

Finding Aid to The HistoryMakers® Video Oral History with Arlie Petters

Overview of the Collection

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| Repository: | The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com |
| Creator: | Petters, Arlie O. |
| Title: | The HistoryMakers® Video Oral History Interview with Arlie Petters, |
| Dates: | February 21, 2012 |
| Bulk Dates: | 2012 |
| Physical Description: | 7 MOV HD video files (3:25:03). |
| Abstract: | Business professor, mathematician, and physicist Arlie Petters (1964 -) is a foremost scholar on gravitational lensing and has served as chairman on the Council of Science Advisors to the Prime Minister of Belize since 2010. Petters was interviewed by The HistoryMakers® on February 21, 2012, in Durham, North Carolina. This collection is comprised of the original video footage of the interview. |
| Identification: | A2012_050 |
| Language: | The interview and records are in English. |

Biographical Note by The HistoryMakers®

Mathematician, physicist and business professor Arlie Petters was born on February 8, 1964 in Dangriga, Belize. As a child, he lived with his grandparents and was captivated by the mystery of the skies. In 1979, Petters left Belize to live with his mother in the United States. After graduating from Canarsie High School in Brooklyn, New York, Petters enrolled at Hunter College. Family problems left Petters homeless, but he received a Minority Access to Research Careers Fellowship that allowed him to stay in school. In 1986, Petters graduated from Hunter College with his B.A/M.A. interdisciplinary degree in mathematics and physics. He continued his studies with a dual concentration in mathematics and physics at the Massachusetts Institute of Technology (MIT), earning his Ph.D. degree in 1991. His doctoral thesis was entitled "Singularities in Gravitational Microlensing." During the summers of 1986 to 1991, Petters worked as a Corporate Research Fellowship Program (CRFP) Fellow at Bell Laboratories.

Following graduation, Petters became an instructor of pure mathematics at MIT. In 1993, Petters joined the faculty of Princeton University as an assistant professor of mathematics. He served as the co-director of graduate studies in mathematics from 1996 to 1998. Petters left Princeton in 1998 to join the faculty of Duke University as the William and Sue Gross Associate Professor. Petters was the lead author of the book, "Singularity Theory and Gravitational Lensing" in 2001, which outlined the first single mathematical theory to explain gravitational lensing. He became a full professor in 2003 and was the first African American at Duke University to receive tenure in the mathematics department. In 2005, Petters founded the Petters Research Institute to train Belizean students in the STEM disciplines. In 2008, he received a triple appointment to the departments of mathematics, physics and business administration, and in 2009, he was awarded the Benjamin Powell endowed chair. In 2010, Petters was appointed to serve as chairman on the Council of Science Advisors to the Prime Minister of Belize.

He also served as visiting professor at the Max-Planck-Institut für Astrophysik, Oxford University, Harvard University, Princeton University and was a Martin Luther King Jr. visiting professor of physics at MIT.

Petters has received numerous awards including the Sloan Research Fellowship and the National Science Foundation Early Career Grant Award. He was the first recipient of the Blackwell-Tapia Prize in Mathematical Science. He also received much recognition for his philanthropic efforts in Belize including the Award for Service to the Educational Development of Belize from the Friends in Support of the Diocese in Belize. Petters was also named by the Queen of England to Membership in the Most Excellent Order of the British Empire. Petters served on the Board of Governors for the Institute for Mathematics and its Applications and on the Board of Trustees for the Institute of Pure and Applied Mathematics. He is a member of the American Mathematical Society, American Astronomical Society and the Royal Astronomical Society. Petters lives with his wife Elizabeth Petters in Durham, North Carolina.

Arlie Petters was interviewed by The HistoryMakers on February 21, 2012.

Scope and Content

This life oral history interview with Arlie Petters was conducted by Larry Crowe on February 21, 2012, in Durham, North Carolina, and was recorded on 7 MOV HD video files. Business professor, mathematician, and physicist Arlie Petters (1964 -) is a foremost scholar on gravitational lensing and has served as chairman on the Council of Science Advisors to the Prime Minister of Belize since 2010.

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:

Petters, Arlie O., 1964-

crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews
Petters, Arlie O., 1964---Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

HistoryMakers® Category:

EducationMakers

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 Arlie Petters, February 21, 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 8/1/2013 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.

Detailed Description of the Collection

Series I: Original Interview Footage, February 21, 2012

Video Oral History Interview with Arlie Petters, Section A2012_050_001_001, TRT: 1:29:04
2012/02/21

Arlie Petters describes his family background. Petters was born in 1964, in Dangriga, Belize. His mother, Velina Petters, was also born in Dangriga, Belize. When Petters was young, his mother went to work in the United States, leaving Petters to be raised by his grandmother, Bernice Waight, who was born in 1928, in Dangriga, Belize. Petters's biological father, Oswald Vasquez, was born in Orange Walk, Belize, and was of Mestizo origin. He worked as a civil engineer, and was not a major part of Petters' life. Petters was formally adopted by his stepfather, Cecil Petters, who was from Honduras. At the age of thirteen, Petters joined his mother and stepfather in the United States.

Families--Belize.

Mothers--Employment.

Grandparents as parents--Belize.

Absentee fathers--Belize.

Stepfathers.

Video Oral History Interview with Arlie Petters, Section A2012_050_001_002, TRT: 2:29:20
2012/02/21

Arlie Petters describes his childhood in Belize. Because Petters was raised by his grandmother for several years, she had a great impact on him. He admired her entrepreneurial spirit and her spirituality, and she instilled these values in him. Though his mother lived and worked in the United States, she did influence his life. She instilled in him a great sense of independence. Petters recalls vivid memories of growing up in Dangriga, Belize. The art and culture of the Garifuna in Belize were a prominent part of his childhood experience. As a child, Petters was very interested in art and wanted to become an artist. The interactions of the Garifuna and the Creole made created a rich culture in which Petters was raised.

Childhood--Belize--1960-1970.

Grandmothers--Family relationships--Belize.

Garifuna (Caribbean people).

Garifuna (Caribbean people)--Art.

Video Oral History Interview with Arlie Petters, Section A2012_050_001_003, TRT: 3:31:24
2012/02/21

Arlie Petters was enrolled in Epwort Methodist Elementary School at the age of four. Even as a child, Petters asked philosophical questions and demonstrated a curiosity about the world around him. He then started high school at the age of eleven. When Petters was thirteen, he immigrated to the United States and attended Canarsie High School in Brooklyn. He remained in high school for two years so as to learn the culture. He continued to take honors classes until he graduated at the age of seventeen. Upon graduation, Petters enrolled in Hunter College in New York City. Petters was mentored by his cousin and by Mr. Leall, his high school teacher.

Children--Education--Belize.

Gifted children--Education.

Immigrants--New York (State)--New York--20th century.

Immigrants--Education--New York (State)--New York--20th century.

Mentoring in education.

Video Oral History Interview with Arlie Petters, Section A2012_050_001_004, TRT: 4:30:42
2012/02/21

Arlie Petters enrolled in Hunter College in 1982. This was a special time for him because he was fully immersed in American culture. At Hunter College, Petters was mentored by Dr. Edward Tryon, who taught him Einstein's theory of relativity. He was also mentored and advised by Dr. Daniel Chass. However, Petters started to experience trouble at home. He went to stay with various friends until he secured a Minority Access to Research Careers Scholarship. This enabled him to finish his accelerated B.A./M.A. program. In 1986, Petters graduated with a dual B.A./M.A. degree in math and physics. His Master's thesis explored the mathematical theory of general relativity. Petters then enrolled in the Massachusetts Institute of Technology to begin his doctoral studies.

Hunter College.

Einstein, Albert, 1879-1955. Essays in physics.

Stepfathers--Family relationships.

Minority college students--Scholarships, fellowships, etc.--United States.

Joint academic degree programs.

Video Oral History Interview with Arlie Petters, Section A2012_050_001_005, TRT: 5:36:07
2012/02/21

Arlie Petters discusses his research on the mathematical theory of gravitational lensing. Petters not only applies the principles of math to physics, but to astronomy and also to finance. In 1994, Petters taught at the Max Planck Institute in Germany. The following year, he became an assistant professor of mathematics at Princeton University. He also served as the Coordinator of Graduate Studies at Princeton University from 1996 to 1998. In 1998, Petters was offered a tenured position at Duke University in Durham, North Carolina, where he was awarded the Alfred P. Sloan Research Fellowship. In 2001, Petters published a mathematical physics textbook, 'Singularity Theory and Gravitational Lensing.

Gravitational lenses--Mathematics.

Universities and colleges--Faculty.

Mathematical physics--Textbooks.

Video Oral History Interview with Arlie Petters, Section A2012_050_001_006, TRT: 6:28:33
2012/02/21

Arlie Petters talks about his career path. In 2002, Petters served as a visiting professor at Harvard University. He then returned to Duke University as Director of Undergraduate Studies for Mathematics. In 2005, Petters founded the Petters Research Institute in Belize, which works to further education in science and technology. Petters applies his mathematical principles to business as well. He teaches course in mathematical science for the Fuqua School of Business. He sees business as a way to convert science into jobs and improve the standard of living. Petters has been featured on 'Nova,' and he was inducted into the National Academy of Arts and Sciences Portrait Gallery of Distinguished African American Scientists and Engineers, has a street named in his honor in Dangriga, Belize. He has also been honored by the Queen of England as one of the Most Excellent Order of the British Empire.

Mathematicians--Intellectual life--20th century.

Harvard University--Visiting teachers.

Nova science now (Television program).

Mathematics--Study and teaching--Awards.

Video Oral History Interview with Arlie Petters, Section A2012_050_001_007, TRT: 7:19:53
2012/02/21

Arlie Petters married his wife, Elizabeth, in 2011. He also remains close with his maternal grandmother. Petters serves as Chairman of the Council of Science Advisors to the Prime Minister of Belize, and has received numerous honors and awards, including the Robert L. Clark Award from the Bronx Community College. He also holds the Benjamin Powell Endowed Chair at Duke University. Petters would like to see a more systematic integration of STEM (Science, Technology, Engineering, and Mathematics) and business into the African American community. He considers his contribution to the mathematical theory of gravitational lensing, and the students that he has mentored to be his legacy. Petters would like to be remembered as someone that shared his wisdom with others.

Family relationships.

Science and state--Belize.

Duke University--College department heads.

Gravitational lenses--Mathematics.

Mentoring in education.