

CHEMICAL HERITAGE FOUNDATION

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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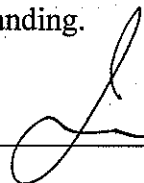
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(Date)

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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

1972-1973 Massachusetts Institute of Technology  
Instructor

1977-1983 Yale University Medical School  
Assistant Professor of Human Genetics

1983-1988 Dartmouth Medical School  
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

1971-1974 Massachusetts Institute of Technology  
Post-Doctoral Fellow

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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