Alanna Schepartz
Biography

Alanna Schepartz was born and raised in New York City. She received her undergraduate training in chemistry at the State University of New York-Albany, her Ph.D. in organic chemistry at Columbia University, and spent just under 2 years as a postdoctoral fellow at Caltech, where she began to learn about the then-new field of chemical biology. She joined the faculty at Yale in 1988 as an Assistant Professor, was promoted to the rank of Full Professor in 1995, and was named a Sterling Professor in 2017. In 2019, Alanna moved to the University of California, Berkeley where she is now the C.Z. and Irmgard Chu Distinguished Chair of Chemistry and Professor of Molecular and Cell Biology. She is also a Faculty Affiliate of the California Institute for Quantitative Biosciences (QB3).

She and her research group are known for the creative application of chemical synthesis and logic to probe mechanism and catalyze discovery in both chemistry and biology. Her research has contributed to and shaped thinking in multiple areas, including the mechanisms of protein-DNA recognition and transcriptional activation; protein design and engineering and their application to synthetic biology; and the complex process by which chemical information is communicated across biological membranes. She is widely recognized for the pioneering design of miniature proteins and β-peptide bundles, the first and only example of a protein-like architecture that lacks even a single α-amino acid.

Current projects focus on (1) repurposing the ribosome to biosynthesize sequence-defined chemical polymers and polyketides; (2) exploring and improving novel tools for trafficking proteins to the cytosol and nucleus for therapeutic applications; (3) understanding the mechanism by which chemical information is transported through cellular membranes; and (4) developing new probes and fluorophores to image organelle dynamics at super-resolution for highly extended times and in multiple colors.

She has received numerous awards for her research, including a David and Lucile Packard Foundation Fellowship, a N.S.F. Presidential Young Investigator Award, a Camille and Henry Dreyfus Teacher-Scholar Award, an Alfred P. Sloan Research Fellowship, an A.C.S. Arthur C. Cope Scholar Award, the A.C.S. Eli Lilly Award in Biological Chemistry, the Agnes Fay Morgan Research Award, the Frank H. Westheimer Prize Medal, the ACS Chemical Biology Prize & Prize Lecture, for which she was the inaugural recipient, the Alexander M. Cruickshank Prize, the Ronald Breslow Award for Achievement in Biomimetic Chemistry, the Wheland Medal, the A.C.S. Ralph F. Hirschmann Award in Peptide Chemistry, and the Vincent du Vigneaud Award. In 2010, Schepartz was elected as a Fellow of both the American Academy of Arts & Sciences and theAmerican Chemical Society. In 2014, Alanna was elected to the National Academy of Sciences.

Alanna Schepartz has also received numerous awards for teaching and service to the community. She was awarded the Dylan Hixon '88 Award for Teaching Excellence in the Natural Sciences at Yale, and for more than a dozen years served the chemical biology community as an Associate Editor of the Journal of the American Chemical Society. In 2016, she took on a new role as the Editor-in-Chief of the classic ACS journal Biochemistry.