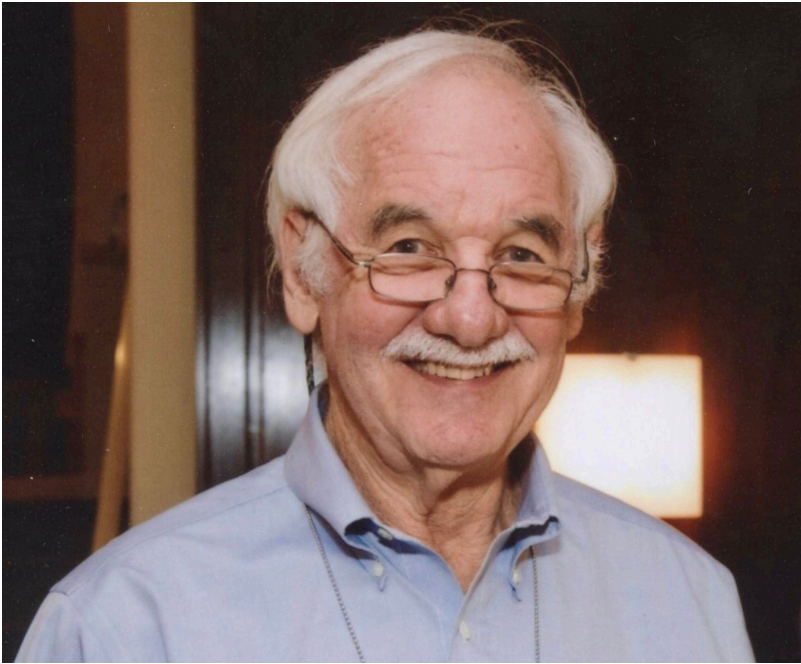


Arthur Karlin

January 14, 1936 - September 20, 2024



*Higgins Professor of Biochemistry & Molecular Biophysics
Professor of Physiology and Cellular Biophysics, and
Neurology Director, Center for Molecular Recognition*

St. Paul's Chapel, Columbia University
October 19, 2024

“Understanding the function of molecular receptors has been my guiding interest and the central mission of the Center. Receptors function in three steps: signal recognition, transduction, and transmission. This is exemplified by the nicotinic acetylcholine receptors, on which I worked for forty years. These receptors bind acetylcholine, transduce this binding into the opening of a pore, and conduct cations causing a depolarization of the synaptic membrane. We identified the overall receptor structure and, within this, the specific sites and substructures at the front-line of these functional steps...

Recently, I began to consider cellular functions that depend on circuits of signaling components...My approach to understanding such systems is to represent all steps as kinetic equations and to solve the resulting equations in time and space...Notwithstanding, such a model is a hypothetical outline of how the cell might function, always wanting experimental tests and refinement.”

Organ Prelude, *Fantasia in A Minor*, JS Bach
Douglas Drake, Administrative Assistant

Rabbi Sharon Forman Introduction and Prayers

Steven A. Seigelbaum, PhD
Chair, Department of Neuroscience
Gerald D. Fischbach *Professor of Neuroscience and Professor of
Pharmacology*

Jonathan A. Javitch, MD, PhD
Leiber Professor of Experimental Therapeutics (in Psychiatry)
*Professor of Pharmacology in the Center for Molecular Recognition and
Physiology and Cellular Biophysics*

Dennis Mitchell, DDS, MPH
Senior Advisor to the President for Inclusion and Belonging
Senior Vice Provost for Faculty Advancement,
Professor of Dental Medicine

Steven O. Marx, MD
Herbert and Florence Irving Professor of Cardiology
Director of Cardiovascular Fellowship Program

Alan Finkelstein, PhD
Professor Emeritus, Physiology, Biophysics and Neuroscience,
Albert Einstein College of Medicine

Amy Finkelstein, PhD
Professor of Economics, MIT

Ramon Valderrama, MD

Richard Lawrence

Robert Rollings, MD

Oliver Karlin

Daniel R. Karlin, MD

“The best thing for being sad,’ replied Merlin, beginning to puff and blow, ‘is to learn something. That is the only thing that never fails. You may grow old and trembling in your anatomies, you may lie awake at night listening to the disorder of your veins, you may miss your only love, you may see the world about you devastated by evil lunatics, or know your honor trampled in the sewers of baser minds. There is only one thing for it then – to learn. Learn why the world wags and what wags in it. That is the only thing which the mind can never exhaust, never alienate, never be tortured by, never fear or distrust, and never dream of regretting.

Learning is the thing for you. Look at what a lot of things there are to learn – pure science, the only purity there is. ...And then, after you have exhausted a milliard lifetimes in biology and medicine and theocriticism and geography and history and economics – why, you can start to make a cartwheel out of the appropriate wood... After that you can start again on mathematics, until it is time to learn to plough.”

Merlin instructing Arthur, the young king-to-be
T.H. White, *The Once and Future King*