BioHealth Innovation
Startup Assistance

Rich Bendis
President & CEO
BioHealth Innovation
3/20/2014
BioHealth Innovation is an Innovation Intermediary

BioHealth Innovation is a Central Maryland innovation intermediary that connects market relevant research assets to appropriate funding, management and global markets to facilitate the development of commercially viable biohealth products and companies.

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

**SOURCES**
- NIH
- Universities
- Federal Labs
- Industry
- Entrepreneurs
- Soft Landing
- DreamIt

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

**BHI Assistance Programs**
- SBIR Program
- Startup Package
- Early-Stage Fund

**Soft Landing**
- DreamIt Health

**Financial Sponsors**
- BD
- NIH
- Johns Hopkins University
- EAGB
- M&T Bank
- United Therapeutics
- NEA
- Venable
- MedImmune
- AstraZeneca
- Northrop Grumman
- Kaiser Permanente

**Strategic Programs**
- CRAB
- Client Portfolio
- Non-client Support
BHI Entrepreneur-in-Residence Program

A team leader who combines scientific, financial/VC and entrepreneurial management experience to:

- Perform due diligence
- Develop biohealth project-focused companies

Proactively identifies and commercializes market-relevant intellectual properties from:

- Federal Labs
- Universities
- Private Sector

2013 Status

114 NIH
63 Industry
Technology Reviews Conducted

4 EIRs

1 CFLD Chinese-American EIR

9 Current Clients

2 Pending Clients

4 Potential New Clients

Future

- Add 2 EIRs
- Create 5 spinouts or tech placements
- Develop education programs
<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BeneVir</td>
<td>Developing a therapeutic platform that can be adapted to target a wide variety of cancers.</td>
</tr>
<tr>
<td>Mimetab, Inc.</td>
<td>Developing and marketing Organ-on-a-Chip solutions for the pharmaceutical industry.</td>
</tr>
<tr>
<td>Mehr Medical</td>
<td>Developing devices for cardiovascular procedures that will solve high unmet needs in the transcatheter valve replacement space.</td>
</tr>
<tr>
<td>MockV</td>
<td>Developing novel viral clearance kits to be utilized during process development bio therapeutics.</td>
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<tr>
<td>NS Sensors, Inc.</td>
<td>Developing sensors that can detect harmful chemicals mixed in air in very small quantities, such as industrial chemicals, and other pollutants.</td>
</tr>
<tr>
<td>Perceptive Navigation</td>
<td>Developing medical devices related to image-guided, minimally-invasive niche markets.</td>
</tr>
<tr>
<td>VLP Therapeutics</td>
<td>Developing a platform vaccine like particle technology that has the potential to be used for various diseases including cancer.</td>
</tr>
<tr>
<td>Strand</td>
<td>Recently licensed a monoclonal antibody targeting ROR1 from the NIH. ROR1 is an emerging target that may be relevant for triple negative breast cancer (TNBC) and other solid tumors.</td>
</tr>
<tr>
<td>India-based molecular information company with multiple powerful bioinformatics platforms.</td>
<td></td>
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</tbody>
</table>
BHI Startup Package

Corporate Legal
- VENABLE LLP

Intellectual Property
- InHouse Patent Counsel
- MILES & STOCKBRIDGE

Accounting
- α Aronson LLC

Laboratory Space
- Montgomery County Business Innovation Network
- UNIVERSITY of MARYLAND BioPark

Incubation
- BioHealth Innovation

Incubation
- M&T Bank
- CAPITAL BANK

Grant Consulting
- TEDCO
- BBC
- ScienceSherpa
BHI Commercialization Model

Inventions patented through Universities, Federal Labs, Private R&D, and Basic Research

1. Proof of Concept
2. Product Development Research
3. SBIR/STTR
4. Prototype Product
5. PROOF OF COMMERCIAL RELEVANCE
6. Make Technology Investment Grade
7. Transfer Technology to Industry
8. Generate Equity, Royalties & License Fees
9. Next Generation Products
10. Reinvestment

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Wealth Creation: Companies, Jobs, Products & Profits

Funding & Entrepreneurial Resources
# BHI Innovation Capital Map

## Pre-Proof of Concept
- NIH R01
- NIH R03
- NIH R21

## Translational Research/Proof of Concept
- SBIR/STTR Grant Phase 1
- NCATS Cures Acceleration Network (CAN)
- Maryland Stem Cell Research Fund (MSCRF) - Various
- TEDCO Technology Validation Program - Proof of Concept
- TEDCO Maryland Innovation Initiative - Phase 1
- JHU - Coulter Translational Research Partnership

## Proof of Commercial Relevance/Pre-Seed
- Maryland Industrial Partnerships (MIPS @ UMD)
- TEDCO Maryland Innovation Initiative - Phase 2
- Maryland Stem Cell Research Fund (MSCRF) - Pre-Clinical
- TEDCO Technology Validation Program - Market Assessment
- BHI SBIR/STTR Federal Funding Assistance Program

## Seed/Start-Up
- Dingman Center Angels (UMD)
- BioMaryland Biotechnology Dev. Award - Translational Res.
- TEDCO Patent Assistance Program
- TEDCO Technology Commercialization Fund
- TEDCO Maryland Innovation Initiative - Phase 3
- SBIR/STTR Phase 2
- BHI Commercial Relevance Fund (CRF)

## Early Stage
- Propel Baltimore Fund
- TEDCO Veterans' Opportunity Fund
- Invest Maryland: Maryland Venture Fund
- BioMaryland Biotechnology Dev. Award - Commercialization
- TEDCO Technology Commercialization Fund
- Maryland Health Care Product Development Corporation
- Abell Venture Fund
- MMG Ventures LLP
- TDF

## Later Stage
- Maryland Venture Fund Authority
- ABS Capital Partners
- Greenspring Associates
- Novak Biddle Venture Partners
- Sterling Venture Partners
- Harbert Venture Partners
- JMI Equity
- New Enterprise Associates

## Associations
- Association of University Resource Parks (AURP)
- Association of University Technology Managers (AUTM)
- Licensing Executive Society (LES)
- Angel Capital Association (ACA)
- Mid-Atlantic Venture Association (MAVA)
- National Venture Capital Association (NVCA)

## Funding Type Key
- **Academic**
- **State of Maryland**
- **Federal**
- **BioHealth Innovation, Inc.**
- **Economic Development**
- **Private Capital**

## Tax Credits
- Maryland Biotechnology Investor Tax Credit
- Montgomery County Biotechnology Investor Tax Credit
BHI Federal Funding Assistance

Value Chain of Assistance

Funding Concept Review
- Ensure Appropriateness for the Federal Agency

Application Technical Support
- Guidance through Federal Registration Process

Proposal Development
- In-Kind Guidance on Proposal Best Practices

Funding for High-Quality Proposals
- Intensive Support with Professional Consultant

Funding Agencies

BioHealth Technology
- Therapeutics
- Devices
- Diagnostics
- Tools
- Bioinformatics
- Health IT

NSF
- National Institutes of Health
- USAID
- USAMRIID
- NIH
- National Cancer Institute
- BARDA
- DARPA
- CDMRP
A Health IT Accelerator is an intensive 16 week program that admits top-recruited companies and entrepreneurs, provides a curriculum and network of experienced mentors in business, marketing and product development in the Health IT arena to “accelerate” top companies.

Retain promising high growth HIT entrepreneurs in MD

**Partners:**

- BioHealth Innovation, Inc
- Johns Hopkins University
- DreamIt Ventures
- Economic Alliance of Greater Baltimore
- Northrop Grumman
- Kaiser Permanente
- DBED
# DreamIt Accelerator Companies

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<tr>
<th>Company</th>
<th>Services</th>
<th>Location</th>
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<tr>
<td>Aegle</td>
<td>Wearable biometric devices</td>
<td>Baltimore, MD</td>
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<tr>
<td>Avhana+</td>
<td>Clinical Decision Support</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td>CogniSure</td>
<td>Mobile Cognitive Rehabilitation</td>
<td>Talinn, Estonia</td>
</tr>
<tr>
<td>Emocha</td>
<td>Mobile Information Platform</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td>Protenus</td>
<td>Smart Administrative Workflows</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td>RESPI</td>
<td>Augmented Reality Treatment</td>
<td>Athens, Greece</td>
</tr>
<tr>
<td>Patient Feed</td>
<td>Inpatient Care Collaboration</td>
<td>Pittsburgh, PA</td>
</tr>
<tr>
<td>Phobious</td>
<td>Augmented Reality Treatment</td>
<td>Barcelona, Spain</td>
</tr>
<tr>
<td>The SmartPhone Physical</td>
<td>Digital Workflow Management</td>
<td>Baltimore, MD</td>
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</table>
BHI offers international companies the perfect starting point to create US based subsidiaries by connecting them with BHI’s extensive network.
Contact

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