

**MEMORIAL RESOLUTION OF THE FACULTY OF THE  
UNIVERSITY OF WISCONSIN-MADISON**

**ON THE DEATH OF PROFESSOR EMERITUS FOLKE K. SKOOG**

Folke Skoog, C. Leonard Huskins professor of botany emeritus, died in Madison on February 15, 2001, at the age of 92, following a long illness. Professor Skoog, one of the foremost plant scientists of the 20th century, led a group that discovered a major new class of plant hormones. He was also the driving force behind several initiatives in research and teaching that have had a lasting impact on the Madison campus.

Folke Skoog was born on July 15, 1908, in Halland, Sweden. His visit to California as a high school student led to naturalization as a US citizen in 1935. He graduated from Caltech in 1932 with a BS in chemistry, and received his PhD at Caltech in 1936 for pioneering studies on the plant growth hormone, auxin. During the next few years he held an NRC fellowship at UC-Berkeley followed by staff positions at Harvard and Johns Hopkins. During World War II he served for two years as chemist and technical representative attached to the US Army in Europe.

Already with a national reputation in plant physiology, Skoog arrived at Wisconsin in the fall of 1947 at the age of 38, a new associate professor in a botany department debilitated by the war years. Eager, intense and energetic, he quickly developed personal relationships with members of the administration and leading figures on the agriculture campus and in the Medical School, and provided advice and established numerous collaborations, many of which ranged considerably beyond his primary research interests. The effect of his activities was to rejuvenate the department and give it campus leadership in basic research in the plant sciences.

His leadership on the campus was manifested in numerous ways, and sometimes required considerable boldness and courage. He led a long-term study of the algal blooms in the local lakes, and was the prime mover in the establishment of the Biotron, one of the few facilities in the country for the study of plants and animals under controlled environments. Also he was the driving force behind the establishment of the highly successful Biocore program at Wisconsin. He was motivated by the conviction that biology majors would be much better educated if they first received a grounding in physics and chemistry, and then, building on this foundation, took courses in biology in logical sequence. His passionate argument for this resulted in the appointment of a cross-campus committee and introduction of the Biocore program in the mid-1960's.

In the quest for unknown plant growth substances, Professor Skoog's group used excised tobacco pith tissues to detect cell division activity in several natural products. The work led to the isolation of "kinetin" from aged herring sperm DNA in 1954. Collaborative work with F. M. Strong in the biochemistry department led to the identification of kinetin as N<sup>6</sup>-furfuryladenine and to the synthesis of compounds of related structure with similar biological activity, generically named "cytokinins." Their discovery triggered a flood of investigations in laboratories around the world that continues to the present day. For many years Skoog's group also collaborated with University of Illinois chemist Nelson J. Leonard in synthesizing and testing hundreds of possible cytokinins and antagonists, and in establishing the principles governing their structure-activity relationships.

Skoog was also a pioneer in investigating how to control the formation of roots, stems and leaves from undifferentiated cells in plant tissue cultures. His concept that control of plant development is exerted by the relative levels of hormones and other factors led to the modification of a number of physiological concepts and horticultural practices, and his demonstration that whole plants can be generated from cultured cells helped lay the groundwork for the production of transgenic plants and other advances in biotechnology.

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In the 1950's, '60's and '70's Skoog served as president of five scientific societies. He was elected to the National Academy of Sciences in 1956. Numerous honors followed in later years, including memberships in foreign academies and several honorary degrees, culminating in the award of the National Medal of Science at the White House in 1991.

He served as major professor for more than 60 PhD students, as mentor for 40 postdoctoral associates and as adviser to students in many collaborative programs. He was remarkably accessible to his students, and totally devoid of stuffiness. A keenly perceptive and stimulating companion, he was known for his quick repartee and acerbic comments and for his clarity and depth of thought. Whether the topic was science, society, politics or philosophy, he always brought unique perspectives and a penetrating analysis to the discussion. He had little patience with pomposity, and delighted in delivering a humorous remark to puncture statements of the pretentious. He was also an extraordinarily kind individual whose students and associates benefited greatly from his concern and assistance. His students bore a deep affection for him, and a large number of them from around the world wrote, called or visited him and his wife, Birgit, later in life.

Folke Skoog was exceedingly careful and rigorous in examining experimental data, using results from his own laboratory and sensitivity to the growth of his tissue cultures to detect important clues for further research. As he himself put it modestly in an interview late in life, he had "a fairly long nose in smelling out problems, and blind perseverance in trying to bring matters to a conclusion." Owing to his widely acknowledged insight into biological phenomena, high professional standards, incisive views and leadership qualities, he exerted an exceptional impact on the course and quality of research in the plant sciences internationally for fifty years.

He is survived by his wife Birgit, daughter Karin, and grandsons Eric, Karl and Alex.

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