



## Barry A. Morgan, PhD Chief Scientific Officer

*Drug Discovery in the Shadow of COVID-19: A Reflection on the Roles of “Big Pharma”, “Biotech”, the Academic Biomedical Research Community and the Economics, and Politics of Healthcare*

Barry A. Morgan, Ph.D. is currently Chief Scientific Officer for HitGen Inc., where he focuses on developing and applying DNA-encoded chemistry technology to early stage small-molecule drug discovery. Barry has over 40 years of experience in R&D in the Pharmaceutical and Biotechnology industries in the UK, France, the USA and now China. He was Vice President, Molecular Discovery, and Site and Business Head at GlaxoSmithKline, Boston 2007-2012. He was previously Senior Vice President for Chemistry and Discovery Sciences at PRAECIS PHARMACEUTICALS Inc., where he was a primary inventor of DNA Encoded Library (DEL) Technology. Barry has presented invited seminars at over 100 Academic and Industry Symposia in Europe, the USA and China, has authored over 100 publications, and is an inventor on more than 40 patents in the area of drug discovery. He has contributed to over twenty drug development candidates in a range of therapeutic areas, of which more than ten have advanced to clinical study. In his capacity as a manager, he has recruited, managed and mentored hundreds of scientists from the Americas, Europe, Asia, Africa and Australia in a range of disciplines.

Barry is Adjunct Professor at the Institute for Molecular Medicine, University of Texas Health Sciences, Houston TX, where he focuses on collaborations applying DEL technology to novel drug targets in academia, and the economics of drug discovery and development.

**Abstract:** A common metric of the quality of healthcare is life expectancy. We will review life expectancy in the USA over the past hundred and sixty years and examine how scientific endeavor, with a focus on drug discovery has reacted to healthcare crises during that period. Although we will place considerable emphasis on the recent discovery of drugs to mitigate the consequences of SARS-CoV-2 infection, we will also examine the discovery of other agents that have the capacity to improve quality of life and survival rate. We will attempt to draw summary conclusions from these discoveries that may provide guidance to the next generation of drug hunters.