CHEMICAL HERITAGE FOUNDATION

MICHAEL D. COLE

The Pew Scholars Program in the Biomedical Sciences

Transcript of an Interview
Conducted by

Robert Kohler and Naomi Morrissette

at

Princeton University
Princeton, New Jersey

on

1 August 1989

(With Subsequent Corrections and Additions)

ACKNOWLEDGEMENT

This oral history is part of a series supported by a grant from the Pew Charitable Trusts based on the Pew Scholars Program in the Biomedical Sciences. This collection is an important resource for the history of biomedicine, recording the life and careers of young, distinguished biomedical scientists and of Pew Biomedical Scholar Advisory Committee members.

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MICHAEL D. COLE

1951 Born in Lima, Ohio on August 27

Education

1973 B.A., Physics, Ohio Northern University
1978 Ph.D., Biophysics, The Johns Hopkins University

Professional Experience

The Johns Hopkins University, Baltimore, Maryland
1978-1980 Post-Doctorate, Biology

St. Louis University School of Medicine, St. Louis, Missouri
1980-1984 Assistant Professor of Biochemistry

Princeton University, Princeton, New Jersey
1984-present Assistant Professor of Molecular Biology

Honors

1978-1980 Leukemia Society Postdoctoral Fellowship
1984-1988 American Cancer Society Faculty Research Award
1985 Pew Scholars Award

ABSTRACT

Michael D. Cole grew up in Ada, Ohio, the oldest of four children. His father was an insurance agent, his mother a housewife. He was always interested in science and nature. He was good at math and physics in high school, so he majored in physics at Ohio Northern University, never taking a biology class. Nonetheless, he found biology more attractive as a career so he entered a PhD program at Johns Hopkins University, starting in Michael Beer's lab. His thesis involved trying to sequence DNA using microscopy. As a postdoc in Ru Chih Huang's lab, Cole planned to study immunoglobulin but ended up working to characterize the *myc* gene instead.

Cole took his first job at St. Louis University, where he used the tumor systems in a "survey" experiment with *myc*. He found the translocation and translocation breakpoint, publishing results in *Cell* that were considered a major breakthrough in the study of cancer. He moved to Princeton University, where there was a good molecular biology department headed by Arnold Levine. He has stayed with *myc* since, still seeking the binding site, but he has two other related areas of interest: finding cofactors necessary for activating tumor growth and studying growth factor receptors.

Cole talks about his personal philosophy; his style; his belief in the necessity for intellectual curiosity in science; serendipity; funding difficulties, especially for long-term projects like his; the problem of invasiveness of tumors. He hopes that in five years he will have found the binding site for *myc.* He wants to study the biology of the system in order to find out *how* transformation of cells occurs, but at this point he feels that the technology does not permit it; he will be going to Sweden to try using PCR. Cole concludes the interview with a discussion of the prints and postcards decorating his office.

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