

## Biosecurity Research Institute Biologic Development Module

### Problem/Issue Statement

Emerging infectious diseases will continue to threaten the food supply and economic stability. K-State's expertise with emerging zoonotic disease was key to attracting the \$1.25B National Bio and Agro-Defense Facility (NBAF). Biosecurity level 3/3Ag facilities in Pat Roberts Hall at the Biosecurity Research Institute (BRI) promote discovery with select biologic agents that threaten public, animal, or plant health.

The BRI is a nexus of talent, training and productivity, boasting 12 years of studies in critical infectious diseases including Zika, SARS, and SARS-CoV-2. K-State is one of a few universities in the world with a high security, containment research facility to study high-consequence pathogens. SARS-CoV-2 and African swine fever virus (ASFV) are current, economically-relevant diseases impacting markets in excess of \$1B across the globe. During the current pandemic, K-State researchers at the BRI have created promising therapeutic agents and vaccine candidates that are now being advanced by pharmaceutical company partners.

### Request Description

While we are well-poised for intellectual discovery, commercialization capacity has not yet been realized. An accessible pilot-scale facility (Biologic Development Module, BDM) in the BRI is under construction and will complement a parallel NBAF-BDM. Together, these BDM units represent a continuum of capacity for pilot-scale manufacturing and commercialization in high containment. To attract corporate interest, we request \$10M to offer cooperative incentive grants to companies to fund research at the BRI.

### Request Goals and Expected Outcomes

Our goal is to offer support to local and global corporate partners for collaborative development of biologics and pharmaceutical compounds using the BRI-BDM. Research partnerships will allow us to efficiently develop countermeasures for a broad range of current and future emerging diseases to fill the complex gap from proof of concept to scalable production. Few non-federal facilities qualify for permission to work with the range of pathogens approved for the BRI. Pilot-scale capabilities in the BRI will enhance existing corporate partnerships, enable us to attract satellite research units, and form strategic alliances with plant, animal, and human health companies.

### Appropriations Subcommittee

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies  
Labor, Health and Human Services, Education, and Related Agencies

### Request Type

Funding Request

Bill Language Request

