

# THE UNIVERSITY OF MICHIGAN

*Regents Communication*

Adopted by the Regents

## ACTION REQUEST

February 19, 2009

**Subject: Report of Faculty Retirement**

**Action Requested: Adoption of Retirement Memoir**

**Stephen Cooper, Ph.D.**, professor of microbiology and immunology, Medical School, retired from active faculty status on January 2, 2009.

Professor Cooper received his B.A. degree from Union College in 1959 and his Ph.D. degree from the Rockefeller Institute in 1963. From 1963-65 he completed NSF fellowships at the University Institute of Microbiology in Copenhagen and at the National Research Council in London. From 1965-70 he was a faculty member first at Tufts University School of Medicine and then at the State University of New York at Buffalo. Professor Cooper joined the University of Michigan faculty as an associate professor in 1970 and was promoted to professor in 1978.

Professor Cooper's research has focused on the central issues of the biology of living cells, notably their growth and cell division. His career began with studies on the molecular means by which RNA bacteriophages replicate within their bacterial hosts, but he soon shifted his interest to the host cells themselves and their replication. In the late 1960s his work revealed fundamental aspects of DNA synthesis and chromosome replication during the bacterial cell cycle. Working with collaborator Charles Helmstetter, his data and elegant interpretation of the pattern of chromosome replication and its integration with growth rate led to what is now known as the Cooper-Helmstetter model of this process. Forty years later, this model remains one of the fundamental tenets of bacterial physiology, taught as a first principle in every microbiology course. Professor Cooper studied other aspects of the segregation of DNA molecules at cell division, but later turned his attention to eukaryotic cells, making fundamental discoveries of their growth and division, and leading to his continuum model of the cell division cycle. His many contributions to cell cycle studies will continue to influence this core field of cell biology.

A dedicated teacher, Professor Cooper directed the Introduction to Microbiology course for many years and has taught medical and dental students throughout his career. He has been a generous mentor and friend to students, postdoctoral trainees, staff, and faculty.

The Regents now salute this distinguished scientist and educator for his dedicated service by naming **Stephen Cooper professor emeritus of microbiology and immunology**.

**Requested by:**



Sally J. Churchill, J.D.

Vice President and Secretary of the University

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