



## **Jimmy Gollihar, PhD**

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*AI-Assisted Directed Evolution of Immunogens*

Dr. Gollihar is a Professor of Pathology & Genomic Medicine and Head of the Laboratory of Antibody Discovery & Accelerated Protein Therapeutics (ADAPT) at the Houston Methodist Research Institute (HMRI). His work encompasses a broad range of engineering biology, from the design of simple genetic “parts” and circuits to protein engineering and industrial biomanufacturing. He uses a foundation in synthetic biology to domesticate non-model organisms and then employs these tools and chassis to engineer proteins or biosynthetic pathways with therapeutic and industrial potential. He adopts a holistic approach to protein engineering by employing concepts in directed evolution, rational design, and artificial intelligence to create biological countermeasures, diagnostics, and vaccine candidates. He is a Professor of Pathology & Genomic Medicine and Head of the Laboratory of Antibody Discovery & Accelerated Protein Therapeutics (ADAPT) at the Houston Methodist Research Institute (HMRI). His work encompasses a broad range of engineering biology, from the design of simple genetic “parts” and circuits to protein engineering and industrial biomanufacturing. He uses a foundation in synthetic biology to domesticate non-model organisms and then use s these tools and chassis to engineer proteins or biosynthetic pathways with therapeutic and industrial potential. He uses a holistic approach to protein engineering by employing concepts in directed evolution, rational design, and artificial intelligence to create biological countermeasures, diagnostics, and vaccine candidates.