2008 Esselen Award Winner
Dr. John A. Katzenellenbogen

- a brief biography

Dr. JOHN A. KATZENELLENBOGEN

Swanlund Professor of Chemistry
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John A. Katzenellenbogen received his A.B. degree from Harvard University and his Ph.D. degree for his graduate studies in chemical synthesis with Professor E. J. Corey at Harvard. He then became an Assistant Professor in the Department of Chemistry at the University of Illinois at Urbana-Champaign, where he is currently the Swanlund Chaired Professor of Chemistry.

Dr. Katzenellenbogen is the author of more than 440 research papers and has produced over 100 doctoral and postdoctoral students from his research group. He is a fellow of the American Academy of Arts and Sciences and recipient of several awards including a Cope Scholar Award of the American Chemical Society, the Roy O. Greep Lecture Award of The Endocrine Society (jointly with Benita S. Katzenellenbogen, Swanlund Chaired Professor of Molecular and Integrative Physiology at Illinois), and the E. B. Hershberg Award in Medicinal Chemistry of the American Chemical Society. He has served on the editorial boards of a number of ACS and other journals and is currently an Associate Editor of Steroids and the Journal of Nuclear Medicine.

Dr Katzenellenbogen's research has been directed at the structure, function and use of steroid receptors. He prepared the first affinity labeling agents for the estrogen receptor and used them to study receptor structure, function and dynamics. He has developed an extensive series of steroid receptor-based agents labeled with fluorine-18 and technetium-99m for imaging receptor positive tumors of the breast and prostate by positron emission tomography. These compounds have highly selective activity on the estrogen alpha and beta subtypes and have proven to be of great benefit in not only the detection of malignancies but also in simultaneously indicating the degree to which hormone therapy will be beneficial. He has developed fluorescent probes for steroid receptors that enable receptor dynamics to be followed in individual cells, resulting in commercially available fluorescence polarization assays for estrogen receptor ligand binding. More recently, he has undertaken biochemical and biophysical studies of the estrogen receptor protein and steroid hormone receptor coregulator proteins.