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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



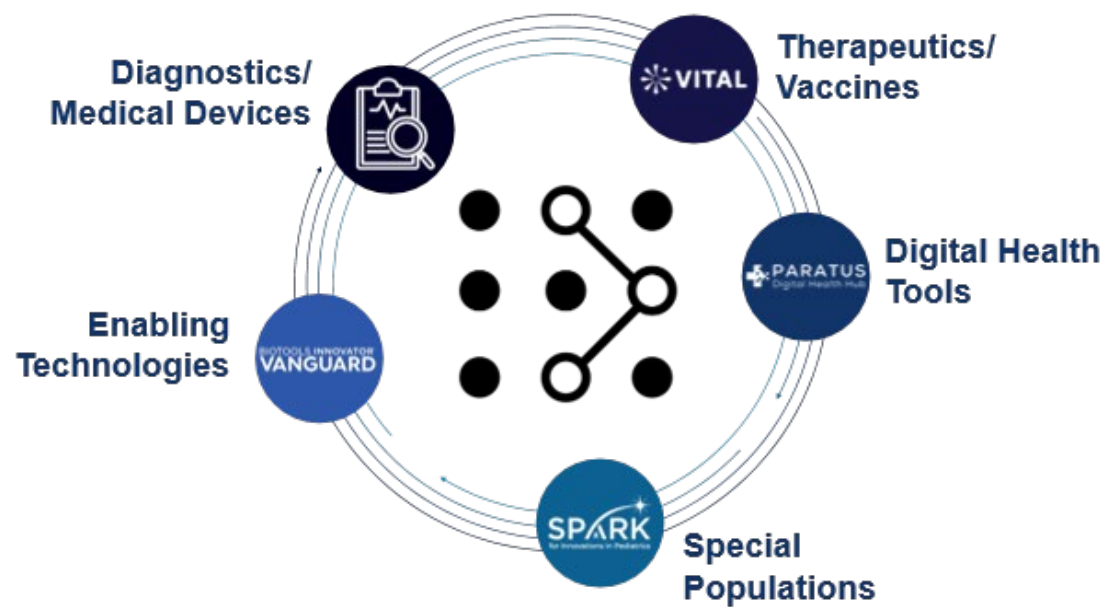
Accelerator Programs



Non-Dilutive Funding



Rapid Response Capability



Why a Pediatric Focus is Critical

Children are highly vulnerable in public health emergencies yet there are critical gaps in current MCMs

Current Gaps

- 40% of MCMs in strategic national stockpiles have no pediatric indications.
- Many lack pediatric dosing and safety data.
- 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

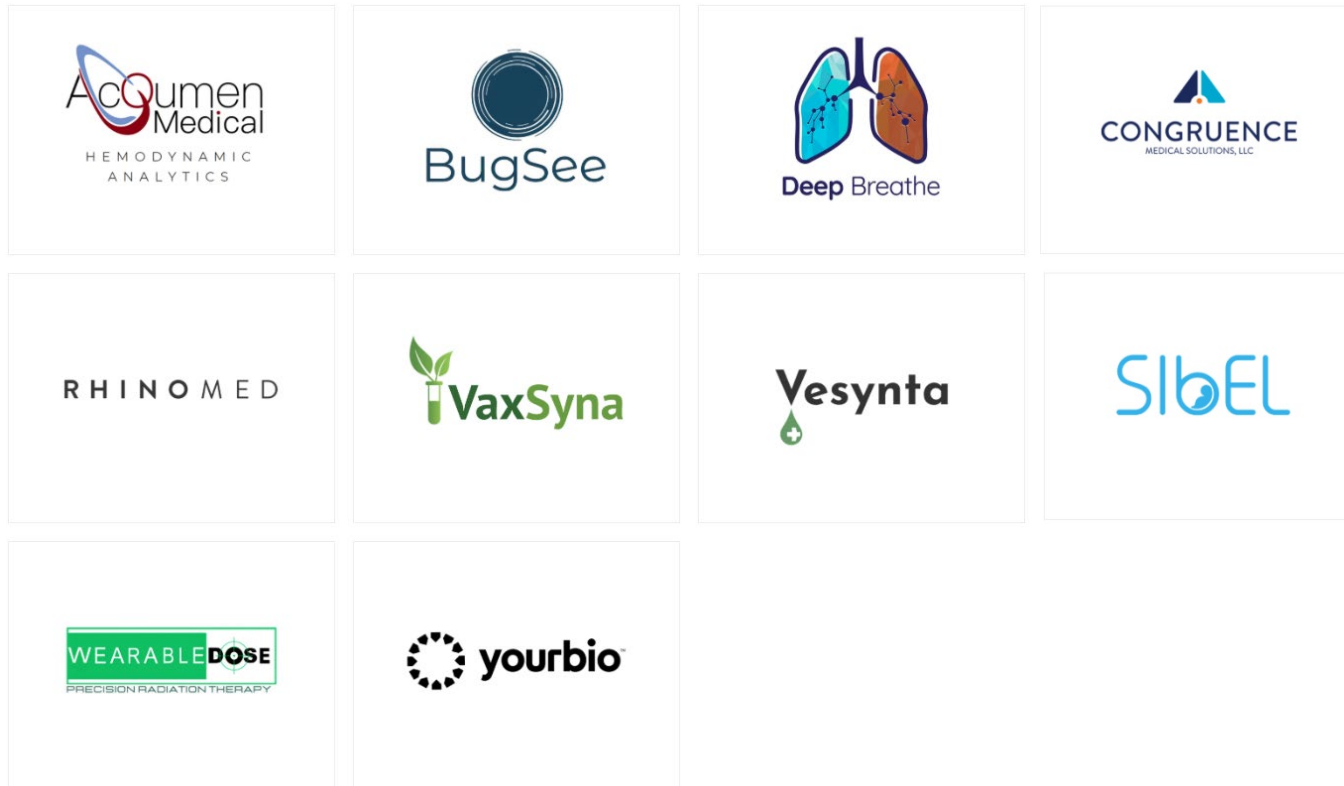
The SPARK hub team at Children's National, along with its partners, has a long history of pediatrics-focused innovation and commercialization programs.



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

our children.

SPARK Portfolio



Highlights

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

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

Digital Health: Data-driven precision dosing platforms

Vaccines/Therapeutics: Modular antibody–antigen fusion vaccines with multivalent display

Enabling Technologies: Pediatric-specific drug delivery for radiation emergencies

Current Opportunity

A six-month, no-cost, equity-free accelerator for startups and academic innovators developing pediatric medical countermeasures. Participants receive mentorship, strategic guidance, and access to key networks, with an opportunity to compete for up to \$50,000 in non-dilutive funding.



Program Overview

- **Zero-Cost, Equity-Free:** Six months of accelerator support at no cost
- **Needs Assessment & Specialized Support:** Begin with a comprehensive assessment to identify your priorities and goals. Based on the assessment, participants receive targeted support in:
 - **Regulatory Strategy:** FDA engagement, regulatory pathway planning, and submission readiness
 - **Clinical Study & Trial Design:** protocol development, endpoint selection, IRB processes, and development planning
 - **Clinical Access & Pediatric Expert Engagement:** direct interaction with pediatric clinicians to support product validation, expert feedback, and potential clinical collaborations
 - **Intellectual Property:** patent strategy, landscape analysis, and freedom-to-operate considerations

- **Reimbursement & Market Access:** coding, coverage, payment pathways, and adoption strategies
- **Health Economics & Commercialization:** value proposition development, economic evidence generation, and go-to-market planning
- **BARDA Alignment:** Understand BARDA priorities and strengthen readiness for future funding opportunities.
- **BARDA Accelerator Network Access:** Curated networking opportunities with innovators, industry leaders, investors, and government stakeholders across the BARDA Accelerator Network.
- **SPARK Capstone Event in Washington, DC:** Showcase your technology and engage directly with investors, strategic partners, industry leaders, and government stakeholders.
- **Up to \$50,000 in Non-Dilutive Funding:** Successful participants compete for a share of a total non-dilutive award pool of up to \$50,000.

Focus Areas

- **Diagnostics, medical devices, digital tools, therapeutics, vaccines, and enabling technologies** to address BARDA mission-relevant health security threats in pediatric populations.
- **Enabling technologies** that facilitate evidence generation for the expansion of pediatric labeling of a specified BARDA mission-relevant medical countermeasure (MCM). Some examples of such technologies include, but are not limited to:
 - *Pediatric digital twins to predict the safety and efficacy of therapeutics and vaccines*
 - *Microphysiological systems, including organoids, assembloids, and organ-on-a-chip platforms, that can simulate pediatric systems to better evaluate therapeutic candidates*
 - *PK/PD models for pediatric dose optimization*
 - *Simulation platforms for clinical trial design and pediatric response forecasting*

PHEMCE
Priority Threats



In-Scope

- MCM developers (diagnostics, medical devices, digital tools, therapeutics, vaccines, enabling technologies) with a named candidate addressing a PHEMCE-priority threat.
- MCM developer-led teams partnering with Enabling Technologies providers to test and validate their MCMs.
- Submissions that articulate a specific FDA regulatory pathway and submission type (e.g., pediatric label extension, age-down extrapolation, dose justification, biomarker qualification via FDA-defined Drug Development Tool (DDT)).
- Use of one or more non-traditional methods (MPS, PBPK/QSP, digital twins, in silico trial design) with a fit-for-purpose pediatric credibility/validation plan.

Out-of-Scope

- Tool, platform, or model development without a named MCM candidate.
- Adult-only modeling, dosing, or trial-design work with no pediatric extension plan.
- Basic research, target discovery, or programs without a defined development candidate.
- Programs whose end deliverable is a publication or a tool release rather than a regulatory submission supporting an on-label pediatric indication.

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.
- Opportunity is open to both U.S. and non-U.S. entities that meet the eligibility criteria.
- All technology readiness level (TRL) will be considered.
- Applicants may apply to multiple BARDA/SPARK solicitations, provided each submission meets the specific criteria and scope. Applications will be reviewed independently.
- Current BARDA portfolio participants are encouraged to apply, as long as proposed projects are distinct and aligned with solicitation requirements.

**subject to the terms and conditions in effect at the time of award notice.*

Application Overview

Section A-C: Organization Information

Section D-E: Technology Overview

Technology *(100 words)*

Problem Addressed *(100 words)*

Innovation *(100 words)*

Competitive Differentiation *(100 words)*

Intellectual Property *(100 words)*

Regulatory Strategy *(100 words)*

Section F: BARDA relevance, Pediatric Impact and Future Plan

BARDA Relevance *(100 words)*

Pediatric Value Proposition *(100 words)*

Development Status & Roadmap *(200 words)*

Key Risks & Challenges *(200 words)*

Proposed Use of SPARK Resources *(250 words)*

Section G: Pitch Deck

< 15 slides and in PDF format

Key Tips for Applicants

Be explicit on BARDA relevance and pediatric impact

Clearly specify the medical countermeasure developed, tested or validated

Specify use in emergency, disaster, or surge scenarios

Evaluation Criteria

- Alignment with BARDA's mission
- Relevance to Pediatric Populations
- Innovation and Differentiation
- Technical Expertise
- Regulatory Knowledge and Readiness
- Proposed use and impact of Accelerator resources

Key Dates

September 10, 2026: Submission Deadline

Applications will be reviewed on a rolling basis. Early submission is encouraged to receive priority review.

October 2026: Pitch Calls with Shortlisted Applicants

November 2026: Accelerator Cohort Selected

December 2026: Accelerator Kick off

Summer 2027: Capstone Event & Pitch Competition

Apply Now



mcm4kids.org/spark-accelerator-program



Get In Touch



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