

REACT – RECOVERY – RESILIENCE

SBDC IOWA CLIENTS SHARE THEIR COVID-19 JOURNEY

FBB Biomed

Howard Urnovitz, Co-Founder

How did you come up with the idea for FBB Biomed?



FBB Biomed is a start-up international biomedical technology firm that is taking on the challenge of defeating COVID-19 and future pandemics. With headquarters and manufacturing in Coralville, Iowa and a business office in Frankfurt, Germany, the company was created to manufacture laboratory-developed tests to screen and index RNA found in the bloodstream. The tests are for the purposes of disease identification, indexing for epidemiological study, and assessment of treatment efficacies. The company was co-founded by Howard Urnovitz, Ph.D., Steven Urnovitz, and Julien Rey in the summer of 2019 and, by early 2020, the founders had turned its focus to COVID-19.

Has your business been impacted by COVID-19? Have you pivoted your operations? How are you helping others during this time?

FBB Biomed's core technology is a discovery program that finds sentinel RNA sequences in the blood of people with acute and chronic diseases. This is a challenge because the amount of sentinel RNA sequences that are found in a drop of blood is less than a nanogram. These RNA sequences are biomarkers indicative of the biological status of diseases occurring within a person and that person's immunological responses to the viral load. The vision of FBB is to help every individual around the world maintain a robust immune system through access to RNA testing to screen for and index diseases and to monitor the efficacy of treatments in individuals relative to the totality of their conditions.

The ability to identify and assess sentinel RNA sequences is important in the context of COVID-19 because, in severe cases, this virus is associated with a high-rate of co-infections and also underlying chronic diseases. The ability to identify someone's total viral load and to conduct an early evaluation of that person's immunological response can potentially help determine who is likely to become seriously ill from something called a cytokine storm – an extreme response of the immune system that can significantly add to the damages caused by the disease processes of the COVID-19 virus itself. Cytokine storms are seen in the people most seriously affected by COVID-19. The ability to predict whether an individual is heading toward a cytokine

storm would aid in the development and selection of appropriate treatments for someone infected with the virus to prevent acute symptoms and possible death.

CEO, Dr. Howard Urnovitz, is an RNA virologist and immunologist with an extensive research background centered on how to understand RNA molecules and their role in disease. His career accomplishments include helping the U.S. government and medical community understand the mechanisms of Gulf War illness and also the development of a urine test for HIV. He describes his drive for the successful commercialization of FBB's RNA assessment technology as his "last rodeo" and says that, therefore, he would like not only to contribute to suppressing the current pandemic but also aims to extend FBB's product pipeline to enable early detection of future novel viruses to prevent future pandemics.

How has the SBDC helped you?

UOI Regional Director Paul Heath and Tech Director Laurie Pieper of America's SBDC Iowa are working with Dr. Urnovitz to identify potential funding and contracting opportunities and to connect him with valuable resources so that important medical products get into the hands of healthcare providers. According to Howard, FBB's short-term goal is to provide diagnostic tests for acute viral diseases and the long-term plan is to provide tests for all chronic diseases for screening and monitoring of treatment efficacy. Routine indexing of sentinel RNA sequences worldwide will also allow researchers to detect and track the appearance of new viral diseases so that the diseases can be combatted before becoming epidemics.

Find FBB Biomed at <https://fbbbio.com>

