THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

Debra A. Thompson, Ph.D., professor in ophthalmology and visual sciences and professor in biological chemistry in the Medical School, retired from active faculty status on December 31, 2024.

Professor Thompson received her B.S. in chemistry in 1974 and secondary education certificate in 1976 from Western Michigan University. She received her Ph.D. in biochemistry in 1984 from Michigan State University where she studied mitochondrial electron transfer with Shelagh M. Ferguson-Miller. From 1984-1989, she pursued postdoctoral training with H. Gobind Khorana at the Massachusetts Institute of Technology studying the biochemistry of photoreceptor cells in the mammalian retina. In 1990, she joined the University of Michigan faculty as visiting assistant research scientist, then as assistant professor of ophthalmology and assistant professor of biological chemistry; she was promoted to associate professor in 1998 and to professor in 2005.

Professor Thompson is internationally recognized for her research focused on the molecular mechanisms of inherited retinal diseases, particularly those impacting vitamin A metabolism and the function of the photoreceptor cells and retinal pigment epithelium. She contributed to the identification of multiple human retinal degeneration genes, including RPE65, LRAT, and RDH12, and performed functional studies of the encoded enzymes using assays of recombinant protein activity and analysis of the retinal phenotypes in corresponding mouse models. She also explored the use of novel therapeutics, demonstrating preclinical proof-of-concept for gene-replacement therapy for early-onset retinal degeneration. Her work was funded by research grants from the NIH, foundations, and industry, and was published in 70 peerreviewed scientific articles as well as book chapters and abstracts, and benefited greatly from interactions with colleagues and trainees. Professor Thompson also contributed to the medical school curriculum continuously since her faculty appointment, teaching medical students and graduate level courses, and serving on preliminary exam and thesis committees. She was actively engaged in recruiting, serving on admissions committees for the graduate program in biomedical sciences (PIBS), the medical scientist training program (MSTP), the residency program in ophthalmology, and as co-chair of the M.S. degree program in biological chemistry. She was a long standing member of the advancements and promotions committee in ophthalmology and visual sciences, and served as a mentor to multiple junior and mid-level faculty, as well as undergraduate and graduate students.

The Regents now salute this distinguished faculty member by naming **Debra A. Thompson**, professor emerita of ophthalmology and visual sciences and professor emerita of biological chemistry.

Requested by:

Jon Kinsey

Vice President and Secretary of the University

December 2024