UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN SENATE

Committee on Honorary Degrees (Final; Action)

HD.14.03 Nominations for Honorary Degrees

The Senate Committee on Honorary Degrees is pleased to nominate the following individuals for an honorary degree to be conferred at the May 2014 Commencement exercises:

Phillip A. Sharp

Information relative to the background and achievements of these nominees is attached. Based on the criteria approved by the Senate, the Committee has selected these individuals for Senate consideration.

The Committee wishes to express its sincere appreciation to all who participated in the process, particularly those who spent considerable amounts of time and effort in preparing documentation for these nominees.

COMMITTEE ON HONORARY DEGREES

Jeremy Tyson, Chair Mckennon Biers Stephen Cartwright Harrison Kim Connor Schickel Jinming Zhang Steven Zimmerman

Phillip A. Sharp Institute Professor

David H. Koch Institute for Integrative Cancer Research at MIT

EDUCATION:

B.A., Chemistry and Mathematics, Union College, Barbourville, KY Ph.D., Chemistry, University of Illinois at Urbana-Champaign

Nominated by: James H. Morrissey, Acting Head, University of Illinois at Urbana-Champaign, Department of Biochemistry

BASIS FOR NOMINATION:

Phillip A. Sharp is nominated for his groundbreaking research in biochemistry, for his exceptional scientific leadership, and for his pioneering achievements in the biotechnology industry. His elucidation of RNA splicing and RNA expression in the 1970s has been described as one of the seminal discoveries in the biological sciences. He was one of the founding entrepreneurs of the biotechnology industry, co-founding Biogen in 1978. Biogen, which merged with IDEC Pharmaceuticals in 2003 to form Biogen Idec, Inc., focuses on developing drugs for neurological disorders, autoimmune disorders, and cancer. In 2002, he co-founded Alnylam Pharmaceuticals to develop RNAi as a therapeutic.

EXCERPTS FROM THE NOMINATION LETTER:

"Since 1999, Professor Sharp has been an MIT Institute Professor, a title given to a very small number of faculty members with extraordinary records of achievement. This honor reflects his receipt of the 1993 Novel Prize in Physiology or Medicine that was awarded for his 1977 landmark discovery of discontinuous genes in mammalian cells that required the excision of introns via RNA splicing. Professor Sharp's research legacy includes contributions to the foundation of RNAi (an RNA-dependent regulatory mechanism that serves as an on/off switch mechanism for gene expression) for which one of his students, Dr. Andrew Fire won the 1998 Nobel Prize in Physiology or Medicine."

"Professor Sharp has received many prominent distinctions including election to the American Philosophical Society, where he was awarded the 1999 Benjamin Franklin Medal. He is an elected member of the National Institute of Medicine, the American Academy of Arts and Sciences, and National Academy of Sciences, as well as is a Foreign Fellow of the Royal Society of the United Kingdom. In 2004, Professor Sharp was awarded the National Medal of Science. He has also been distinguished by the Albert Lasker Basic Medical Research Award in 1988."

HONORS/AWARDS (NOT INCLUSIVE):

- 1980 The National Academy of Sciences' U.S. Steel Foundation Award in Molecular Biology
- 1983 Elected to the American Academy of Arts and Sciences

- 1986 The New York Academy of Sciences Award in Biological and Medical Sciences 1988 The Albert Lasker Basic Medical Research Award 1993 The Nobel Prize in Physiology or Medicine 1999 Institute Professor, MIT 2003 Novartis Drew Award in Biomedical Research 2003 University of Illinois Alumni Achievement Award 2005 The 2004 National Medal of Science 2010 AACR Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research 2011 Elected Foreign Fellow of the Royal Society, UK
- 2013 The Lifetime Achievement in Science Award from the RNA Society
- 2013 Elected Fellow of the AACR Academy

EXCERPTS FROM THE LETTERS OF RECOMMENDATION:

Paul Schimmel, Ernest and Jean Hahn Professor, Scripps Research Institute, La Jolla, CA "In spite of his status as Institute Professor (a singular professorship at MIT), recipient of the US National Medal of Science, elected member of all the major academies (like the American Academy of Arts and Sciences, National Academy of Sciences, Institute of Medicine, American Philosophical Society, among other), being award the Nobel Prize in Physiology and Medicine, or being the key driving force behind building the Biogen (later Biogen-Idec) powerhouse into a \$60B enterprise that has healed and transformed countless patients, Phil takes it all in stride, with a sense of humility and a never-ending desire to move ahead to the next challenge, and to serve whenever, whomever, and however he can."

H. Robert Horvitz, Professor of Biology, Massachusetts Institute of Technology, Cambridge, MA, and Investigator, Howard Hughes Medical Institute

"Dr. Sharp is unquestionably one of the most accomplished scientists and scientific leaders of all time. His contributions include fundamental discoveries concerning biomedical science, exceptional service at the national level, profound leadership at MIT, the remarkably successful mentorship and training of large numbers of outstanding young scientists, the inspirational teaching of countless undergraduate and graduate students, and pioneering achievements in the biotechnology industry."

Jack W. Szostak, Investigator, Howard Hughes Medical Institute, Boston, MA

"Phil Sharp is one of the most accomplished and important figures in modern biology and biomedical science. He is of course most well known for this co-discovery of RNA splicing in the late '70s; this was subsequently recognized by the 1993 Nobel Prize in Physiology or Medicine. ... In addition to Phil Sharp's scientific discoveries, Phil is preeminent as a biotech entrepreneur, having co-founded both Biogen and Alnylam. Through this aspect of his career, Phil Sharp has helped to advance basic science to the clinic and to the marketplace, benefiting hundreds of thousands of patients and creating employment for thousands of people. ... He would be an absolutely outstanding choice for recognition by an honorary degree at UIUC."