

We are saddened to inform you that H. Ronald Kaback, Distinguished Professor in the Department of Physiology and in the Department of Microbiology, Immunology & Molecular Genetics, and Member of the Molecular Biology Institute passed away on December 20, 2019. He received a BS in Biology at Haverford College and an MD from Albert Einstein College of Medicine. As a medical student, he had a eureka moment in which he proposed that bacterial membrane vesicles could be a model system to study active transport of substances into the cell. This spark ignited a passion for science and a relentless pursuit of the molecular mechanism by which a membrane transporter, LacY, facilitates the movement of sugar (lactose)



into cells under the influence of the pH gradient. In the course of this journey spanning almost six decades, Prof. Kaback developed many of the techniques for studying active transport across membranes and enabled the entire field to evolve from “phenomenology” to discovering mechanisms of transport based on fundamentals of molecular biophysics and biochemistry. His other passion was tennis, and the southern California weather afforded him year-round access to the courts.

After internship, Prof. Kaback was a Commissioned Officer in the USPHS for six years at NIH in the National Heart Institute (now NHLBI). In 1970, he moved to the newly established Roche Institute for Molecular Biology in New Jersey where he became Chairman of the Department of Biochemistry. In 1989, Prof. Kaback was recruited to the David Geffen School of Medicine as an Investigator of the Howard Hughes Medical Institute and Professor in the Departments of Physiology and MIMG. In 2004 he became a Distinguished Professor and remained active in his laboratory (still with NIH funding) up to his final days. While at UCLA, Prof. Kaback and colleagues obtained the elusive structure of LacY, the first for a membrane transport protein. He leveraged these insights to discern the details of sugar transport, at the atomic level, that has served as a paradigm for understanding actively coupled membrane transport in a wide variety of systems and biological contexts. Prof. Kaback’s contributions to science have been recognized by many honors and awards including election to the National Academy of Science, elected Fellow of the American Academy of Arts and Sciences, the Peter Mitchell Medal, and the Harvey Lecture.

The UCLA flag will be lowered to half-mast on February 6th to commemorate the life and academic contributions. Notification of additional campus events to celebrate Prof. Kaback’s career will follow.