

On the Panel



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About Us

The Special Populations Acceleration, Research and Knowledge (SPARK) for Innovations in Pediatrics, a BARDA Accelerator Network hub, focused on supporting the development and availability of medical countermeasures (MCM) for pediatric populations facing chemical, biological, radiological, nuclear (CBRN) threats, pandemic influenza, and emerging infectious diseases.

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About BARDA

Mission: to develop medical countermeasures that address the public health and medical consequences of chemical, biological, radiological, and nuclear (CBRN) accidents, incidents and attacks, pandemic influenza, and emerging infectious diseases



BARDA Accelerator Network



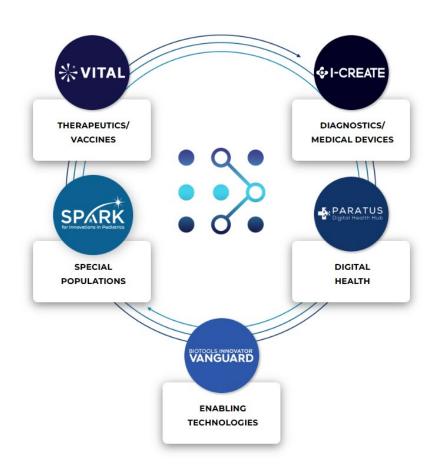
Wraparound Accelerator Support Services



Development, Evaluation, and Validation Funding



Rapid Response Capability



Why a Pediatric Focus is Critical

Children are highly vulnerable in public health emergencies yet underserved by current MCMs

Current Gaps

- 40% of MCMs in strategic national stockpiles have no pediatric indications.
- Many lack pediatric dosing data and safety.
- Pediatric formulations are costly and hard to store.
- Ethical protections and consent requirements limit clinical trials and increase development costs.

What It Takes

- Include pediatric formulations and dosing in national stockpiles.
- Base dosing on pediatric research, not adult data.
- Ensure ethical inclusion in life-saving studies.
- Build strong partnerships across public and private sectors to prioritize pediatric health security.

Protecting children strengthens nation's health security



The SPARK Hub Partnerships

The SPARK hub team at Children's National, along with its partners, has a long history of pediatrics-focused innovation and commercialization programs.















Let's drive innovation together for the most vulnerable among us —

our children.



SPARK Portfolio 2025





















Highlights

Devices: Child-friendly, non-invasive, pain-free wearable monitors, nasal swabs, microneedle blood collection

Diagnostics: Rapid bacterial infection detection, and pediatrics-focused Alpowered lung ultrasound interpretation

Digital Health: Data-driven precision dosing platforms

Vaccines/Therapeutics: HSV-targeted subunit vaccines

Enabling Technologies: Pediatricspecific drug delivery for radiation emergencies

Open Opportunities

SPARK Hub for Pediatric Innovations provides Wraparound Accelerator Services (WAS) and funding for Development, Evaluation, and Validation (DEV) of pediatric-focused MCM innovations. These services are tailored to support MCM innovators through each phase of development, from ideation to FDA-regulated product validation.



Up to \$200,000 in non-dilutive funding for development, evaluation, and validation of pediatric-focused medical countermeasures



A zero-cost needs-based, advisory and mentorship program for startups developing pediatric health security solutions



At a Glance: SPARK Accelerator 2026



- **Tailored Onboarding:** Start with a self-assessment to identify specific needs in technical, clinical, regulatory, reimbursement, IP, and commercialization domains.
- Curated Curriculum: Participate in webinars and panel discussions shaped by cohort needs, with access to one-on-one office hours with featured speakers.
- Clinical Access: Tap into pediatric clinician networks for validation, feedback, and potential clinical collaboration opportunities.
- **Executive Mentorship:** Benefit from in-depth, needs-based advising from senior industry leaders through our partnership with BioHealth Innovation's Entrepreneur-in Residence program.
- **Strategic Connections:** Network with innovators, healthcare leaders, investors, and partners through curated SPARK and BARDA events.



At a Glance: DEV Funding 2026



- **Funding:** Multiple awards of up to \$200,000 in non-dilutive funding are available for up to 6-months long projects focusing on development, evaluation, and validation of pediatric-focused medical countermeasures.
- Contracts: Fixed-price contracts with milestone-based payments.
- Allowable expenses: Direct costs for development, evaluation, or validation activities, as well as labor costs for personnel or contract research organizations (CROs) directly engaged in project execution.
- Resources: Full access to SPARK Accelerator Program materials and core mentors.
- **Reporting:** Monthly progress updates, milestone achievement reports, and a final report at completion.



Focus Areas 2026

Preclinical Models for Pediatrics

- Pediatric-specific micro physiological systems (e.g., organoids, tissue chips, organ-on-a-chip)
- Animal models for safety, efficacy, and dosing studies

Computational & In Silico Tools

- Pediatrics-focused digital twins
- Pediatric PK/PD drug models for determining the appropriate dose needed to achieve adultequivalent PK/PD
- Simulation platforms to optimize clinical trial design and forecast pediatric responses

Pediatric Innovation Through Real-World Data Integration

 Tools and platforms that integrate biological, computational, and real-world pediatric data (from clinical care, registries, and wearable devices) to accelerate MCM development, streamline regulatory pathways, and reduce the need for large-scale pediatric clinical trials.

Pediatric Use Case Demonstration for MCM Technologies Approved or in Development for Adults

 Medical countermeasure technologies, including medical devices, diagnostics, therapeutic platforms, digital health tools, and enabling technologies, that are FDA-approved or in active development for adult populations and can be repurposed for use in pediatric populations



Eligibility

- Academic innovators and companies developing technologies aimed at improving health security for pediatric populations.
- Proposals should align with BARDA's mission and demonstrate strong pediatrics focus.
- Funding opportunity is open to both U.S. and non-U.S. entities that meet the eligibility criteria.
- All technology readiness level (TRL) countermeasures will be considered.
- Applicants are allowed to apply to multiple SPARK/BAN solicitations. Applications and proposals will be reviewed independently.



Key Dates & Timeline

SPARK Accelerator Program 2026

- Submission Deadline November 17, 2025
- Pitch Calls January 2026
- Teams Selected February 2026
- Accelerator Begins March 2026

SPARK DEV Funding Opportunity 2026

- Preliminary Proposal Submission Deadline November 17, 2025
- Full Proposal Submission Invitations January 2026
- Pitch Calls February 2026
- Guided Proposal Revisions March 2026
- Awardees Announced April 2026

Apply Now





Get In Touch





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SPARK for Innovations in Pediatrics Hub

