



# ANDREW HESSEL

FOUNDER, PINK ARMY COOPERATIVE

CO-CHAIR, BIOINFORMATICS AND BIOTECHNOLOGY, SINGULARITY UNIVERSITY

PUBLIC SPEAKER, AUTHOR, ADVISOR, INSPIRER

## SYNTHETIC BIOLOGY VISIONING, CATALYSIS, AND EVANGELISM

BIOGRAPHY and EXPERIENCE HIGHLIGHTS

- *Managed Research Operations for \$150M public-private medical research partnership*
- *Assisted growth of MIT iGEM Synthetic Biology training program to hundreds of institutions worldwide*
- *Co-chair of Bioinformatics and Biotechnology at the Singularity University*
- *Founded the world's first DIY, cooperative cancer biotechnology company*

Andrew has been exploring the forefront of genomic technologies for over twenty years, meeting the bright minds and collecting and sharing highlights from their work and lives. He also helps industry and research groups better understand and apply these fast-moving technologies to key challenges including health, environment, and energy.

He views cells as living computers that can be programmed easily with synthetic biology, a plug-and-play genetic engineering technology based on DNA synthesis. He co-chairs the Bioinformatics and Biotechnology track at the Singularity University, an institution founded by futurist Ray Kurzweil and X Prize Foundation CEO Peter Diamandis, and sponsored by world-leading organizations including Google, Autodesk, and NASA. He is also the founder of the Pink Army Cooperative, an experimental biotechnology venture exploring collaborative paths to open source, personalized cancer therapies.

Prior to focusing on bioengineering, he managed research operations for the Amgen Institute in Toronto, one of the first private-public research institutes in Canada, with annual funding in excess of \$15M. He architected the Institute's bioinformatics efforts, including the analysis of human genome and gene expression data. In 2002, he co-founded Miikana Therapeutics, a clinical-stage drug development company. The company was acquired by Entremed in 2006 for \$39M in cash and milestones.

Today, Andrew applies his unique strategic and scientific experience to counsel industry and educational groups on advanced biotechnologies. He is a strong advocate of open source biology and youth entrepreneurship in science. Major sponsors have included the Alberta government, Alberta Research Council, and the Oil Sands Leadership Initiative. He has given dozens of invited talks at events that include TEDx, Mobile Monday, the H+ summit, and the Sanofi-Aventis Biotalent Challenge, and his ideas have been featured in *The New York Times*, *Futurist Magazine*, *H+ magazine*, and *Wired News*.

“BIOLOGY IS THE NEXT IT INDUSTRY”