

# Eleptic Technologies

Hartford, CT USA

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**Industry:** Research and Development,  
Academia, SynBio Industry.

**Management:**

Hasan Baig, PhD (Computer Science and  
Engineering), Co-Founder and CEO

Sumaiya Hasan  
Co-founder and Project Manager

**Board:**

Craig Carder (C3 Medical Consultants  
LLC)  
Also seeking other members

**Scientific Advisory Board:**

Seeking members

**Number of Employees:** 2

**Finance:**

Accountant/Tax: Katy Daiell  
Funding to date: \$3000 (Accelerate  
UConn)

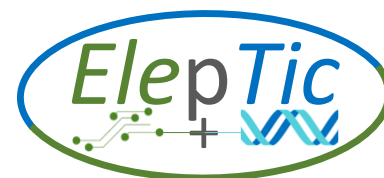
Financing sought: \$8M  
For

- R&D
- Software/Hardware development
- Genetic modules development and testing
- Microfluidic architecture

**IP:**

- Hardware (provisional)
- Software (Craig Kenesky)

**Legal:** Craig Kenesky



Electronic plus genetic Technologies

**Business Description / Company Background:**

Eleptic (ELEctronic Plus geneTIC) Technologies is a startup company focusing on developing solutions to address challenges in the development of synthetic biological systems. The main product of Eleptic technologies is an integrated electronic and genetics hand-held platform for executing synthetic biology experiments, especially systems composed of genetic logic systems. The highlighting feature of this platform is its programmability. The founder, Hasan, got the initial idea back in 2017 when he was developing a simulation and synthesis tool for genetic logic circuit. His past experience on electronic chip designing (on a reusable and reconfigurable platform) inspired him to come up with a similar platform for synthetic biologists.

**Market Opportunity / Unmet Need:**

Wetlab experimentations were greatly affected when COVID hit. Unlike software developers, hardware developers, accountants, etc., Wetlab workers did not have an opportunity to work from home because of equipment dependency. Also, Wetlab experimentation is too time consuming, first because of manual handling and second, experiments are often required to be repeated again due to mishandling of apparatus. Manual experimentation further generates massive amount of hazardous trash, and in the US alone, the disposal of plastic pipette tips is estimated to be approximately 32 million tons of garbage.

Alone in USA, there are 600+ (under)grad schools and 7000+ industries teaching and researching on developing synthetic bio and genetic systems. Average lab uses up to 16,500 disposable pipette tips in a single year. The proposed solution can save significant amount of money by not only saving disposable pipette tips but also up to 60% chemical reagents.

**Products / Services – Launched & Pipeline**

Our product is a complete design suite, consists of a software and a hardware, which allows a user to model, simulate, synthesize and verify synthetic biological systems right on their desk without going into a Wetlab. “Reconfigurability” of the platform allows a user to reuse the same platform multiple times, thus saving them up to 65% of resources that are utilized in manual experimentation otherwise. Furthermore, precise control of sample volumes in microliters additionally helps in cost reduction, but also completes the chemical reaction faster because of small sample size.

**Competition / Competition Advantage / Customer Benefits:**

Our competitors exist; however, our product have advantages in terms of both hardware and software. Our software does not require a user to understand any specific bio terminologies which allows ANYONE (synthetic biologist, computer scientist or engineer) to start developing synthetic bio systems. Moreover, the hardware provides high-throughput experimentation compared to other existing vendors.

**Financial Projections (Unaudited):**

|                            | First Year | Second Year | Third Year | Fourth year |
|----------------------------|------------|-------------|------------|-------------|
| Revenues<br>(x 10,000)     | \$204      | \$775       | \$1633     | \$4246      |
| Gross Profit<br>(x 10,000) | \$137      | \$532       | \$1115     | \$2941      |
| Gross Margin               | 67%        | 68.6%       | 68.3%      | 69.3%       |