and November 30, 2012, in Los Angeles, California, and was recorded on 11 uncompressed MOV digital video files. Biologist and biology professor Edwin Cooper (1936 - ) was a leader in the fields of invertebrate immune systems and comparative immunology. He conducted research at the University of California, Los Angeles for more than forty years.

---

## 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:

Cooper, Edwin L. (Edwin Lowell), 1936-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

## Subjects:

African Americans--Interviews

Cooper, Edwin L. (Edwin Lowell), 1936---Interviews

---

African American biologists--Interviews.

---

African American families--Texas--Interviews.

---

Texas Southern University--Interviews.

---

## Organizations:

HistoryMakers® (Video oral history collection)

---

The HistoryMakers® African American Video Oral History Collection

---

University of California, Los Angeles

---

## Occupations:

Biologist

---

## 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 Edwin Cooper, April 27, 2011 and November 30, 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 Edwin Cooper, Section A2011\_033\_001\_001, TRT: 1:30:28 ?

Edwin Cooper talks about his mother's side of the family. His mother, Ruthester Porche Cooper was born in Yoakum, Texas. The Porche family originated in Louisiana from Pierre Porche, Cooper's great-grandfather, a Frenchman who was born around 1830. His wife, Juliana Porche was of mixed race and was born about the same time. They gave birth to Joseph Porche who married Hannah Hughes Porche, Cooper's maternal grandparents. Cooper then talks about his paternal lineage, all of whom came from Oakland, Texas including Cooper's great-grandfather, Edmund Cooper, grandfather, Alan Gates Cooper, and father, Edwin Ellis Cooper. Edwin Ellis was born in 1910. Cooper's paternal great-grandfather had served in the Civil War, but later became a minister of the M.E. Methodist Church. Cooper's parents married in 1935 and stayed in Oakland, Texas, where his father attempted to start a farm.

African American mothers.

African American families--Texas--Colorado County--History.

African American parents--Texas--Colorado County.

African American farmers.

Racially mixed people.

Genealogy.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_001\_002, TRT: 2:29:17 ?

Edwin Cooper discusses the relationship between his father, Edwin Ellis Cooper, and grandparents, Alan Gates Cooper and Eula Jones Cooper. Cooper's grandmother, Eula, was a detail-oriented and demanding woman, and his father, Edwin Ellis, was a shy but hard-working man. Edwin Ellis Cooper was essentially tasked with both raising his own family and ensuring the well-being of his parents, who moved to Houston to make a better living. He worked at Sinclair Oil and did not attend college, eventually marrying Cooper's mother, Ruthester, in 1935. The couple moved to Oakland, Texas, where Cooper was born about a year later followed by six more children. Cooper was a favored child in Oakland, in part because of his difficult birth since he was an unusually large baby. Cooper closes this section of the interview by talking about his interest in studying insects and crawfish as a youth.

African American families--Texas--Houston.

African Americans--social life and customs--Texas--Houston.

African American children--Texas--Houston.

African American grandparents.

Sinclair Oil Corporation.

Childbirth.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_001\_003, TRT: 3:29:32 ?

Edwin Cooper discusses his youth in Houston, Texas. His family moved to the city in 1938, a couple years after he was born. They moved to several locations in the city during his childhood; each move was to a better neighborhood with access to better schools. Cooper attended Luckie Elementary School before moving to The Heights neighborhood in northern Houston. As a youth, Cooper enjoyed teaching lessons to the kids of his neighborhood. He cannot recall any problems with race relations in Houston while he was growing up, although the city had segregated facilities. His family eventually moved to what was formerly the Jewish neighborhood of Houston, near Texas Southern University. Cooper attended Yates High School and graduated at the age of sixteen. During high school, Cooper won a city-wide art contest for his ceramic vase.

African American children--Education (Elementary)--Texas--Houston.

Segregation in education--Texas.

Texas Southern University.

Biology.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_001\_004, TRT: 4:28:42 ?

Edwin Cooper traces his educational path from Yates High School to his graduate studies at Brown University. Cooper enjoyed art in high school, and although he wanted to become an artist, his parents disallowed it. He studied at Texas Southern University, where his mentors included S. Milton Nabrit, Robert Terry, and Alberta Seaton. Cooper developed an interest in developmental biology and decided to pursue his M.S. degree at Atlanta University. He studied the development of the ears of chickens under the guidance of Mary Reddick. Some of his other professors included, Barnett Smith, John Burney and Frederick Mapp. Cooper graduated with his M.S. degree in 1959. During his time at Atlanta University, Cooper had the opportunity to take a course in invertebrate biology at Woods Hole. He then went on to conduct research at Brown University.

Brown University.

Development biology.

Atlanta University.

Education, Higher.

Biology.

African American scientists.

African American educators.

African Americans--Education (Higher)--Georgia--Atlanta.

African Americans--Education (Higher)--Rhode Island--Providence.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_001\_005, TRT: 5:29:33 ?

Edwin Cooper received his Ph.D. degree in 1963 from Brown University. His research focused on using immunosuppressive drugs to aid scale transplants in fish. The research introduced him to the field of immunology, which he

combined with zoology to create the field of comparative immunology. Cooper recalls many people in academia dismissing his ideas initially, but he continued his research nonetheless. In 1962, Cooper started his post-doctoral fellowship at the University of California, Los Angeles. He became an assistant professor at the UCLA Medical School, teaching basic science courses in immunology. In 1966, Cooper spent a year in Mexico as part of an exchange program funded by the Agency for International Development. Some of Cooper's first research projects included the study of immune responses in earthworms and frogs. Cooper published his first paper in 1969 in *Transplantation*, and started the *International Journal of Development and Comparative Immunology* in 1977.

Zoology.

Immunology.

University of California, Los Angeles--African American students.

African American scientists.

Science--Study and teaching--United States.

Earthworms.

Frogs.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_002\_006, TRT: 6:30:22 ?

Edwin Cooper was promoted to a full professorship in the Department of Anatomy at the University of California, Los Angeles (UCLA) School of Medicine in 1973. While there, Cooper established the field of comparative immunology in 1976, formalized by the publication of his book 'Comparative Immunology.' The book was well received in Eastern Europe, Japan and China; and was later republished without his permission. Cooper's field was controversial amongst scientists, as immunological studies had focused on mammals rather than immunological evolution via primitive invertebrates. While conducting research at the University of Modena and Reggio Emilia in Modena, Italy, Cooper observed immune responses in earthworms, and found that their responses were similar to mammals. At UCLA School of Medicine, Cooper pursued his research interests, using grants from the American Cancer Society and the National Institutes of Health. Additionally, Cooper describes the role of the thymus in the generation of immune response.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_002\_007, TRT: 7:29:43 ?

Edwin Cooper took a sabbatical leave from the University of California, Los Angeles (UCLA) to conduct research in Sweden after receiving a Guggenheim fellowship in 1970. Later in 1977, he was awarded an Eleanor Roosevelt International Cancer Fellowship at the Ludwig Institute for Cancer Research in Zurich, Switzerland. There, he worked in the laboratory of microbiologist Jean-Charles Cerottini. Cooper also began corresponding with scientist Agustin Zapata, whom he eventually met in Spain. Cooper and Zapata then worked together at UCLA, and later published 'The Immune System: Comparative Histophysiology,' drawing inspiration from Zapata's micrographs. In 1977, Cooper founded the *Development and Comparative Immunology* journal. After attending the first meeting of the International Society of Developmental and Comparative Immunology in Scotland, Cooper hosted the group's second conference at UCLA in 1983. Between 1980 and 1988, Cooper worked at various universities in Spain, Italy, Norway, Japan and Egypt.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_002\_008, TRT: 8:30:10 ?

Edwin Cooper began regularly visiting Japan in 1977, in relation to his research on comparative immunology. He became president of the American Society of Zoologists in 1983, and established affirmative action and public policy

committees during his tenure. In 1985, he received a Fulbright Fellowship to conduct research at Cairo University in Egypt. Initially, he encountered resistance from the program's leadership, but they soon came to an understanding to work effectively together. Cooper was awarded a Mayor's Medal in Verona, Italy for his contribution to scientific research there. In 1989, he was named vice chairman of the department of anatomy and cell biology at the University of California, Los Angeles School of Medicine. In addition, Cooper talks about the differences between innate and adaptive immune systems, and the impact of the 1985 discovery of the cytotoxic T cell receptor by Leroy Hood. Cooper also describes the interpersonal challenges he faced as a professor at UCLA.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_002\_009, TRT: 9:29:05 ?

Edwin Cooper discovered the role of peptides in the major histocompatibility complex (MHC) class II structure by means of a Beta-2 microglobulin component. In the mid-1990s, Cooper published a variety of books on immunity in primitive animals, including 'Primordial Immunity: Foundations for the Vertebrate Immune System' and 'Developmental Immunology.' Cooper conducted research on immune toll-like receptors to identify whether or not they were also found in earthworms. In 1997, Cooper published 'Clavanins, Alpha-helical Antimicrobial Peptides from Tunicate Hemocytes' after conducting research on aquatic tunicates. Six years later, Cooper founded the journal Evidence-Based Complementary and Alternative Medicine, which was published through the Oxford University Press. At this point in the interview, Cooper describes the effects of soil pollution on earthworms. He also describes the use of leeches and maggots in the removal of dead tissue, and the anti-microbial properties in honey.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_002\_010, TRT: 10:29:59 ?

Edwin Cooper founded the journal Evidence-Based Complementary and Alternative Medicine in 2003. The articles featured focused on scientific confirmation of alternative medicines. While managing the journal, Cooper was approached by a rectal cancer patient who requested in vitro treatment made from earthworm immune cancer killing cells. As a non-clinician, Cooper denied this request for many reasons, such as its potential to do lethal harm. Oxford University Press eventually ended its publication of Evidence-Based Complementary and Alternative Medicine, and it was picked up by Egypt-based publisher, Hindawi. At this point, Cooper describes the importance of scientific evidence in complimentary remedies, and notes the unverified use of earthworm lumbrokinase for dissolving blood clots. Cooper also talks about medical marijuana legalization, and the United States' lack of preparation in geriatric care. Additionally, Cooper talks about the genetic and physiological study of centenarians and aging.

Video Oral History Interview with Edwin Cooper, Section A2011\_033\_002\_011, TRT: 11:26:17 ?

Edwin Cooper was a distinguished professor at the University of California, Los Angeles. He talks about the treatment of emeritus professors, as well as the natural origins of aspirin. At this point in the interview, Cooper describes his family. Additionally, he reflects on his life, legacy and how he would like to be remembered. Cooper ends the interview by narrating his photographs.