

Finding Aid to The HistoryMakers® Video Oral History with Bertram Fraser-Reid

Overview of the Collection

Repository:	The HistoryMakers®1900 S. Michigan Avenue Chicago, Illinois 60616 info@thehistorymakers.com www.thehistorymakers.com
Creator:	Fraser-Reid, Bertram O.
Title:	The HistoryMakers® Video Oral History Interview with Bertram Fraser-Reid,
Dates:	May 6, 2013
Bulk Dates:	2013
Physical Description:	8 MOV HD video files (3:36:59).
Abstract:	Chemist and chemistry professor Bertram Fraser-Reid (1934 -) is a well-respected scientist whose research in carbohydrate chemistry has led to significant advances in many diverse fields. Fraser-Reid was interviewed by The HistoryMakers® on May 6, 2013, in Pittsboro, North Carolina. This collection is comprised of the original video footage of the interview.
Identification:	A2013_106
Language:	The interview and records are in English.

Biographical Note by The HistoryMakers®

Chemist and chemistry professor Bertram Oliver Fraser-Reid was born on February 23, 1934 in Coleyville, Jamaica. In 1956, Fraser-Reid enrolled at Queen's University in Canada and graduated from there with his B.Sc. and M.Sc. degrees in chemistry in 1959 and 1961, respectively. He went on to earn his Ph.D. degree in chemistry from the University of Alberta in 1964, under the supervision of Dr. Raymond Lemieux. Upon graduation, Fraser-Reid was awarded a postdoctoral fellowship at Imperial College of the University of London and studied under Nobel Laureate, Sir Derek Barton from 1964 to 1966.

From 1966 to 1980, Fraser-Reid served on faculty of the University of Waterloo in Waterloo, Ontario, where he established a research group known as "Fraser-Reid's Rowdies." His work at the University of Waterloo emphasized the synthesis of chiral natural products, such as insect pheromones, which could be made using carbohydrates as the starting materials--instead of petroleum products. In 1980, Fraser-Reid briefly taught chemistry at the University of Maryland, College Park before he was hired by Duke University in Durham, North Carolina in 1982. In 1985, Fraser-Reid was named James B. Duke Professor of Chemistry. He later founded the Natural Products and Glycotechnology Research Institute in Durham, North Carolina where he oversaw research to develop carbohydrate-based vaccines to fight malaria and tuberculosis.

Fraser-Reid received the Merck, Sharp & Dohme Award in 1977 from the Chemical Institute of Canada, and he was honored with the Claude S. Hudson Award in 1989 from the American Chemical Society. Fraser-Reid was nominated for the Nobel Prize in chemistry in 1998, and he was recognized as the Senior Distinguished U.S. Scientist by West Germany's Alexander von Humboldt Foundation in 1990. In 1991, Fraser-Reid was elected as a Fellow of the American Academy of Arts and Sciences, and received the Percy L. Julian Award from the National Organization of Black Chemists and Chemical Engineers. The American Institute of Chemistry named him the North Carolina Chemist of the Year in 1995. In addition, the Royal Society of Chemistry bestowed upon him the Haworth Memorial Medal and Lectureship, the Japanese Society for the Promotion of Science elected

him as a Fellow, and the Institute of Jamaica honored him with the Musgrave Gold Medal.

Bertram Oliver Fraser-Reid was interviewed by The HistoryMakers on May 6, 2013.

Scope and Content

This life oral history interview with Bertram Fraser-Reid was conducted by Larry Crowe on May 6, 2013, in Pittsboro, North Carolina, and was recorded on 8 MOV HD video files. Chemist and chemistry professor Bertram Fraser-Reid (1934 -) is a well-respected scientist whose research in carbohydrate chemistry has led to significant advances in many diverse fields.

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:

Fraser-Reid, Bertram O., 1934-

Crowe, Larry (Interviewer)

Hickey, Matthew (Videographer)

Subjects:

African Americans--Interviews

Fraser-Reid, Bertram O., 1934- --Interviews

Organizations:

HistoryMakers® (Video oral history collection)

The HistoryMakers® African American Video Oral History Collection

HistoryMakers® Category:

ScienceMakers

EducationMakers

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 Bertram Fraser-Reid, May 6, 2013. The HistoryMakers® African American Video Oral History Collection, 1900 S. Michigan Avenue, Chicago, Illinois.

Processing Information

This interview collection was processed and encoded on 8/19/2013 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, May 6, 2013

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_001, TRT: 1:30:04 2013/05/06

Bertram Fraser-Reid describes his family's background in Jamaica. His mother, Laura Maria Fraser, was born in Jamaica in the 1890s, and studied at a teachers' college in Kingston, Jamaica, where she met his father. Fraser-Reid's

father, William Benjamin Reid, was also born in Jamaica in the 1890s. Laura Fraser and William Reid worked at a school, as a head teacher and assistant head teacher, respectively. Fraser-Reid talks about his mother's death when he was nine-months old, as well as about his step-mother, Mary Keane, whom he called "Ms. May." Mary Keane had lived in New York before marrying his father, and Fraser-Reid fondly recalls how she made him aware of life in the first-world, in North America.

Families--Kingston (Jamaica).

Educators--Kingston (Jamaica).

Husband and wife--Kingston (Jamaica).

Mothers--Death.

Stepmothers--Family relationships.

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_002, TRT: 2:28:24 2013/05/06

Bertram Fraser-Reid was raised in the village of Brice, Jamaica. In this section of the interview, he describes the island of Jamaica, and his memories of growing up in Brice. He also talks about his grandmother, his siblings and his father. Fraser-Reid's father was trained at a teachers' college in Kingston, Jamaica, and became the head teacher of Brice Presbyterian Elementary School. He describes his father's methodical personality, and reflects upon his own likeness to him. He discusses the early relationship between schools and churches in Jamaica, and the different educational opportunities that were available to the white and black populations. Fraser-Reid recalls his father testing himself for diabetes, which exposed him to his first chemistry experiment. He attended elementary school in Brice, before going to Excelsior School, which was a well-known boarding school in Kingston.

Childhood--Jamaica.

Families--Jamaica.

Fathers--Conduct of life--Jamaica.

Education--Jamaica.

Diabetes.

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_003, TRT: 3:28:32 2013/05/06

Bertram Fraser-Reid attended Excelsior School in Kingston, Jamaica, and then transferred to Clarendon College in Chapelton, Jamaica. He describes his poor academic performance at Excelsior, and his father's emphasis on education and learning. After graduating from Clarendon College with his Higher School Certificate in 1951, Fraser-Reid returned to work as a teachers' assistant. He describes developing an interest in chemistry, through his interaction with the first science teacher there, and by studying the textbook on his own. He also talks about the shortcomings in his exposure to science and mathematics in his high school classes, owing to the lack of teachers with formal degrees. Fraser-Reid recalls the influence of his friends' mother, Mrs. Jackson, in motivating him to pursue studies abroad. In 1956, he went on to study chemistry at Queen's University in Kingston, Ontario, Canada, after ruling out the United States during the racially charged incidents of the 1950s.

Boarding schools--Kingston (Jamaica).

Teachers--Jamaica.

Chemistry--Study and teaching.

Queen's University (Kingston, Ont.).

Race Relations--United States--1950-1960

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_004, TRT: 4:32:05 2013/05/06

In 1956, Bertram Fraser-Reid began his undergraduate studies at Queens University in Ontario, Canada. He describes his initial adjustment to life in Canada, and to the academic rigors of college. Fraser-Reid describes how he took his first physics test in college, without having ever taken a formal course in physics in high school in Jamaica. Fraser-Reid began to work with sugar chemist, J.K.N. Jones as an undergraduate student, and went on to receive his B.S. and M.S. degrees in chemistry in 1959 and 1961, respectively. He talks about his mentors, Professor Jones and Professor Moir at Queens University. In 1961, Fraser-Reid attended the University of Alberta on a National Research Council scholarship to pursue his Ph.D. degree in chemistry. He describes his doctoral dissertation research in the area of sugar chemistry, under the tutelage of Professor Raymond Lemieux, who pioneered the synthesis of sucrose.

Queen's University (Kingston, Ont.).

Student adjustment.

Mentors in science.

National Research Council Canada--Scholarships, fellowships, etc.

Sugar--Chemistry.

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_005, TRT: 5:29:01 2013/05/06

In 1963, while pursuing his doctoral studies at the University of Alberta, Bertram Fraser-Reid married Lillian Lawrynyuk. From 1964 to 1966, he pursued a postdoctoral fellowship at Imperial College in London, England, where he worked with Nobel laureate, Sir Derek Barton. Fraser-Reid talks about gaining experience in the field of photochemistry and its applications on sugars. He also talks about his relationship with his advisor. In 1966, Fraser-Reid returned to Canada to the faculty of the University of Waterloo, where he began to apply his expertise in the field of sugar chemistry to the synthesis of insect pheromones. In this section of the interview, Fraser-Reid describes his research and its applications, and demonstrates the concept of optical isomers of sugars. In 1980, Fraser-Reid accepted a position at the University of Maryland, following his sixteen-year career at the University of Waterloo.

University of Alberta--Graduate work.

Marriage--Canada.

Barton, Derek, Sir, 1918-1998

Sugar--Chemistry.

Universities and colleges--Faculty.

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_006, TRT: 6:29:11 2013/05/06

In 1980, Bertram Fraser-Reid moved from the faculty at the University of Waterloo to the University of Maryland. He talks about his disappointment in his experience at Maryland, as well as the strengths of the undergraduate program in chemistry at the University of Waterloo. In 1982, Fraser-Reid joined the faculty of Duke University, where he developed a novel method to link simple sugars into oligosaccharides. In 1988, he was nominated for the Nobel Prize in chemistry for this work. Fraser-Reid discusses his interest in RNA synthesis, which was funded by the National Science Foundation (NSF). He also reflects upon his former interest in using carbohydrate chemistry to

finding a cure for Acquired Immunodeficiency Syndrome (AIDS). Fraser-Reid is an accomplished pianist and organist, and shares his experiences of performing at scientific meetings around the world.

Universities and colleges--Faculty.

Sugar--Chemistry.

Nobel Prize.

RNA--Synthesis.

AIDS (Disease)--Research.

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_007, TRT: 7:30:55 2013/05/06

In 1991, Bertram Fraser-Reid received the Percy Julian Award from the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChe). In this section of the interview, Fraser-Reid describes his hopes and concerns for the African American community, talks about his family, reflects upon his legacy in the field of carbohydrate chemistry, and talks about how he would like to be remembered. He then begins to describe his photographs.

National Organization for Black Chemists and Chemical Engineers--Awards.

African American families.

Carbohydrates--Chemistry.

Photograph collections.

Video Oral History Interview with Bertram Fraser-Reid, Section A2013_106_001_008, TRT: 8:08:47 2013/05/06

In this section of the interview, Bertram Fraser-Reid continues to describe his photographs.

Photograph collections.