

Finding Aid to The HistoryMakers® Video Oral History with Ralph Etienne-Cummings

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Etienne-Cummings, Ralph
Title:	The HistoryMakers® Video Oral History Interview with Ralph Etienne-Cummings,
Dates:	June 28, 2012
Bulk Dates:	2012
Physical Description:	6 uncompressed MOV digital video files (2:41:40).
Abstract:	Electrical engineer, computer scientist, and engineering professor Ralph Etienne-Cummings (1967 -) is a neuromorphic engineering expert developing biomorphic robots and neural prosthetics. Etienne-Cummings was interviewed by The HistoryMakers® on June 28, 2012, in Washington, District of Columbia. This collection is comprised of the original video footage of the interview.
Identification:	A2012_137
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Electrical engineer, computer scientist and engineering professor Ralph Etienne-Cummings was born in August 20, 1967 in Mahe, Seychelles to Marguerita Etienne and Eddie Micoock. His mother later married Herman Cummings, who formally adopted him. Etienne-Cummings first showed his aptitude for engineering when he fixed the reception on his short wave radio in order to listen to a soccer match. After attending a British boarding school, he moved to the United States with his family. Etienne-Cummings received his B.S. degree in physics from Lincoln University in Pennsylvania in 1988. He went on to receive his M.S. in electrical engineering and his Ph.D. in electrical engineering from the University of Pennsylvania in 1990 and 1994, respectively.

Shortly after receiving his Ph.D., Etienne-Cummings took a position as an assistant professor at Southern Illinois University. In 1998, he moved to Maryland where he began teaching as an assistant professor at Johns Hopkins University. From 2002 to 2004, Etienne-Cummings taught at the University of Maryland, College Park as an associate professor while also holding the position of director at the Institute of Neuromorphic Engineering. In January 2004, he was appointed Associate Director for Education and Outreach of the ERC on Computer Integrated Surgical Systems and Technology at Johns Hopkins University. In 2005, Etienne-Cummings received a secondary appointment in computer science at Johns Hopkins University and in 2008, he became a professor of electrical and computer engineering. While at Johns Hopkins University, Etienne-Cummings sponsored a number of diversity and mentoring programs including serving as co-chair of the Diversity Committee and mentor of the school's Robotics Club. In addition to teaching, Etienne-Cummings served as a consultant engineer for several technology firms including Nova Sensors, Inc., Innovative Wireless Technologies, Singular Computing, Panasonic N. American & Corporation, Avago Technologies, Micron Technologies and others. His research interests include systems and algorithms for biologically inspired and low-power processing, biomorphic robots, applied neuroscience, neural prosthetics, and computer integrated surgical systems and technologies. He holds seven patents and has mentored over thirty-five students at the graduate level.

Etienne-Cummings has served as a visiting scientist at Lawrence Livermore National Laboratory and as a visiting African scholar at the University of Cape Town in South Africa. He received the National Science Foundation's CAREER Award in 1996 and the Young Investigators Program Award from the Office of Naval Research in 2000. In 2006, *Science Spectrum* awarded him its Trailblazer Award for Top Minorities in Science and in 2007, Etienne-Cummings was named a Kavli Frontiers in Science Fellow by the National Academies of Science. He has also won best paper awards in high impact technical Journals and Conferences. In 2012, he was elected Fellow of the IEEE for contribution in "Neuromorphic Sensory-Motor Circuits and Systems". He is married to Shatima Etienne-Cummings, a patent attorney.

Ralph Etienne-Cummings was interviewed by *The HistoryMakers* on June 28, 2012.

Scope and Content

This life oral history interview with Ralph Etienne-Cummings was conducted by Larry Crowe on June 28, 2012, in Washington, District of Columbia, and was recorded on 6 uncompressed MOV digital video files. Electrical engineer, computer scientist, and engineering professor Ralph Etienne-Cummings (1967 -) is a neuromorphic engineering expert developing biomorphic robots and neural prosthetics.

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:

Etienne-Cummings, Ralph

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews
Etienne-Cummings, Ralph--Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

Johns Hopkins University

Johns Hopkins University

Occupations:

Electrical Engineer

Computer Scientist

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 Ralph Etienne-Cummings, June 28, 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 Ralph Etienne-Cummings, Section A2012_137_001_001, TRT: 1:29:30 ?

Ralph Etienne-Cummings describes his family background and his native country, the Seychelles. Etienne-Cummings was born in 1967 on the island of Mahe, in the Seychelles. His mother, Marguerita Etienne, was born in the Seychelles in 1947. Her father, Pilgrim Etienne, was a premier ship-builder in the Seychelles. Marguerita Etienne completed secondary school and later became a teacher. Etienne-Cummings' biological father, Eddie Micoock, is also from the Seychelles. Eddie Micoock went to college and lived abroad for several years before returning to the Seychelles, where he works as an optician. When Etienne-Cummings was twelve years old, his mother married an American Air Force pilot named Herman Cummings, who adopted him as his own. Etienne Cummings feels that all three parental figures have made a strong impact on his personality and his life.

Affirmative action programs.

Affirmative action programs.

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Video Oral History Interview with Ralph Etienne-Cummings, Section A2012_137_001_002, TRT: 2:29:28 ?

Ralph Etienne-Cummings describes his life growing up in the Seychelles. Etienne-Cummings was raised by his grandmother for four years, while his mother worked as an au pair in the United Kingdom. During this time, she sent money to his grandmother in the Seychelles so that he could attend Seychelles College, an elite elementary school. His favorite teacher, Madame Moutia, was very influential. Etienne Cummings reports that he demonstrated an early aptitude for math, and an early interest in science. When Etienne-Cummings reached seventh grade, the school system in the Seychelles was revamped, and he then attended Anse Etoils, a local school. The following year, Etienne-Cummings went to live in the United Kingdom, where he attended St. Augustine's College. While in the United Kingdom, Etienne-Cummings was very active in sports, particularly track and field. In 1985, Etienne Cummings completed his studies at St. Augustine's College and came to the United States.

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Video Oral History Interview with Ralph Etienne-Cummings, Section A2012_137_001_003, TRT: 3:30:25 ?

Ralph Etienne-Cummings talks about his life and education in the United States. Initially, Etienne-Cummings lived in New Orleans, Louisiana, and wanted to enlist in the U.S. Air Force. However, he was not eligible to work as an aircraft mechanic because he was not a U.S. citizen. Instead, Etienne-Cummings enrolled in Lincoln University in 1985. There, he was mentored by Professor Irving Heard and conducted research with him on the production of microchips. At Lincoln University, Etienne-Cummings was immersed in a thriving African American culture and a rich history of notable graduates, including Langston Hughes, Roscoe Lee Brown, Kwame Nkrumah, and Nnamdi Azikiwe. In 1988, Etienne-Cummings completed his B.S. degree in physics and enrolled in the University of Pennsylvania for his graduate studies.

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Video Oral History Interview with Ralph Etienne-Cummings, Section A2012_137_001_004, TRT: 4:30:01 ?

Ralph Etienne-Cummings talks about his work of building a circuit map of the brain and developing technology that interfaces with the nervous system. As a part of his doctoral research, Etienne-Cummings helped to build the first neurocomputer, which is designed to react to stimuli. Etienne-Cummings completed his Ph.D. degree in electrical engineering from the University of Pennsylvania in 1994. Upon graduating, Etienne-Cummings took a position as an assistant professor at Southern Illinois University. After one year at the University of Maryland, Etienne-Cummings began working at Johns Hopkins University. In his research at Johns Hopkins University, Etienne-Cummings worked to simulate spinal impulses to cause locomotion. Etienne-Cummings' groundbreaking research has been developed with the use of animal models and is now beginning to be tested with humans.

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Video Oral History Interview with Ralph Etienne-Cummings, Section A2012_137_001_005, TRT: 5:29:23 ?

Ralph Etienne-Cummings talks about his work at Johns Hopkins University. He spends his days working with students, writing grants, and teaching. Etienne-Cummings is very proud of the students he has mentored. Some of his students have gone on to work in business, electrical engineering, and medical technology. Etienne-Cummings' current research includes investigation into how we direct our attention, producing more detailed ultrasounds, and developing flying robots. Of all his projects, Etienne-Cummings feels that his work to restore function to those with spinal cord injuries is the most important. Etienne-Cummings has high hopes for the future of robotics, and wishes to see more intelligent and efficient robots developed. Etienne-Cummings believes that his biggest contributions have been the creation of the first neurocomputer, creating an electronic spinal cord model, and his pioneering work in the understanding of vision.

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Video Oral History Interview with Ralph Etienne-Cummings, Section A2012_137_001_006, TRT: 6:12:53 ?

Ralph Etienne-Cummings talks about his recent travels to the Seychelles. He describes the serenity and seclusion of Bird Island, his favorite island in the Seychelles. Etienne-Cummings also talks about his sabbatical year in 2006, where he spent nine months in South Africa. Etienne Cummings' work enables him to travel and collaborate with scientists all over the world, and he enjoys this aspect of his career. He would like to be remembered for his scientific contributions, and for being a good mentor to his students.

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