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# Pediatric Medical Device Collaboration



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To accelerate the invention, development and commercialization of medical devices and medical info & knowledge, to profoundly improve the care and treatment of pediatric patients in Israel, the United States and globally.

Introduction  
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## Pediatric Medical Device Collaboration



- ❑ Bringing needs and capabilities together
  - Needs from the hospital, by CCMC physicians
  - Innovation and engineering capabilities, from BGU



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## Pediatric Medical Device Collaboration

- ❑ Bringing needs and capabilities together





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## □ Past and current Projects

- Image Guided Autonomous Needle Insertion Device (IGANID)
- Clamp for Stabilization of Stomach during Sleeve Gastrectomy
- Blood Analyses Sensing in Catheter
- Prolonged administration of surfactants to the lungs of prematures based on PLGA based nano particles.
- Device for Un-blocking and Removing Secretions from Airways
- Real-Time Predictive Analytics for Earlier Intervention of Shock

Funding of up to \$100K per project.

□ About Cincinnati Children's  
Hospital Medical Center

- Established in 1883
- Ranked one of the top 3 pediatric hospitals in the US
- Active medical staff of 14,000 employees
- ~ 1,200,000 patients encounters per year
- Children's Research Foundation is one of the largest pediatric research programs in the US

## □ About Ben-Gurion University

- Established in 1969
- Ranked 18 among the world's top universities under 50 years old
- 3<sup>rd</sup> largest university in Israel,
- 20,000 students, 35% attend advanced degree programs
- 850 faculty members, staff of 5,000 employees
- 33% of the engineering researchers at Israeli universities