Top Skills

Biomedical Engineering
Bioprinting
Project Management

Honors-Awards

Mightex Student Research Grant
Graduate Student Fellowship Award
Florida-Canada Linkage Institute
Award
MegaWatt Ventures Clean Energy
Business Finalist
Capstone Design: First Runner Up

Eric Bennett

CEO | Frontier Bio
San Francisco Bay Area

Summary

Eric is a serial entrepreneur with expertise in developing advanced technologies. Prior to Frontier Bio, he was the CTO at Aether, a firm that specialized in producing low-cost, feature-rich bioprinters. His extensive scientific background covers brain machine interfacing, optogenetics, microfluidics, DNA assembly, in addition to bioprinting. He earned a Master's degree in Biomedical Engineering, with his research centering on the use of optogenetics and brain-computer interfacing to study and mitigate neural disorders. Eric is committed to creating transformative technologies that push the frontiers of what's possible.

Experience

Frontier Bio
CEO
2018 - Present (8 years)
San Francisco Bay Area

Frontier Bio creates lab-grown human tissues to replace animal studies and save patients' lives. Working with customers like Mayo Clinic, Wellcome Leap, and Intuitive Surgical, Frontier Bio is harnessing the power of the stem cell to push the frontier of what's possible.

StartX
Entrepreneur - S24 Cohort
May 2024 - Present (1 year 10 months)
Stanford, California, United States

StartX Stats:

- 1 in 28 StartX companies reaches over $1B in value

- StartX companies have raised over $24bn

- StartX startups are 3× more likely to reach $100M valuation than any major accelerator

- Alums include: Alchemy, Patreon, Orca Bio, Turing, Lime, OpenSea, Freenome, Kodiak Sciences, Boba Network, and Ethos Insurance.

Aether
CTO
2014 - 2017 (3 years)
San Francisco Bay Area

Designed and built all aspects (mechanical, electrical, software) of a low-cost feature-rich bioprinter for the first 2 years, then managed a team of engineers.

Bioprinter features:
- Computer Vision for Automatic PSI Calibration
- Multi-extrusion, multi-modal printing (pneumatic, FDM, microvalve, custom tools
- Cleaning station, mechanical auto-leveling, offset calibration

Aether created collaborations with more than 20 institutions across the globe including Cambridge, Stanford, McGill, University of South Australia, CSIC, National University of Singapore, McMaster, Tufts, University of Waterloo, etc...

Gladstone Institutes
Research Associate
2014 - 2015 (1 year)
San Francisco Bay Area

• Built an "auto-patcher" device to automate the setup of single-neuron patch-clamp measurements

• Created algorithms for analysis of various neurological signals to identify seizure-like activity

• Set the lab up for open and closed-loop optogenetics experiments in vitro and in vivo

University of Florida
3 years

Research Assistant
2011 - 2013 (2 years)
University of Florida

• Used SolidWorks to design and 3D-print easy-to-use, inexpensive neural headsets

• Designed and assembled a real-time brain-machine interface control system

• Wrote real-time, closed-loop seizure detection and suppression algorithms

• Performed neural surgery for gene therapy and brain machine interface installation

• Designed a genetic construct for gene therapy to specifically target inhibitory neurons

• Proposed a method of accelerating brain-machine interface learning using electrodes and optogenetic stimulation

Teaching Assistant
2010 - 2011 (1 year)

Taught undergraduate labs for introductory circuit design.

University of Alberta iGEM Team
Research Assistant
April 2009 - August 2010 (1 year 5 months)
University of Alberta

Competed twice in the annual International Genetic Engineered Machines (iGEM) competition held at MIT
- Developed a novel DNA assembly technique using paramagnetic beads
- Designed microfluidic chips for fast, modular, automated DNA assembly
- Created optimization algorithms to model the minimal metabolic E. coli genome
- Won "Best Foundational Advance" Award and 2 gold medals

Education

StartX
Founder, S24 · (April 2024)

University of Florida
Master of Science (M.Sc.), Biomedical Engineering · (2011 - 2012)

University of Florida
Master of Science (M.Sc.), Electrical & Computer Engineering · (2010 - 2011)

University of Alberta

Bachelor of Science (BSc), Electrical Engineering · (2005 - 2010)