First Annual UCLA Ginsburg Symposium 2022 in Precision Health

Frontiers in Gene Editing

Speaker Bios

David Liu, PhD – Plenary

Richard Merkin Professor and Director of the Merkin Institute of Transformative Technologies in Healthcare
Vice Chair of the faculty at the Broad Institute of Harvard and MIT
Thomas Dudley Cabot Professor of the Natural Sciences at Harvard University
Howard Hughes Medical Institute (HHMI) investigator

Cambridge, MA

David R. Liu's research integrates chemistry and evolution to illuminate biology and enable next-generation therapeutics. His major research interests include the engineering, evolution, and in vivo delivery of genome editing proteins such as base editors to study and treat genetic diseases; the evolution of proteins with novel therapeutic potential using phage-assisted continuous evolution (PACE); and the discovery of bioactive synthetic small molecules and synthetic polymers using DNA-templated organic synthesis and DNA-encoded libraries. Base editing—the first general method to perform precision gene editing without double-stranded breaks, and a *Science* 2017 Breakthrough of the Year finalist—as well as prime editing, PACE, and DNA-templated synthesis are four examples of technologies pioneered in his laboratory. These technologies are used by thousands of laboratories around the world and have enabled the study and potential treatment of many genetic diseases.