

RRPV Member Spotlight: Unicorn Biotechnologies



Q: What does your company do? What specific capabilities or strengths does your company offer?

A: Our core capabilities are:

- Developing/providing instrumentation to automate cell culture workflows (e.g., for bioassays).
- 2. Weird & wonderful contract research projects. If you have a nasty technical problem in cellular biology, molecular engineering, bioprocess engineering, sensor development, or lab automation/instrumentation, give us a call. We will work tirelessly to help solve the problems that most CROs won't touch with a 10 ft pole.

Unicorn Biotechnologies has three technologies/products of relevance to the RRPV community:

- 1. Intelligent bench-top instruments to automate & scale cell culture workflows.
- 2. Contract cellular & molecular biology work (from construct engineering to bioassay development).
- 3. Acting as a tech integrator & tester (e.g., building self-driving labs, streamlining LNP delivery/tox assays, etc.).

Reach out to us at hello@unicornb.io—we'd love to speak!

Q: Are there any specific partnership opportunities you're seeking with other members in the industry? What kinds of expertise or resources would be beneficial for your company to explore through partnerships?

A: We are looking to partner with teams who:



- 1. Have a vaccine development and/or platform (mRNA, cellular, etc.).
- 2. Want to standardize (mitigate operator variability) and scale their bioassays through GMP manufacture.
- Have novel manufacturing or process technologies and are looking for a partner with cellular, molecular, and bioprocess engineering and instrumentation & bioreactor experience.

Q: Provide some insight about your company's history, core business areas, focuses, or key ideas that you wish to describe.

A: Unicorn Biotechnologies was founded in 2020 by asking a simple question: was it possible to create intelligent machines to do the manual parts of biology (cell culture, cloning, bioassays, bioproduction) that could also augment scientists to design & perform experiments previously seen as impossible? The short answer is: yes, it is and we did.

Unicorn was founded to address this challenge. Our founders envision a world where scientists are liberated from manual labor to focus on therapeutic innovation, the tech transfer barrier from lab to clinic/commercial manufacture is removed, and the United States and its allies can rebuild domestic bioproduction capacity with fleets of automated bio-factories.

We specialize in developing/providing: intelligent bench-top instrumentation to automate cell culture workflows and bioproduction systems; contract biological R&D services (from cell line derivation to molecularly engineered biological systems and developing scalable bioprocesses for clinical/commercial bioproduction); first-of-their-kind in vitro models, cell lines, and media solutions for toxicology and development work.

Q: What trends or innovations do you foresee shaping the future of the industry, and how is your company preparing for those changes?

A: The future of bioproduction is:

1. Automated



2. Nationalized/localized

As a species, we need to develop:

- 1. Self-driving labs to shorten the build-test-iterate cycle for MCMs, biological countermeasures, and vaccines.
- 2. Intelligent machines that can linearly scale from lab to factory to remove tech transfer/scale-up challenges and facilitate the rapid and economical production of high-quality vaccines, etc.
- 3. Autonomous bioproduction foundries at the Regional/State /Federal level(s) to facilitate rapid responses to emerging biological threats.

Unicorn Biotechnologies is committed to developing the tools & technologies to enable the United States and its allies to deliver on this vision.