



BioHealth InnovationSM
Maryland's Commercialization Collaborative



MARYLAND
BIOTECHNOLOGY
CENTER

Life Science Advisory Board

Rich Bendis

President & CEO, BioHealth Innovation Inc.

10/28/2014

Baltimore

BioHealth Innovation is an Innovation Intermediary






















An private-public partnership, serving as an innovation intermediary in Central Maryland with a mission to:

- Advance local technologies, assets and resources
- Accelerate innovation



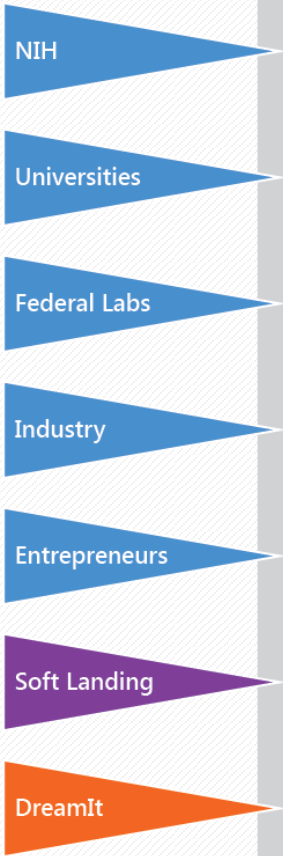
- Regionally-oriented
- Private-public partnership, 501(c)(3) nonprofit
- Market-driven, private sector-led and funded
- Neither a government initiative, nor a membership organization

BHI Board of Directors

 <p>Daniel J. Abdun-Nabi CEO, Emergent BioSolutions</p>	 <p>Judith Dunn VP, Global Head of Clinical Dev. Roche</p>	 <p>Douglas Liu Senior VP of GO Qiagen</p>
 <p>Michael J. Baader, Esq. General Counsel Greenspring Associates</p>	 <p>Jens Eckstein President SR One (GSK)</p>	 <p>Charles Morton Partner Venable LLP</p>
 <p>Richard A. Bendis President & CEO BioHealth Innovation, Inc.</p>	 <p>David M. Gillece (Secretary) Regional Managing Principal Cassidy Turley</p>	 <p>David Mott General Partner New Enterprise Associates</p>
 <p>Kenneth Carter Chair Noble Life Sciences</p>	 <p>Rick Ivey Vice President R&D BD Diagnostics</p>	 <p>John A. Sackett President Shady Grove Adventist Hospital</p>
 <p>Dave Lemus CEO Sigma-Tau Pharmaceuticals</p>	 <p>Joel Marcus CEO & Founder Alexandria Real Estate</p>	 <p>J. Thomas Sadowski President & CEO EAGB</p>
 <p>Chris Callaghan Group VP, Healthcare Banking M&T Bank</p>	 <p>Beth Meagher Principal Deloitte Consulting LLP</p>	 <p>Reginald Seeto VP, Partnering and Strategy MedImmune</p>
 <p>Ronald J. Daniels President Johns Hopkins University</p>	 <p>William E. Kirwan Chancellor University System of MD</p>	 <p>Thomas Street ACAO MoCo Government</p>

BHI Program Structure

SOURCES



BHI Assistance Programs



Strategic Programs

Financial Sponsors

OUTCOMES

- ★ Technologies Progressed
- ★ Company Growth
- ★ Risk Capital
- ★ New Startups & Spinoffs
- ★ Partnerships
- ★ Mergers & Acquisitions
- ★ Leveraged \$
- ★ Regional Branding
- ★ Jobs
- ★ Economic Development



Who are the Entrepreneurs-in-Residence?



Todd Chappell (NIH-OTT)

Todd assists the Office of Technology Transfer (OTT) in the evaluation of existing technologies, provide an entrepreneurial perspective on new licensing proposals from start-up companies, advise on opportunities for new ventures, assist with developmental strategies, and mentor scientists to help ensure their research becomes commercially valuable.



Ken Malone (UM Ventures)

Ken has built his career on creating economic value from science. Whether it was developing new business lines for global corporations or spinning out new ventures from universities, he has engaged in the commercialization of hundreds of new products in advanced materials and life sciences.



Ram Aiyar (NHLBI)

Ram assists the National Heart Lung and Blood Institute (NHLBI) in translating disruptive science into commercially viable technologies. He works with the relevant stakeholders within the NIH to develop commercial plans and/or develop licensing opportunities such that the NIH technologies can be translated into commercially viable entities that will solve unmet medical needs of patients.



Tania Fernandez (BHI Financial Advisor)

Tania Fernandez has ten years of experience as a venture capitalist with Burrill & Company and 16 years of experience in the life sciences/biotech industry with the ability to successfully identify and assess promising scientific technologies/products and business models for venture investments across the sectors of therapeutics, diagnostics, next gen sequencing and healthcare delivery.

Pending:

NHLBI #2

NIAID

NINDS

USDA Agricultural
Research Service

Partnership Intermediary Agreements



PIA between BHI and NIH's Office of Technology Transfer (OTT) that supports the 27 NIH institutes' \$3 billion intramural research and the Food and Drug Administration to **promote and foster cooperative research and accelerate technology commercialization** among NIH/FDA, businesses, and universities.

BHI Client Companies

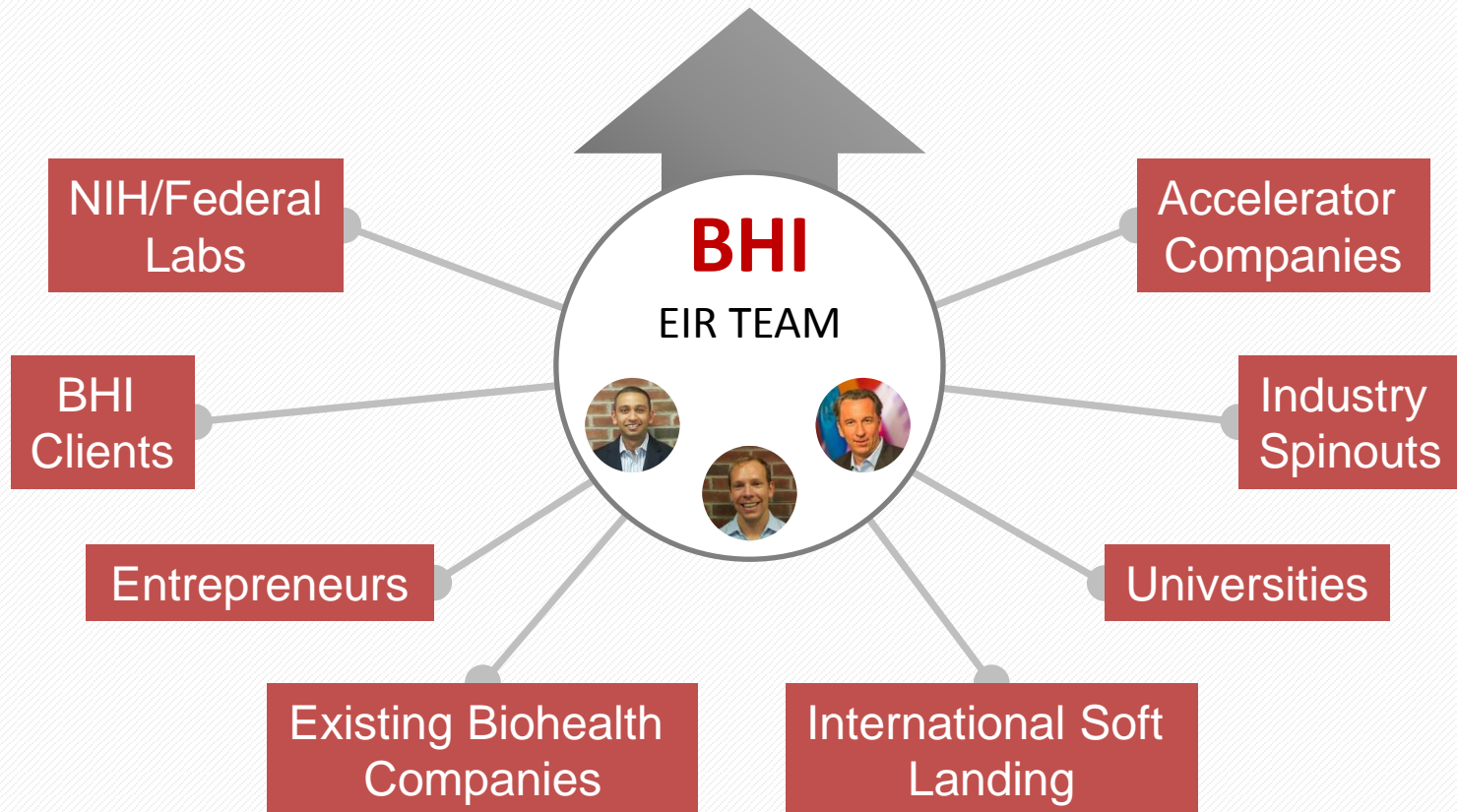
	Ram Aiyar NYU	Todd Chappell NIH	Todd Chappell NIAID	Todd, Tania, Rich MoCo Entrepreneur
Therapeutic	 BeneVir <small>active immunotherapy against evolving tumors</small>	 speed <small>BioSystems</small>	 VLP Therapeutics	 CytImmune
	Todd JHU	Ram NY	Todd Physician *	
Medical Device	 PERCEPTIVE NAVIGATION	Intravenous Solutions	Sinus Bath	
	Ethan Byler India	Ethan SG Incubator *		
Personalized Medicine	 Strand Life Sciences <small>Algorithms for Life</small>	 mawi		
	Ken Malone JHU	Ethan UMCP *	Ken Baltimore Entrepreneur	
Health IT / IT	 Avhanahealth	 TERTIUS ANALYTICS <small>Networks. Clusters. Regions.</small>	 mdlogix <small>accelerating clinical research</small>	
	Todd Netherlands	Todd HGS Entrepreneur	Todd India *	
R&D Tool	 MIMETAS <small>the organ-on-a-chip company</small>	 MockV Solutions	HepTox	
	Ken UMCP			
Occupational Safety and Health	 N5 Sensors, Inc. <small>Smart Sensors for a Safer World</small>			

* Pending

BHI Scouting



**BHI
Partners**



USM EIR Activities and Outcomes

- Provide all Maryland based biohealth related start-ups that have licensed technologies from USM with strategic business and networking assistance
- Partnered with N5 Sensors, Inc. (College Park) to successfully secure multiple SBIRs, investors and develop strategic partnerships, and became a BHI client company
- Through teaching a life science entrepreneurship course to graduate students, a new business was formed and another is in formation
- Analysis of commercial opportunities in the Center for Stem Cell Biology and Regenerative Medicine
- Portfolio analysis of the Center for Biomolecular Therapeutics 75 targets has identified 5 key assets for further IP development
- Evaluating multiple business development opportunities under scouting collaboration agreement with Roche

NIH Activities and Outcomes

- Three Entrepreneurs-in-Residence established at NIH OTT and NHLBI in 2014
- Recruiting 3 additional EIRs for 2015 at NHLBI, NIAID, and NINDS
- Evaluated over 175 technologies for their commercial relevance
- 6 license applications have been submitted; 3 licenses have been awarded (3 pending)
- Multiple private sector partnerships forged with the NHLBI National Centers for Accelerated Innovation program
- Working with BHI clients whose IP originated within NIH
- Evaluating multiple business development opportunities under scouting collaboration agreement with Roche

BHI: The Triple Bottom Line

Grows high-paying jobs and businesses

A large, hollow, downward-pointing arrow connects the first box to the second box.

Expands tax base; improves economic vitality

A large, hollow, downward-pointing arrow connects the second box to the third box.

...and benefits human health!