

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Approval to Award an Honorary Doctorate of Science Degree to Keith Robert Yamamoto, Iowa State University

Date: March 12, 2001

Executive Summary:


Iowa State University requests approval to award an honorary doctorate of science degree to Keith Robert Yamamoto. Professor Yamamoto is an outstanding, internationally renowned research scientist, a superb teacher, a recognized leader in national science and public policy matters, and a distinguished alumnus of Iowa State University.

He is an international leader in the study of steroid hormone receptors, which are proteins that reside within cells and bind to [steroid] hormone molecules that circulate in the bloodstream. His laboratory was the first to purify a steroid receptor and to isolate and characterize its gene. He and his collaborators since have developed both genetic, as well as molecular biological, strategies to decipher the mechanisms of steroid hormone action. His work, therefore, has had a major impact on the fields of molecular biology and endocrinology. These hormones play a vital role in growth, the regulation of development and of metabolism, and defects in their synthesis or function have serious medical implications. A detailed understanding of the mechanism of hormone action provides the basis for understanding the many cellular signaling processes that occur as part of normal cell function and that go awry during disease.

Professor Yamamoto has received much recognition for his accomplishments. He was elected to the National Academy of Science [1990] at a relatively young age; he was elected as a fellow of the American Academy of Arts and Sciences in 1989; he received the Iowa State University Distinguished Achievement Award in 1997, the Gregory Pincus Medal in 1990, and the Vanderbilt Medal of Merit in 1999. He has served the National Institutes of Health and the National Academy of Science in many capacities. He has lectured widely in this country and abroad, and is an active organizer of national and international conferences. As one might expect, he serves on the editorial boards of such prestigious scientific journals as

Science, Biochemistry, the Journal of Biological Chemistry, Journal of Molecular Biology, Molecular Biology of the Cell, Chemistry & Biology, and Annual Review of Biochemistry. Dr. Yamamoto earned his B.Sc. in Biochemistry and Biophysics in 1968 from Iowa State University and his Ph.D. in Biochemical Sciences in 1973 from Princeton University; he is a native of Des Moines, Iowa.

In summary, Dr. Yamamoto is widely acclaimed for his scientific achievement and for his leadership in developing national science policy.


Robert J. Barak

Approved: 
Frank J. Stork