# Finding Aid to The HistoryMakers ® Video Oral History with Godfrey Gumbs

#### Overview of the Collection

**Repository:** The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616

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Creator: Gumbs, Godfrey, 1948-

Title: The HistoryMakers® Video Oral History Interview with Godfrey Gumbs,

**Dates:** May 17, 2012

Bulk Dates: 2012

**Physical Description:** 6 uncompressed MOV digital video files (2:44:08).

**Abstract:** Research physicist and physics professor Godfrey Gumbs (1948 - ) is a distinguished

professor at Hunter College of the City University of New York and an expert in the field of nanophysics. Gumbs was interviewed by The HistoryMakers® on May 17, 2012, in New York, New York. This collection is comprised of the original video footage of

the interview.

**Identification:** A2012 106

**Language:** The interview and records are in English.

## Biographical Note by The HistoryMakers®

Research physicist and physics professor Godfrey Gumbs was born on September 7, 1948 in Georgetown, Guyana to Mary Teresa Gumbs, a homemaker and Charles Alexander Gumbs, a postal worker. After graduating from Queen's College of Guyana, he received a Guyana scholarship to attend Trinity College, Cambridge University where he earned his B.A. degree in applied mathematics in 1971. From 1971 to 1972, he sat Part III of the Mathematics Tripos which is a natural first step for the doctoral degree at Cambridge. Gumbs went on to earn his M.S. and Ph.D. degrees in theoretical condensed matter physics from the University of Toronto in 1973 and 1978, respectively.

From 1978 to 1982, Gumbs served as a Research Associate at the National Research Council of Canada in Ottawa. Then, from 1982 to 1989, he worked as a Natural Sciences and Engineering Research Council (NSERC) of Canada Fellow, a Canada University Research Fellow at Dalhousie University and the University of Lethbridge. As an NSERC Fellow, Gumbs held the position of Assistant Professor of physics at Dalhousie University in Halifax, Nova Scotia and as Professor of Physics at the University of Lethbridge in Alberta, Canada. In 1992, he was hired by Hunter College, City University of New York and was duly appointed the Chianta-Stoll Chair and as a University Distinguished Professor. Gumbs received the Eugene Lang Student-Faculty Research Fellowship at Hunter College in 1993 and the Presidential Award for Excellence in Research from Hunter in 2003. He has served as a visiting professor at the Massachusetts Institute of Technology, a J. William Fulbright Senior Scholar and a visiting fellow at his alma mater, Trinity College, Cambridge University. His research interests in theoretical condensed matter physics include: nanoscale semiconductor structures and electronic properties of mesoscopic systems. He has over 300 publications in leading scientific journals and co-wrote the textbook *Properties of Interacting Low-Dimensional System*, in 2011.

Gumbs is a fellow of the Institute of Physics, the New York Academy of Sciences and the American Physical Society (APS). He was an Alexander von Humboldt Fellow, a United States Air Force Faculty Fellow and a Kavli

Institute for Theoretical Physics Scholar (KITP) at the University of California, Santa Barbara. Gumbs is a member of the Sigma-Xi Honorary Scientific Research Society. In 2005, he received APS' Edward A. Bouchet Award for his significant contributions to physics and his mentoring of students. Gumbs and his wife, Jean have three adult sons.

Godfrey Gumbs was interviewed by *The HistoryMakers* on May 17, 2012.

## **Scope and Content**

This life oral history interview with Godfrey Gumbs was conducted by Larry Crowe on May 17, 2012, in New York, New York, and was recorded on 6 uncompressed MOV digital video files. Research physicist and physics professor Godfrey Gumbs (1948 - ) is a distinguished professor at Hunter College of the City University of New York and an expert in the field of nanophysics.

#### 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:

Gumbs, Godfrey, 1948-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

## Subjects:

African Americans--Interviews Gumbs, Godfrey, 1948---Interviews

## **Organizations:**

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

## Occupations:

Research Physicist

## 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 Godfrey Gumbs, May 17, 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 Godfrey Gumbs, Section A2012\_106\_001\_001, TRT: 1:29:04?

Godfrey Gumbs describes his family background. Gumbs was born in 1948 in Georgetown, Guiana. His mother, Mary Teresa Jansen, was born in 1916 in Georgetown. Gumbs' father, Charles Alexander Gumbs, was also born in Georgetown in 1909. He attended school until the age of seventeen, when he began working as a postal clerk. It was through his work as a postal clerk that he met Mary Jansen. The two were married in 1934. Gumbs is the seventh of eight children, and was raised in different parts of Georgetown. Georgetown is the capitol city of Guiana, and is a major trade center for fruits, vegetables, lumber, bauxite, and gold. He has memories of Georgetown's crowded streets, boats on the river, and the sound of calypso music. At age five, Gumbs began attending St. Thomas Moore Roman Catholic School. Though he suffered from a number of different illnesses, he excelled in school.

Families--Georgetown (Guyana).

Postal service--Employees.

Georgetown (Guyana)--Commerce.

Sick children.

Video Oral History Interview with Godfrey Gumbs, Section A2012\_106\_001\_002, TRT: 2:30:02?

Godfrey Gumbs enrolled in Wrungfield Anglican School at age eight when his family moved to Meadowbank. His math teacher, Mr. Yhap, took a special interest in him and helped him prepare for his exams. Because of his good grades, Gumbs was given the opportunity to enroll in the Queen's College, which offered courses in science. Though he had no preparation, Gumbs did well in the sciences. He graduated from Queen's College in 1967, and decided to attend Cambridge University. He arrived in London, England in October 1967. As this was his first time out of Guiana, Gumbs experienced a culture shock. The weather and food were very different, and the currency of Guiana held little value in London. In spite of these difficulties, Gumbs was able to find community among a group of international students at Cambridge University, and succeeded in his studies.

Mentoring in education.

Mathematics--Study and teaching--Caribbean Area.

University of Cambridge.

Blacks--Great Britain--Intellectual life.

Video Oral History Interview with Godfrey Gumbs, Section A2012\_106\_001\_003, TRT: 3:28:05?

Godfrey Gumbs enrolled in Cambridge University in London, England in 1967. Gumbs describes the student body of Cambridge University as very diverse. He also discusses some of Cambridge University's distinguished faculty members, including Paul Dirac and H.K. Moffitt. While at Cambridge University, Gumbs studied solid state physics and earned his B.S. degree in applied mathematics in 1971. That same year, he married a woman that he met in Guyana through his cousin. In 1972, Gumbs and his wife moved to Toronto, Canada to continue his studies. Gumbs completed both his M.S. and Ph.D. degrees at the University of Toronto. Upon completion of his Ph.D. degree in theoretical condensed matter physics, Gumbs relocated to Ottawa to work for Canada's National Research Council.

University of Cambridge--Faculty.

Dirac, P. A. M. (Paul Adrien Maurice), 1902-1984

Physics Study and teaching (Higher)--Canada.

National Research Council Canada.

Video Oral History Interview with Godfrey Gumbs, Section A2012 106 001 004, TRT: 4:28:52?

Godfrey Gumbs began teaching physics at the University of Lethbridge in Lethbridge, Alberta in 1986. In 1990, Gumbs took a sabbatical and was awarded the Alexander von Humboldt Fellowship to study in Germany. Gumbs spent two summers in Germany studying the interactions between various layers of a material. Gumbs used the rest of his sabbatical to work as a visiting professor at the Massachusetts Institute of Technology. In 1992, Gumbs joined the faculty of Hunter College in New York City. He eventually became a distinguished professor at Hunter College, where his research focused on semiconductors. He also conducted research on a new material called graphene, which is simply one layer of graphite. Gumbs talks about the progress being made in the field of nanotechnology, and believes that nanotechnology will improve cell phones and other personal devices in the future.

Physics Study and teaching (Higher)--Canada.

Scholarships, fellowships, etc.--Germany.

Alexander von Humboldt-Stiftung.

Universities and colleges--Faculty.

Graphene.

Video Oral History Interview with Godfrey Gumbs, Section A2012\_106\_001\_005, TRT: 5:29:29?

Godfrey Gumbs describes advances in the field of nanotechnology. As a result of his contributions to the field, Gumbs received numerous honors and awards. He was named an International Theoretical Physics scholar, which allowed him to teach at the University of California, Santa Barbara for a short time. Gumbs has also received the American Physical Society Edward A. Boucher award. In addition, he was named a Fulbright Scholar and spent a short time in Israel. In 2007, Gumbs was invited to Cambridge University's Trinity College as a visiting Fellow. As a former student, this was a very emotional experience for Gumbs. While at Trinity, his research focused on single electron transfer. Gumbs would like to see more students pursue advanced degrees in physics, but feels that lack of funding is a major obstacle.

Nanotechnology.

Fulbright scholars.

Trinity College (University of Cambridge).

Scholarships, fellowships, etc.--Great Britain.

Charge exchange.

Video Oral History Interview with Godfrey Gumbs, Section A2012 106 001 006, TRT: 6:18:36?

Godfrey Gumbs recalls being the only minority student in his classes at University of Toronto. Gumbs notes the striking absence of African Americans in physics at Cambridge University and at the American Physical Society meetings. He expresses his concern about the lack of minorities in the physical sciences and his role of working with the City University of New York (CUNY) to recruit minority students from the New York City area and around the country. When reflecting on his career, Gumbs feels that his unique history has equipped him to work with people from all backgrounds. Gumbs talks about the students that he has mentored and his research contributions as his legacy. Gumbs has three sons, Anthony, Alex, and Andrew, and would like to be remembered as a loyal and devoted husband and father.

Minorities in science.

City University of New York.

Minority college students--Recruiting--United States.

Work and family.

