

# 2025 UPDATE ON POTENTIAL DEVICES, DIAGNOSTICS, & THERAPEUTICS

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# The Rady-OC Virtual Incubator

## Research Strategic Plan for acceleration of peds devices

- WHAT? Calls for us to build out a peds device incubator or accelerator
- WHY?
  - Ethical responsibility to promote peds devices
  - Promote RADY as a top destination for peds medical device testing and innovative research on devices
  - Leverage our geographic locale in center of MedTech ecosystem
  - Generate an economic engine for RADY and for OC/San Diego Counties by accelerating devices

## HOW? Current approach:

- Utilize Nadine Afari to source promising devices
- Develop early phase partnerships-pre FDA clearance/approval
- Partner with Octane and City of Irvine to provide full service acceleration
- Build capacity towards becoming a MPDTCU
- Use “wins” to apply for SHIP hospital status

# The Rady-OC Virtual Incubator

## Test cohort June 2025-June 2026

- Opportunity to try our incubation skills for a few devices
- Leverage our unique position and resources to support early stage devices
- Demonstrate CHOC is a key local partner for OC founders and others
- Apply for grants, attempt device trials and other efforts to test our limits and highlight areas for improvement
- Align infrastructure, assess needs for future growth of incubator
- Develop a strategic direction and phase growth

## Update December 2025 –Lessons Learned

- No clear legal pathway for partnership
- No dedicated fast-lane for ARC review of experimental devices regardless of risk
- Strategic direction for the incubator not aligned with RI processes and infrastructure
- RI Leadership focused on managing operations for merger, growing budget and FTE, fitting device trials into normal research operations, and improving basic research operations
  - No prioritization of device partnerships in research
  - No defined processes for effective management of projects, research requests, and founder's needs (all ad hoc via email requests using extant personnel)
  - Limited expertise and experience among regulatory staff or managers for devices
- Future opportunities will require us to align strategic direction to new processes and a develop a plan to stage growth

# The 2025 Cohort of Companies

## Leasing space:

Omaroon: <https://www.omaroon.com/>

Interro IQ, Inc. <https://www.interroiq.io>

Syntr Health Technologies, Inc.: <https://syntrhealth.com/>

## Implementation/clinical trial:

Canva Dx: <https://cognoa.com/>

## Industry Education/partner:

Innopiphany: <https://innopiphany.com/>

## In process/planned partnering with PIs for CHOC RI:

Syntr Health Technologies, Inc.: <https://syntrhealth.com/>

Epinex: <https://www.epinex.com/>

KiHealth: <https://www.kihealth.com/?srsltid=AfmBOooaMDJcOgmOBVRU20yVD4KVs17yKCr1xMLzpRwmlMJvUDyhah>

CoreDX: <https://cordx.com/>

Centralive: <https://centralive.health/>

Sanofi: <https://www.sanofi.com/en/patients/understanding-diseases-conditions/diabetes/autoimmune-type-one-diabetes>

## Other

Ventris medical

AcQumen

# 2026 Update on Biostats Innovation Collabs

- **Cardiology**

- Digital twinning-tool to develop “counterfactual examples” to test hypotheses
- Virtual Pectus patient -Simulation of complex cardio-pulmonary and chest wall dynamics- (Dr. Renella, Dr. Kabeer, University of Genoa)
- Digital twinning-Fontan patient optimizing surgical intervention (Dr. Starr, Dr. Kelly).

- **Device testing**

- Promoting *in silico* evidence testing for SaMD
- Ventris medical –data analytics for device testing

- **GI**

- Remote monitoring (Dr. Chogle and UCI); agentic component

- **Population Health**

- RSV #1-Query-based agent to provide analytic insights based on Claudia and RSV data to identify RSV vaccine “hot spots” in OC (dr. Winkler)
- RSV #2- Applying game theory to improve forecast of vaccine geo-dynamics (dr. Winkler)
- *TOAST-Targeting Obesity in Adolescents with Obesity* prototype agentic health coach. (Dr. Weiss, Dr. Casilang, CentraLive)
- Food as Medicine-content added to health coach

# 2026 Proposed Process for Incubator Growth

- Create a process to review opportunities monthly or quarterly
- Create a Rady incubator stakeholder's group
  - Key research personnel
  - Clinical and other stakeholders
  - Experienced PIs with skills and interest in MedTech
- Develop clear incubator goals and tasks
  - Assess organizational readiness to incubate
    - Resources
    - Training
    - Data
    - Regulatory
  - Develop a plan to implement incubator goals
    - Grow capacity
    - Target key partnerships
  - Develop incubator criteria
  - Identify incubator partners
  - Implement and assess incubator criteria

# 2026 Organizational Readiness

- Infrastructure
  - Formal independent Intake system, vetting, communications, referrals
  - Coordination with pipelines
  - Tracking system
  - Transparency in deliverables, costs
  - Strict timeframes for deliverables
  - Easy data access for exploration, recruitment, and trial optimization
  - Trial management system with embedded costs
- Resources
  - Permanently assigned portfolio project director/manager and assistants
  - Independent budget with funding
  - Available dedicated “Hubs” or PIs
  - Scientists, engineers, device founders and investors
  - Legal support specifically for contracting
  - SBIR dedicated support; Trial support
  - FDA support
- Other Needs/Training
  - Regulatory experience
  - Device recruiting
  - Specific lane in Foundation for peds device gifts to “de-risk” investment
  - Financial and other incentives for clinicians
- Clear Criteria
  - Impact/novelty
  - Commercial viability
  - Shared success
  - Patient/population fit
  - Resources required
  - Clinical fit and capabilities
- Planned Growth
  - Leadership
  - Strategic planning
  - Funding
  - Additional resources

# Appendix A : Details for 2026 Proposed CHOC/Rady Incubator Selection Criteria

- **Impact Assessment**

- **Outcomes improvement:** Degree of clinical benefit expected for patients/families
- **Standard of Care Improvement:** Measurable advantages over current approaches (outcomes, safety, workflow)
- **Workflow Efficiency Gains:** Time and resource savings for clinical teams
- **Cost-Benefit Profile:** Economic advantages for healthcare delivery
- **Quality of Life Enhancement/Reduce Burden of Care:** Patient experience and functional improvement potential
- **Scalability Beyond CHOC/Rady:** Applicability to Broader Pediatric Healthcare Environments
- **Health Equity Advancement:** Potential to address disparities in care or outcomes
- **Transformative Potential:** Capacity to fundamentally change practice paradigms in pediatric care

# 2026 Proposed Selection Criteria cont'd

- **Patient Availability, Population Exploration, Trial Design, and Data Access**

- **Target Population Presence:** Sufficient numbers of relevant patient population at CHOC
- **Data Access to RWE, Exploration and Sample Optimization-Capabilities** to optimize trial design and sampling
- **Patient Recruitment Potential:** Established pathways to identify and engage appropriate patients
- **Demographic Representation:** Availability of diverse patient populations reflective of target markets
- **Follow-up Capabilities:** Infrastructure for patient tracking and long-term outcomes assessment
- **Ethical Considerations:** Clear pathway for appropriate consent and patient safety protections
- **Competitive Study Landscape:** Assessment of other ongoing studies that might compete for the same patients

# 2026 Proposed Selection Criteria cont'd

- **Resource Availability**

- **Technical Infrastructure Readiness:** Necessary systems, equipment, and IT support
- **Staff Expertise Alignment:** Availability of personnel with relevant skills and knowledge
- **Time Commitment Feasibility:** Realistic assessment of clinician and staff time requirements
- **Departmental Support:** Buy-in from relevant clinical and administrative departments
- **Physical Space Availability:** Appropriate facilities for implementation and evaluation
- **Financial Resource Allocation:** Budget alignment with project requirements
- **Cross-Functional Collaboration:** Mechanisms for interdisciplinary teamwork and communication

# 2026 Proposed Selection Criteria cont'd

- **Clinical Capabilities and Fit**

- **Clinical Problem Definition:** Clarity and precision in defining the clinical need being addressed
- **Clinical Champion:** Presence and commitment of CHOC clinical advocates
- **Clinical Evidence Needs:** (conceptual, preliminary data, pilot studies, IRB clinical trials)
- **Clinical Implementation Feasibility:** Ease of integration into clinical workflows and systems
- **Regulatory Pathway:** Knowledge and ability to meet FDA/regulatory requirements



# 2026 Proposed Selection Criteria cont'd

- **Shared Success Model/Partnership**

- **Stakeholder Value Alignment:** Families, providers, patients, payers, health system
- **Revenue Sharing Framework:** Transparent mechanisms for distributing potential income
- **Brand Association Parameters:** Guidelines for CHOC name and reputation utilization
- **“De-Risking” Assessment:-**Fair allocation of financial upside relative to contributions
- **Intellectual Property Rights:** Clear ownership and licensing arrangements
- **Publication and Recognition Rights:** Academic credit and authorship guidelines
- **Follow-on Innovation Rights:** Process for managing subsequent improvements and applications

# 2026 Proposed Selection Criteria cont'd

- **Commercial Viability**

- **Reimbursement Pathway:** Payment Mechanisms
- **Exit or Commercialization Strategy:** An agreed approach for technology transfer or spinout
- **Timeline Feasibility:** Realistic timeframes for clinical trials, testing, or evidence generation
- **Adoption Barriers:** Understanding of challenges to purchasing, implementing
- **Competitive advantage:** Identifiable differences from alternatives
- **Sustainable Revenue Generation:** Growth and robust revenue strategy



# Questions? Comments?

