CHEMICAL HERITAGE FOUNDATION

MICHAEL J. OVERDUIN

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

William Van Benschoten

at

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Birmingham, England

on

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From the Original Collection of the University of California, Los Angeles

Michael J. Overduin

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Michael J. Overduin, Ph.D.

27 Feb 2008

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MICHAEL J. OVERDUIN

1967	Born in Welland, Ontario, Canada on 4 April

Education

1988	B.Sc., Honours Biology with Mathematics Minor, Wilfrid Laurier University, Waterloo, Ontario, Canada
1993	Ph.D., Biochemistry, Genetics, and Physical Chemistry, The Rockefeller University, New York City, New York

Professional Experience

University of Toronto/Ontario Cancer Institute, Toronto, Ontario, Canada

1993-1995	Postdoctoral Fellow, Department of Medical Biophysics

University of Colorado Health Sciences Center, Denver, Colorado

1995-2002	Assistant Professor, Department of Pharmacology
2002-2003	Associate Professor, Department of Pharmacology

University of Birmingham, Birmingham, United Kingdom

2004-present	Professor, Cancer Research UK Institute for Cancer Studies,

Honors

1988	Gold Medal for highest achievement, Dept. of Biology, Wilfrid Laurier University
1993-1995	National Cancer Institute of Canada Postdoctoral Fellowship Award
1995	Alumnus of the Year, Wilfrid Laurier University
1997-1998	Howard Hughes Medical Institute Pilot Project Award
1998-1999	Howard Hughes Medical Institute Junior Faculty Startup Award
1998-2000	Basil O'Conner Award, March of Dimes
1998-2002	Pew Scholar, Pew Charitable Trusts
1998-2003	FIRST Award, National Institutes of Health/National Cancer Institute
2001	Faculty Excellence in Research Award, Department of Pharmacology, University of Colorado Health Sciences Center
2003	Chair of Structural Biology, University of Birmingham
2004	Royal Society Wolfson Research Merit Award

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ABSTRACT

Michael J. Overduin was born in Ontario, Canada, the second oldest of five children. Overduin's father received master's degrees in English and music and was a teacher who traveled around Ontario to develop new programs at various schools—in music, English, and theater; in addition, he was well-respected in musical communities, especially those associated with churches, he put out several CDs, and, later in life, became a professor (without a PhD). Overduin's mother was a teacher as well, before having her children, and musically inclined too—classical music was a mainstay of the Overduin household. As a child Overduin was interested in music (though never performed) and art, and he appreciated the creativity of science. His interests and his parents' belief in education cultivated his love of biology and nature; influential teachers in school and early laboratory experiences proved formative as well.

Overduin matriculated at Wilfrid Laurier University, Waterloo, Ontario, Canada and pursued a major in biology and a minor in mathematics. While in college he completed a thesis with Bernard Glick on the transformation of *Pseudomonas aeroginosa* and *Escherichia coli* by electroporation. After receiving his baccalaureate of science, he chose to attend Rockefeller University for graduate studies in structural biology, working in the laboratory of David Cowburn. Overduin's graduate work used nuclear magnetic resonance to determine the structure of a signal transduction protein; additionally, he worked with David Baltimore. For his postdoctoral fellowship, he worked with Mitsuhiko Ikuraat the University of Toronto and focused on the structural protein cadherin and its involvement in cell adhesion. After his time in Toronto, he accepted a position at the University of Colorado Health Sciences Center and began research on the domain structure of receptors involved in endocytosis. He also assisted in establishing an NMR spectroscopy facility and biomolecular structure program while there. After several years at Colorado, he moved to the University of Birmingham, Birmingham, England, helping build the NMR spectroscopy facility there, and continuing his research on complex systems and protein domains of therapeutic targets.

The interview concludes with Overduin's thoughts on his laboratory management style; the process of writing journal articles; the issue of patents; the role of the scientist in educating the public about science; setting the national science agenda; recruiting foreign students as science graduate students and postdoctoral fellows in the United States; and balancing his career and time with his family. Overduin's oral history ends with his reflections on the impact of the Pew Scholars Program in the Biomedical Sciences on his research and what he likes most about being a principal investigator.

UCLA INTERVIEW HISTORY

INTERVIEWER:

William Van Benschoten, Interviewer, UCLA Oral History Program; B.A., History, University of California, Riverside, 1990; M.A., History, University of California, Riverside, 1991; C.Phil., History, University of California, Los Angeles, 1995.

TIME AND SETTING OF INTERVIEW:

Place: Overduin's office, University of Birmingham.

Dates of sessions: February 8 and 9, 2005.

Total number of recorded hours: 5.

Persons present during interview: Overduin and Van Benschoten.

CONDUCT OF INTERVIEW:

This interview is one in a series with Pew Scholars in the Biomedical Sciences conducted by the UCLA Oral History Program in conjunction with the Pew Charitable Trusts's Pew Scholars in the Biomedical Sciences Oral History and Archives Project. The project has been designed to document the backgrounds, education, and research of biomedical scientists awarded four-year Pew scholarships since 1988.

To provide an overall framework for project interviews, the director of the UCLA Oral History Program and three UCLA faculty project consultants developed a topic outline. In preparing for this interview, Van Benschoten held a telephone preinterview conversation with Overduin to obtain written background information (curriculum vitae, copies of published articles, etc.) and agree on an interviewing schedule. He also reviewed documentation in Overduin's file at the Pew Scholars Program office in San Francisco, including Overduin's proposal application, letters of recommendation, and reviews by Pew Scholars Program national advisory committee members.

ORIGINAL EDITING:

Carol Squires edited the interview. She checked the verbatim transcript of the interview against the original tape recordings, edited for punctuation, paragraphing, and spelling, and verified proper names. Words and phrases inserted by the editor have been bracketed.

Overduin reviewed the transcript. He verified proper names, made a minor number of corrections and additions and contributed the biographical summary and curriculum vitae.

Carol Squires prepared the table of contents and TechniType Transcripts compiled the guide to proper names.

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