

Unchained Labs shows off its Nunchuck skills, launches new LNP maker!

August 2, 2022 – Pleasanton, CA – [Unchained Labs](https://www.unchainedlabs.com), the life sciences company that's all about getting biologics and gene therapy researchers the right tool for the job, launched [Nunchuck](#) today – the first and only instrument for making size-tunable lipid nanoparticles (LNPs) that combines total flow rate (TFR) screening and formulation scale-up – two must-do steps in LNP development.

Throughout the pandemic, billions of people have been vaccinated with LNPs. These lifesaving lipid balls packed with RNA need to be just the right size to get inside cells and do their thing. LNPs are also being developed for gene therapy, delivering DNA and RNA to cells with underlying genetic problems. These things are amazing but making perfectly sized LNPs and scaling them up can be a total grind. Picking the right lipids, identifying the right buffer mix, and dialing in the flow rate can eat up a massive amount of time – especially when changing the flow rate means setting up and running a whole new experiment, every single time.

Nunchuck gets researchers to their optimal LNP-making conditions way faster. They load syringes filled with their lipid and payload into Nunchuck, lock them into the Nun consumable and they're ready to make LNPs. The Nun's microfluidics can handle flow rates from 0.5 to 30 mL/min, making a wide range of LNP sizes possible. In one run they can screen up to 8 total flow rates to find the size sweet spot for their LNP formulation in just 10 minutes. When it's time to scale up their LNP, Nunchuck can make 0.5 to 200 mL – so no need for a different instrument to bulk it up.

"Researchers only want instruments with good skills and Nunchuck has great LNP-making skills," said Taegen Clary, SVP of Marketing at Unchained Labs. "LNPs have become the most important delivery vectors of our time and are rapidly being deployed to take on viruses beyond Covid-19 and as gene therapies. Nunchuck is the perfect tool for researchers racing to create the perfect LNP to deliver the next pandemic squashing and life-altering payloads."

About Unchained Labs

Here's the deal. We're all about helping biologics and gene therapy researchers break free from tools that just don't cut it. Unleashing problem-tackling products that make a huge difference in the real science they do every day. That's our mantra, our promise and we own it. We're located in Pleasanton, CA and can be found online at www.unchainedlabs.com.

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