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CHARLES N. COLE

AND

INDER VERMA

Transcript of Two Interviews
Conducted by

Sondra Schlesinger

at

St. Louis, Missouri and Salk Institute, San Diego, California

on

6 May 1995 and 23 August 1995

(With Subsequent Corrections and Additions)

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CHARLES N. COLE

1946	Born in New York City, New York, on 28 October

Education

1968	A.B., chemistry, Oberlin College
1972	Ph.D., cell biology, Massachusetts Institute of Technology

Professional Experience

	Massachusetts Institute of Technology
1972-1973	Instructor
	Yale University Medical School
1977-1983	Assistant Professor of Human Genetics
	Dartmouth Medical School
1983-1988	Associate Professor of Biochemistry
1984-1995	Director, Program in Molecular and Cellular Biology, Norris Cotton Cancer Center of Dartmouth Hitchcock Medical Center
1986-present	Co-Chair, Molecular Genetics Center, Dartmouth College and Dartmouth Medical School
1988-present	Professor of Biochemistry
1995	Co-director, Program in Molecular Therapeutics, Norris Cotton Cancer Center of Dartmouth Hitchcock Medical Center
2000-present	Professor of Genetics

Honors

1969-1972	Postdoctoral Fellowship, National Science Foundation
1974-1977	Helen Hay Whitney Postdoctoral Fellowship
1989	National Institute for Medical Research Fellowship, Royal Society of the United Kingdom, Mill Hill, London, UK

INDER M. VERMA

1947	Born in Sangrur, Punjab, India on 28 November

Education

1966	M.Sc., biochemistry, Lucknow University
1971	Ph.D., biochemistry, The Weizmann Institute of Science

Professional Experience

	The Salk Institute
1974-1979	Assistant Professor
1979-1983	Associate Professor
1983-1985	Senior Member, Molecular Biology and Virology Laboratory
1985-1995	Professor, Molecular Biology and Virology Laboratory
1995-present	Professor, Laboratory of Genetics
	University of California, San Diego
1979-1983	Adjunct Associate Professor, Department of Biology
1983-present	Adjunct Professor, Department of Biology

Honors

1964-1966	First in order of merit in M.Sc.
1967-1970	Reverend Solomon B. Caulker Memorial Fellowship
1970-1973	Fellow of the Jane Coffin Childs Memorial Fund for Medical Research
1985	Medal for Outstanding Scientist of North American Scientists of Indian Origin
1987	NIH Merit Award
1988	NIH Outstanding Investigator Award
1990	American Cancer Society Professor of Molecular Biology
1993	Thrombosis Research Institute, London, Annual Award for 1993
1995	Charaka Award, The Association of Indians in America
1995	Member, The Third World Academy of Sciences
1997	Fellow, American Academy of Microbiology
1997	Foreign Fellow, The National Academy of Sciences, India
1997	Member, The National Academy of Science (USA)
1998	Associate Member, European Molecular Biology Organization (EMBO)
1999	Member, Institute of Medicine of the National Academy of Sciences

(USA)

2000 Fellow, American Academy of Arts and Sciences

ABSTRACT

Charles N. Cole begins his interview by discussing the reasons behind his decision to attend Massachusetts Institute of Technology [MIT]. Cole's interest in viruses led him to switch from Harvey F. Lodish's Laboratory to the laboratory of David Baltimore. Cole's research involved the polio virus and the role of defective interfering particles. While at Baltimore's lab, reverse transcriptase was discovered. Cole discusses the effect that this discovery had on his polio research. After completing his Ph.D., Cole decided not to pursue polio research. Cole's time at MIT coincided with rising political activism. Cole discusses his anti-war activities, his arrest for disorderly conduct, the resulting trials, and his decision to live communally. Cole concludes the interview with some thoughts about working with David Baltimore and his skill as a writer and lecturer.

Inder Verma begins his interview by discussing how he came to join David Baltimore's Laboratory. Verma, who was at the Weizmann Institute of Science, was convinced to move to MIT and join Baltimore's Lab by Bob Weinberg. When Verma first arrived, Baltimore was away teaching in Taiwan. Verma discusses his early research on reverse transcriptase and RNA, and his attempts to establish himself with his co-workers in the lab. Verma discusses his interaction with Baltimore and his impressions of Baltimore's skills as a scientist and lecturer. Verma provides an alternate view to some of the political turmoil that Charles N. Cole discusses in his interview. As a foreign student, Verma had a different opinion of the Vietnam War and the anti-war demonstrations. Verma concludes his interview with some thoughts about his research and the it's impact on cancer research.

INTERVIEWER

Sondra Schlesinger is Professor of Molecular Microbiology at Washington University School of Medicine. She received her Ph.D. in biological chemistry from the University of Michigan and spent three years as a postdoctoral fellow with Professor Boris Magasanik at the Massachusetts Institute of Technology, where she worked on enzyme induction and regulation in bacteria. She joined the faculty at Washington University in 1964, where initially she continued her research in the field of microbial genetics and physiology. In the early 1970s, she began her research work on the structure and replication of animal RNA viruses, which continues to this day. Dr. Schlesinger has over one hundred publications spanning these areas of microbiology. She was President of the American Society for Virology in 1992-1993, at which time she began her present interest and work in the history of virology.

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6. Inder Verma, "RNA-Dependent DNA Polymerase in virions of RNA tumor viruses," *Nature* 226 (1970): 1209-1211.

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