

Contact: Diana Gonzalez

**REQUEST TO AWARD AN HONORARY DOCTOR OF SCIENCE DEGREE AT  
IOWA STATE UNIVERSITY**

**Action Requested:** Consider approval of the request by Iowa State University to award an honorary Doctor of Science degree to Harold A. Scheraga at Spring 2011 Commencement.

**Executive Summary:** Iowa State University wishes to recognize Dr. Scheraga for his outstanding experimental and theoretical studies of interactions, conformational changes, and reactivity of proteins and nucleic acids, and for his development of computational approaches that have bridged the gaps between chemistry, biochemistry, and biophysics.

**Details on Dr. Scheraga's Accomplishments:**

- ◇ Dr. Scheraga received his Bachelor's degree from City College of New York in 1941 and his Master's degree in 1942 and Ph.D. in 1946 from Duke University. He joined Cornell University in 1947 as an instructor in chemistry and spent his entire career there. He was promoted to full professor in 1958, was named Todd Professor in 1965, and became Todd Professor Emeritus in 1992.
- ◇ Dr. Scheraga is one of the world's leading physical chemists working on macromolecules, primarily proteins and nucleic acids. During the past 60 years, he developed and applied physical methods to study interactions in model polypeptide systems and in proteins, and to study protein conformation and reactivity. He was a pioneer in the development of the field of conformational energy calculations to determine structure and dynamics of proteins, work that has provided the basis for much current research in protein engineering and drug design.
- ◇ Dr. Scheraga has received many national and international honors and recognitions for his contributions to science. He is a member of the National Academy of Science and American Academy of Arts and Sciences and a Fellow of the American Chemical Society, Biophysical Society, and American Association for the Advancement of Science. He is a six-time Fogarty Scholar of the National Institutes of Health. Four of his papers have been designated as "citation classics" by the journal *Current Contents*. In the March 1982 issue, he was listed as the most frequently cited physical chemist in the world. In a 2009 ranking of the 2,000 most notable living chemists, he was ranked 11<sup>th</sup>.
- ◇ Dr. Scheraga has provided outstanding teaching and mentoring for many of today's scientific leaders. He supervised approximately 50 graduate students. At least 300 post-doctoral associates and visiting scientists conducted research in his laboratory.
- ◇ ISU described Dr. Scheraga in the following way: "Dr. Scheraga has brought our understanding of protein structure in solution from the early concepts of colloid chemistry to the modern view in which we can now specify the internal inter-atomic interactions that determine how a protein folds to achieve its biologically active structure."