

CHEMICAL HERITAGE FOUNDATION

MICHAEL C. CARROLL

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Arnold Thackray and Richard Sawyer

at

Coral Gables, Florida

on

4 March 1990

(With Subsequent Corrections and Additions)

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MICHAEL C. CARROLL

1945 Born in Birmingham, Alabama on August 8

Education

1968 B.B.A., Accounting, Texas Tech. University
1975 M.S., Biology, Southern Methodist University
1980 Ph.D., Immunology, University of Texas Health Science Center

Professional Experience

Oxford University, Oxford, U.K.
1980-1985 Research Fellow, Department of Biochemistry

Boston Children's Hospital and Harvard Medical School
1985-1988 Assistant Professor, Pediatrics and Biological Chemistry
1988-1999 Associate Professor, Biology
1999-present Professor of Pediatrics and Senior Investigator, Program in Cellular and Molecular Medicine

Honors

1980-1983 Postdoctoral Fellow, American Arthritis Foundation
1983-1986 Investigator, American Arthritis Foundation
1986 Pew Scholars in the Biomedical Sciences Award

ABSTRACT

Michael C. Carroll was born in Birmingham, Alabama, one of four children. His father worked as an engineer after serving in the United States Air Force, and his mother was a housewife and secretary. The family moved to Texas for Carroll's father's job when Carroll was about ten. Carroll obtained a business degree from Texas Tech University and moved to Dallas, Texas, to work in banking.

Becoming bored with banking, Carroll decided to try science. He entered Southern Methodist University as an undergraduate, continuing there for a master's degree and becoming interested in immunology. He obtained his PhD from University of Texas Health Science Center, where his advisor was Donald Capra; and there he began his interest in Complement C4. He moved to University of Oxford to work with Rodney Porter as a post-doctoral fellow where he cloned C4. He then accepted an appointment in Boston Children's Hospital and is now a professor in Harvard Medical School.

Carroll talks about funding and the ways in which funding drives areas of research, using as an example his own concentration on work in the less fashionable biology of complement, rather than pursuing MHC. He compares British and American science, specifically Harvard's and Oxford's. He explains the importance to him of things other than science, primarily family; and he describes the intersection of his science and religion.

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<p>Born in Birmingham, Alabama; grew up mainly in Texas. Second of four children. Father was an engineer after serving in US Air Force; mother housewife, then secretary. Family background. Undergraduate years at Texas Tech University. Liked golf, social life. Began in electrical engineering, switched to business. Moved to Dallas, Texas, to work in bank. Secure but bored.</p>	
Discovering Science	5
<p>Entered Southern Methodist University (SMU) as undergraduate, taking only science classes. Working in parasitology lab led to interest in immunology. Stayed at SMU for master's degree, but had project at University of Texas Health Science Center, obtained PhD in immunology there. In first graduate class; students in demand for lab work. Donald Capra his advisor. Interest in protein structure, especially major histocompatibility complex (MHC). First publication with Rodney Porter, who later became postdoc advisor. Subsequently moved to European lab.</p>	
Postdoctoral Work	13
<p>Arthritis Foundation allowed foreign postdocs; pushed by Horace Judson to try England and molecular biology. Walter Bodmer and cloning complement genes. Difficulties of living in England. Porter's mentoring, management style, personality. Two years in George Brownlee's lab at University of Oxford. Funding. Polymorphism and disease susceptibility. Cloning C4; importance to immune response. Wanting to return to United States; wanting family and better pay.</p>	
Boston Children's Hospital	22
<p>Accepts assistant professorship of pediatrics at Boston Children's Hospital with joint appointment in pediatrics department of Harvard Medical School. More about funding: National Institutes of Health, Pew Charitable Trusts, and Multiple Sclerosis Society. His lab composition. Typical day in his lab. French wife and two children. Leaving bench for more administrative responsibilities. "Harvard style": expand or drop out. British science vs. American; Oxford's vs. Harvard's. Funding agencies' emphasis on novel or fashionable science. Discarded mapping molecular biology in favor of biology of complement because of funding and Harvard environment. Keeping archive of his work. Religion.</p>	
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