INNOVATIVE PRODUCTS, TECHNOLOGIES AND PLATFORMS

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Resilient People. Healthy Communities. A Nation Prepared.
BARDA Investment in Innovation

- BARDA has built on the foundation of existing technology to develop, test, manufacture and deploy medical countermeasures for public health threats.
- BARDA actively promotes the identification and advancement of innovative technologies to fill gaps in emergency preparedness and response capabilities.
- BARDA support can drive innovation that would otherwise take longer to emerge or might not occur at all.
Innovation in BARDA’s Programs

- BARDA’s programs are designed to address medical countermeasure preparedness and response gaps
  - BARDA encourages the use of new technologies in programs intended to address specific threat/countermeasure goals
  - BARDA’s Innovations program specifically targets new and improved technologies that may fill capability gaps and provide tools to produce countermeasures faster, more efficiently, and more cost-effectively
- Innovations may benefit both public health preparedness goals and commercial enterprise as well
Product Innovations

- Influenza Vaccines and Therapeutics
  - Call-based production
  - Superior performance
  - Novel small molecule and immuno-therapeutics

- Antimicrobials
  - First-in-class antibiotics
  - Non-traditional approaches
  - Portfolio partnerships/CARB-X Accelerator

- Diagnostics
  - Point-of-care molecular diagnostics
  - Biomarkers for pre-symptomatic infection
  - Critical enabling technologies
Technology Innovations

- Improved recombinant protein production system
- In vitro system for immune response testing
- Formulations for improved stability
- Accelerated sterility testing
- Improved diagnostic test platforms
- Refined vaccine adjuvant formulations
- Synthetic biology to create virus seed stocks
- Continuous manufacturing
  - FDA-BARDA collaboration
  - Support as part of medical countermeasure development
  - Support for enabling technologies
BARDA Innovative Technologies Program

- The Pandemic and All Hazards Preparedness Act directs BARDA to assess and promote technologies that save time and cost in developing MCM for public health emergencies.

- Innovations Areas of Interest are intended to find the best match between countermeasure need and technological opportunity, and are revised as that landscape evolves.

- The Innovations portfolio is opportunistic and does not have a single countermeasure or threat focus.
Platform Technologies

- Some technology investments target specific product needs; others support capabilities that may apply to multiple countermeasures and enable improvements in the overall enterprise.
- Such platform technologies are an explicit goal of BARDA’s Innovations program.
- Platform technologies may improve capabilities to prepare for and respond to known and newly emerging threats.
BARDA Innovation Opportunities

- Support for innovations in countermeasures or technologies can be sought through BARDA’s open solicitations
- Countermeasure programs: BAA-16-100-SOL-00001 (CBRN); and BAA-16-100-SOL-00002 (Influenza)
- Innovative Technologies program: BAA-16-100-SOL-00003
- For more information about BARDA’s programs or to request a meeting with BARDA, visit BARDA’s web-site, www.medicalcountermeasures.gov