COVID-Related Research



University of Central Florida Vice President for Research Elizabeth Klonoff November 4, 2021



Rapid Acting Disinfectant (RAD) Spray for Slowing the Spread of COVID-19



UCF researchers have developed a nanoparticle-based disinfectant that can continuously kill viruses on a surface for up to seven days – a discovery that could be a powerful weapon against COVID-19 and other emerging pathogenic viruses.



The Journey

A Great Idea

Faculty with expertise in engineering, material sciences, nanotechnology, and medicine work with local industry partner to collaborate on a proposal for a Rapid Response Grant from the National Science Foundation to develop a unique spray. NSF liked the project so much they featured it nationally.

Partnerships

College of Engineering and Computer Science Professor Sudipta Seal and College of Medicine Professor Griffith Parks collaborate with, Christina Drake '07PhD, founder of Kismet Technologies, LLC, a Central Florida-based manufacturing company.



Practical Solution

The team responds to global pandemic to give healthcare workers, businesses, and everyday people a new tool that can potentially reduce the spread of COVID-19. The experimental spray may also be useful against other emerging viral threats.



Great Ideas Lead to Community Impact

Results

NSF provides a grant, which Kismet and Florida High Tech Corridor also contribute to quickly advance the idea. Journal publication followed in September and the team is in talks with a local hospital network to test the product in their facilities. If all goes well, next step is the marketplace.

The Future

Partnerships matter and together we can do more. Many of the partnerships begun during this period of crises will no doubt continue to grow and develop into future conjoint projects, better positioning UCF to respond to the multidisciplinary needs that future funding opportunities require.

Our researchers' expertise and collaborative spirit, our partners in the local and global community and our ability to quickly respond position us for success both in funding and in making a difference in our community.



