

Ralph F. Hirschmann

Born in Bavaria, Germany in 1922, Ralph Hirschmann came to the U.S. in his teens. He graduated from Oberlin College in 1943 before serving in the U.S. Army for three years. He resumed his education at the University of Wisconsin (Madison) as the Sterling Winthrop Fellow with W.S. Johnson as mentor, receiving a Ph.D. (1950) degree in organic chemistry. Professor Hirschmann was immediately recruited by Dr. M. Tishler to join the Development Research group at Merck. While at Merck, he discovered the first rearrangement under stereoelectronic control, a reaction later studied in detail by E.J. Corey, and with R.G. Denkwalter he reported the first solution synthesis of a protein—the 124 amino acid enzyme ribonuclease A. In 1974 Professor Hirschmann was appointed Executive Director of Medicinal Chemistry at Merck, West Point, and Vice-President and Senior Vice President of Basic Research in 1976 and 1978, respectively. In 1988 he joined the University of Pennsylvania as the first Research Professor in Chemistry, and he was appointed the Rao Makineni Professor of Bioorganic Chemistry in 1994.

Professor Hirschmann has authored 141 papers and is named inventor or co-inventor on nearly 100 patents. His wide-ranging research interests include: the chemistry and biology of anti-inflammatory steroids; carbohydrate chemistry; selective drug delivery; synthetic methods in peptide chemistry; chemistry, conformation, biology and structure activity relationships of hypothalamic releasing factors, especially TRH and somatostatin; design, synthesis and evaluation of drugs for inflammatory disease, cardiovascular and renal disorders, disorders relating to mental health and the nervous system, and endocrine disease; polyvalent drugs, peptidomimetics with novel scaffolding; catalytic antibodies; drug receptor interactions; and new approaches to improve transport properties of peptides. During his tenure as Merck's Head of Basic Research, his colleagues discovered and/or developed the well-known drugs Mevacor®, Vasotec®, Prinivil®, Primaxin®, Proscar® and Ivermectin.

Professor Hirschmann's professional activities include many state, federal, and international review committees, including most recently the NIH Medicinal Chemistry A Study Section, the Pimentel Committee, the ACS Committee on Chemistry and Public Affairs, the Executive Committee of the Organic Division of the ACS, the National Research Council Committee on Critical Technologies, and the Chemical Heritage Foundation Executive Committee. He also served as Cochairman (Chemistry & Biology of Peptides), and as Member, Vice Chairman and Chairman of the Board of Trustees of the Gordon Research Conferences, and was Program Chairman for the 17th National (1980) Medicinal Chemistry Symposium.

Presently, he serves on the advisory and/or editorial boards of numerous scientific journals, including most recently the *Journal of Organic Chemistry*, *Organic Reactions*, *Journal of Medicinal Chemistry*, *Journal of Peptide Research*, *Organic Reactions*, *Ullmann's Enzyklopadie der Technischen Chemie*, and *Archiv der Pharmazie*. Professor Hirschmann also serves as consultant for, and on the scientific advisory boards of, major industries both in the US and Europe.

He has been honored as distinguished lecturer in academia and industry. Examples include the Romanes Lecturer (University of Edinburgh, Scotland), the Agnes Borrowman Leadership in Pharmacy (London University), Speaker at the First International Pontifical Commission on "Pharmaceuticals at the Service of Human Life" (Vatican City), First Gensia Lecturer in Chemistry (The Research Institute of Scripps Clinic), Keynote Speaker of the 3rd Max Tishler Memorial Symposium (The Kitasato Institute), Monsanto Lecturer in Bioorganic Chemistry (Purdue University), and the Max Hoffer Lecturer (Hoffmann-LaRoche). Among his numerous awards are three honorary degrees, and national awards such as the Alan E. Pierce Award (American Peptide Society), the Edward E. Smissman Award (ACS Division of Medicinal Chemistry), the Alfred Burger Award (ACS), the Dr. Josef Rudinger Award (European Peptide Society), and the American Association of Pharmaceutical Scientists Achievement Award in Medicinal and Natural Products Chemistry. Professor Hirschmann is an elected Member of the American Academy of Arts and Sciences and the American Society of Biological Chemists, and is a Fellow of the American Association for the Advancement of Science.

In 1984, Oberlin College and the University of Wisconsin both established Endowed Lectureships in his name. In 1987 the Medical University of South Carolina established the Ralph F. Hirschmann Professorship of Biochemistry, and in 1989 The American Chemical Society established the Ralph F. Hirschmann Award in Peptide Chemistry. In 1992 the *Journal of Medicinal Chemistry* dedicated volume 35, number 21 to him.

Professor Hirschmann's distinguished record of achievements and honors are a testament to his dedication to medicinal chemistry research and education, a dedication which exemplifies the ideals practiced by Ed Smissman. Thus, it is with a sense of deep respect and pleasure that the Department of Medicinal Chemistry and contributors to the Edward E. Smissman Fund welcome Professor Hirschmann as the 1998 Smissman Lecturer.