

# NEVILLE ROBERT KALLENBACH

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Born, Johannesburg, Union of South Africa, January 30, 1938  
US citizen, 1959.

## **Education:**

- 1958 Rutgers University, New Brunswick, NJ BS, Chemistry, Mathematics
- 1961 Yale University, New Haven, CT. Ph.D, Physical Chemistry
- 1961-62 University of California, San Diego, CA. National Science Foundation  
Postdoctoral Fellow
- 1962-64 University of California, San Diego, CA National Institutes of Health  
Postdoctoral Fellow  
Biophysical Chemistry

## **Professional Experience:**

- 1964-1968 Assistant Professor of Biology, University of Pennsylvania, Phila., PA  
1968-1972 Associate Professor of Biology, University of Pennsylvania  
1971--1972 Visiting Professor and Guggenheim Fellow, Dept. of Chemical Physics, Weizmann  
Institute of Science, Rehovot, Israel  
1972-1987 Professor of Biology, University of Pennsylvania  
1980-1984 Member & Chairman, Molecular & Cellular Biophysics Study Section, National  
Institutes of Health  
1980-1981 Visiting Professor of Biochemistry, Stanford University School of Medicine, Palo  
Alto, CA (NIH Senior Fellow)  
1983-1985 Director of Research, Molecular Biophysics Technologies, Inc. Philadelphia,  
PA. (Start-up biotechnology company)  
1986 Chairman, Gordon Research Conference on Physics and Physical Chemistry of  
Biopolymers  
1986 Program Chairman, 32nd Annual Meeting of Biophysical Society  
1985-1993 Member, Editorial Board, *Journal of Biomolecular Structure and Dynamics*  
1985-1995 Member, Editorial Board, *Biochemistry*  
1987-1995 Professor of Chemistry and Chair, Department of Chemistry, New York University  
1990-1994 Member, Biomedical Sciences Study Section, NIH  
1993-1994 Chair, Biophysics Section, New York Academy of Sciences, NY  
1995- Professor of Chemistry, Department of Chemistry, New York University  
1997 Member, External Review Committee, Department of Chemistry, University of  
Delaware, Newark, DE.

1998 Member, Review Committee, Institute for Cellular and Molecular Biology,  
National University of Singapore

1995-1999 Co-Principal Investigator, New York City Collaborative for Excellence in Teacher  
Preparation.

1998 Chairman, Special Study Section (Structural Genomics), NIGMS, UC Berkeley.

1998 Member, Review Committee, Division of Biological Sciences, Lehigh University.

1999-2000 Visiting Special Expert, NIGMS, NIH. Project on Biology of Complex Systems.

2001. Panel member, New Technologies Initiative, NCI-NIH.

2001. Panel member. Panel on Microbial Cell Project, Department of Energy,  
Georgetown, DC.

2002- Member, Editorial Advisory Board, *Protein Science*

2004-2005 Member, NIH Review Panel ZRG1 BST-F, Assays and Methods Development

2007- Director of Science Programs, Faculty Resource Network.

## **Honors and Awards:**

B.S., Summa Cum Laude, Rutgers University (1958), Selman Waksman Scholarship (1954-1958), Harry I. Etelman Foundation Scholarship (1954-1958), Henry Rutgers Scholar (1958), American Institute of Chemists Medal for Outstanding Chemistry Major (1958), Pi Mu Epsilon (1957), Phi Lambda Upsilon (1957), Phi Beta Kappa (1958); Woodrow Wilson Fellowship (1958-59); DuPont Fellowship, Yale University (1959-1960), M.A. (H.C.), University of Pennsylvania (1971), Guggenheim Fellowship -- Weizmann Institute of Science and Centre de Biophysique Moleculaire, Orleans, France (1972-1973), Visiting Research Fellow, Sao Paulo Foundation for Scientific Research, University of Sao Paulo, Brazil (1978), NIH Senior Research Fellow -- Stanford University, Department of Biochemistry, (1981-1982). "Golden Dozen" Award for Excellence in Teaching, Washington Square College, NYU (1992), (2003); Herman and Margaret Sokol Prize for Faculty Research, NYU (1994).

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3. Liu J, Deng Y, Zheng Q, Cheng CS, Kallenbach NR, Lu M. A parallel coiled-coil tetramer with offset helices. *Biochemistry.* 2006 Dec 26;45(51):15224-31.
4. Liu J, Zheng Q, Deng Y, Cheng CS, Kallenbach NR, Lu M. A seven-helix coiled coil. *Proc Natl Acad Sci U S A.* 2006 Oct 17;103(42):15457-62.
5. Liu J, Zheng Q, Deng Y, Kallenbach NR, Lu M. Conformational transition between four and five-stranded phenylalanine zippers determined by a local packing interaction. *J Mol Biol.* 2006 Aug 4;361(1):168-79.
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**Abstracts and Short Communications:** I have authored or coauthored more than 50 abstracts of research presented at meetings since 1968, including the Biophysical Society, the Protein Society, Conversations in the Discipline of the State University of New York at Albany, and the American Chemical Society. These are published in the Biophysical Journal, Protein Science, the Journal of Biomolecular Structure and Dynamics, and JACS.

### **Invited Lectures, 1993-:**

- University of Houston, *Model Alpha helices and Protein Folding*. 10/93
- Texas A & M. 10/93
- University of Texas. 10/93
- Pace University, *Protein Folding*. 11/93
- San Diego Conference, Roche Molecular Systems. *Branched DNA Structures and their Properties*. 11/93
- City College. 11/93 *Helical structure: principles and applications*
- University of Nebraska, *Structure and Drug Interactions of Some Novel DNA's., and the Alpha-helix and its Determination*. 2/94
- Gordon Conference on Physics and Chemistry of Biopolymers . *Helix Capping Interactions*. Salve Regina, RI 6/94
- Protein Society Eighth Symposium, CA, *Alpha-Helices and Protein Folding*. 7/94
- Los Alamos National Labs. 8/94 *Mutational analysis of protein folding*. 6/94
- Institute of Biochemistry and Biophysics, Polish Academy of Sciences, *Determinants of the Alpha Helical Structure in Peptides*. 9/94
- National University of Singapore, Institute of Molecular and Cell Biology, *Protein Folding*. 9/94
- National Tsing Hua University, Taiwan, *Studies on the Alpha Helix in Peptides and Proteins*. 9/94
- Protein Research Institute of Japan, Molten Globule Symposium, *Mutational Snapshots of Molten Globules*. Tokyo, Japan 9/94
- 8th Annual Gibbs Conference on Biothermodynamics, Carbondale, Illinois, *Alpha Helix Stabilizing and Capping Interactions Studied in Synthetic Model Peptides*. 10/94
- Columbia University, College of Physicians and Surgeons. *Principles of helix stabilization*. 3/95
- Albert Einstein College of Medicine, Yeshiva University. *Folding of helical proteins*. 5/95
- Workshop on Quantitative Biophysics at the Molecular and Macromolecular Scales (Adriatico Research Conference) International Centre for Theoretical Physics, Trieste, Italy. *Secondary structure and folding of helical proteins*. 6-7/95.
- University of Kansas, Lawrence, Kansas. *Determinants of alpha helix stability*. 11/95

- Lindsay Kimball Research Laboratory, New York Blood Center, NY. *The alpha helix*. 12/95
- Chiba University, Tokyo, Japan. International Workshop on Protein Folding. *Determinants of helix stability*. 12/95
- Gordon Conference on Chemistry and Biology of Peptides, Ventura, CA. Peptide models for dissecting alpha helical stability. 2/96
- The Johns Hopkins Protein Folding Meeting, Coolfont Conference Center, Berkeley Springs, W. Va. *Present status of the folding problem-discussion leader*. 3/96
- Consultant, American Association of Colleges and Universities Workshop on Science Education, St. Michaels's College, Burlington, VT 6/96, 6/97
- Co-Director, Faculty Resource Network Workshop on Molecular Biology, 6/96, 6/97.
- Program Committee and Session Chair, Tenth Conversation in the Disciplines, SUNY Albany, 6/97.
- New York Academy of Sciences, Science Education section, presentation on NY Collaborative for Enhancement of Teacher Preparation in Science and Mathematics, April, 1998.
- Colloquium speaker, Oregon State University, Corvallis, OR., May, 1998.
- Speaker, NSF Shaping the Future Workshop on Core Curricula, Colorado State University, Fort Collins, CO. July, 1998.
- Colloquium speaker, University of Missouri, Columbia, MO., Dept. of Biochemistry, Sept. 1998
- Organizer, NSF Shaping the Future Workshop, Science Education in the 21st Century, Atlanta, GA, October 1998.
- Conference on proteins and peptides, Gdansk, Poland Sept. 2000. Helix stability by side chain interactions.
- Gibbs Conference on Biothermodynamics, October 2001. Structure in unfolded proteins.
- Columbia University, School of Physicians and Surgeons, Dept. of Biophysics, Nov. 2001. Structure in unfolded proteins.
- Workshop on Self Organizing Materials, ICAM, Santa Fe, NM, January, 2002.
- Cornell University School of Medicine Department of Biochemistry, April, 2003.
- ONR Workshop, Coolfont, W.Va. April 2003. Structural approach to antibiotic peptides.
- Colloquium speaker, Department of Biochemistry, University of Wisconsin, January 2004.
- Invited speaker, Gordon Conference on Biopolymers, June 2004 Salve Regina, RI.
- Invited speaker, NERM American Chemical Society, Rochester, NY November, 2004
- Colloquium speaker, Dept. of Chemistry, Utah State University, Logan, UT April, 2005
- Invited speaker, Gibbs Conference on Biothermodynamics, October, 2005.
- Invited speaker: Telluride Conference on Hydrogen Bonds and Solvation, August, 2006
- Department colloquium, City College of New York, December 2006
- Seminar speaker, Department of Chemistry, Syracuse University, April, 2007