

Speakers

Richard A. Young, Ph.D.

Whitehead Institute for Biomedical Research
Nine Cambridge Center
Cambridge, Massachusetts 02142
USA

- 1971–1975 B.S., Indiana University, Bloomington, IN
1975–1979 Ph.D., Yale University Department of Molecular Biophysics and Biochemistry, New Haven, CT
1979–1980 Postdoctoral Fellow, Swiss Institute for Experimental Cancer Research, Department of Biology, Lausanne, Switzerland
1981–1984 Postdoctoral Fellow, Stanford University, Department of Biochemistry Stanford, CA
1984–1988 Assistant Professor, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA
1984–1991 Associate Member, Whitehead Institute for Biomedical Research, Cambridge, MA
1988–1993 Associate Professor
1991–present Member
1994–present Professor

Honors

- 1977–1979 National Institutes of Health Public Service Award (Predoctoral)
1979–1980 Swiss National Science Foundation Postdoctoral Fellow
1981–1983 National Institutes of Health Public Service Award
1983–1989 IMMLEP Steering Committee (Program for Immunology of Leprosy), Tropical Disease Research WHO/World Bank/UNDP
1987–1992 Burroughs Wellcome Scholar Award
1987–1990 Chairman, Molecular Biology Subcommittee, Tropical Disease Research, WHO/World Bank/UNDP
1987–1996 National Institutes of Health Merit Award
Chairman, FASEB Summer Research Conference "Molecular Biology and Infectious Disease"
1988–1993 AIDS and Related Research Study Section, National Institutes of Health, Bethesda, MD
1988–1997 Director, National Cooperative Vaccine Development Group for AIDS (NIH)
1993–1998 Editorial Board, Molecular and Cellular Biology
Chiron Corporation Biotechnology Research Award, American Society for Microbiology
1994 Fellow, American Academy of Microbiology
1995 Charter Fellow, Molecular Medicine Society
1995 External Review Committee, Bermuda Biological Station for Research
1996–1997 Chair, Graduate Program, Biology Department, M.I.T.
1999 NIAID Blue Ribbon Panel on Microbial Genome Sequencing
1999 NIAID Strategic Plan Task Force

Dissecting transcriptional circuitry and mechanisms in yeast

Genome-wide expression analysis is being used to obtain clues to the roles played by transcriptional regulators, components of the transcription initiation apparatus, histones and chromatin-modifying enzymes in gene regulation. Previous genetic and biochemical studies identified much of the transcriptional machinery of eukaryotic cells and provided mechanistic insights into the functions of various components at specific promoters. However, knowledge of the contributions of regulators and the transcriptional machinery to the complete transcriptional circuitry is lacking. Our data describes how expression of the genome depends on over 50 components critical to transcriptional regulation in yeast cells. This information provides a foundation for understanding the molecular mechanisms involved in genome-wide expression, and new insights into transcriptional regulation will be described.