



Sandia's regional COVID-19 response efforts address medical and economic effects of pandemic

Sandia National Laboratories took fast action when the COVID-19 pandemic began, supplementing existing technology transfer programs with creative new initiatives. Sandia personnel have been working nonstop to combat both the medical and economic effects of the pandemic, and many of these efforts have been focused locally.

Sandia, one of the largest employers in New Mexico, is positioned to help create new companies and new products that can build upon the lab's intellectual property (IP) and the talent already in the state. These new companies will create jobs that will add to the state's prosperity. They might also become suppliers of goods and services to Sandia.

"This isn't just a public health crisis; it's also an economic crisis," said Susan Seestrom, Sandia's chief research officer. "Companies need new ways of doing business. They need cybersecurity tools so they can operate remotely. They need advanced manufacturing techniques to produce goods that are in high demand. If Sandia's intellectual property can help, we want to lower barriers to people getting it."

The Rapid Technology Deployment Program (RTD) is opening about 75% of Sandia's intellectual property (IP) portfolio for free licensing. More than 1,000 technologies are available for nonexclusive licenses. And the time needed to get the license is fast—a license is returned to applicants, if they are eligible, within two days. Applicants just fill in a form online. The program was up and running just over two weeks after being conceived.

Sandia also became one of the 10 Founding Adopters of the Open COVID Pledge—along with Facebook, Amazon, Intel, Microsoft, and IBM—because its RTD program fit in with the model, which calls on organizations worldwide to make their patents and copyrights freely available in the fight against the pandemic. Other national laboratories have since implemented Sandia's RTD program. At the time of this award submission, 10 licenses had been signed, and some of those were issued the same day the application was submitted.

The New Mexico Small Business Assistance (NMSBA) program has rapidly mobilized to assist local companies with COVID-19 related product development challenges. Individual projects were fast-tracked through the system. NMSBA program managers and principal investigators (PIs) worked evenings and weekends to



Above: Sandia National Laboratories chemist Jessica Kruichak worked with Wayward Sons Craft-Distillery in Santa Fe through the New Mexico Small Business Assistance program. She tested hand sanitizer for the company to make sure it meets standards set by the World Health Organization and the U.S. Food and Drug Administration. (Photo by Lonnie Anderson)

assess lab capabilities, develop each project's scope of work, and process requests through the approval system. Once the projects were approved, the PIs prioritized the projects and worked long hours to interface with the participating businesses to complete the projects as soon as possible.

One project helped Wayward Sons Craft-Distillery in Santa Fe quickly develop and produce hand sanitizer. Named Elbow Bump, the product helped the company respond to the widespread shortage of hand sanitizer in New Mexico and nearby states. Another NMSBA project helped Albuquerque medical device manufacturers Marpac, Sierra Peaks, and Sew-EZ test materials being used to make medical-grade N95-like masks.

For leveraged projects—those involving multiple companies—a special call was put out, and the NMSBA process was modified to fast-track COVID-19 related projects. For the first emergency proposal, NTX, NTXBio, Bluveris, and VM Technology were approved for \$80,000 of technical assistance from Sandia to aid in the encapsulation of a proprietary RNA-based COVID-19 vaccine candidate. Sandia is testing an approach to scale the manufacturing process to produce up one million doses per day. ☺