



2015 Post - SelectUSA Summit: Chinese Investment in Maryland Showcase

Rich Bendis

President & CEO

BioHealth Innovation, Inc.

Germantown

3/25/2015

The Region – Central Maryland

- Unrivaled Research Assets -
- Unfulfilled Commercial Promise -



National Institutes
of Health



Chinese-American Demographics in Montgomery County

43,182

Total
Chinese
Population

8

Chinese Companies
Headquartered
Companies

State of Maryland: Federal & University Resources



- **Population: 5.9 million people**
- **59 Federal Laboratories, Centers, & Institutes in Maryland**
- **Maryland Federal R&D investment exceeding \$12 billion annually**

JHU and USM represent another \$3.5 billion in annual R&D



JOHNS HOPKINS
UNIVERSITY



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
- Globally connect sectors, industries, communities, and markets

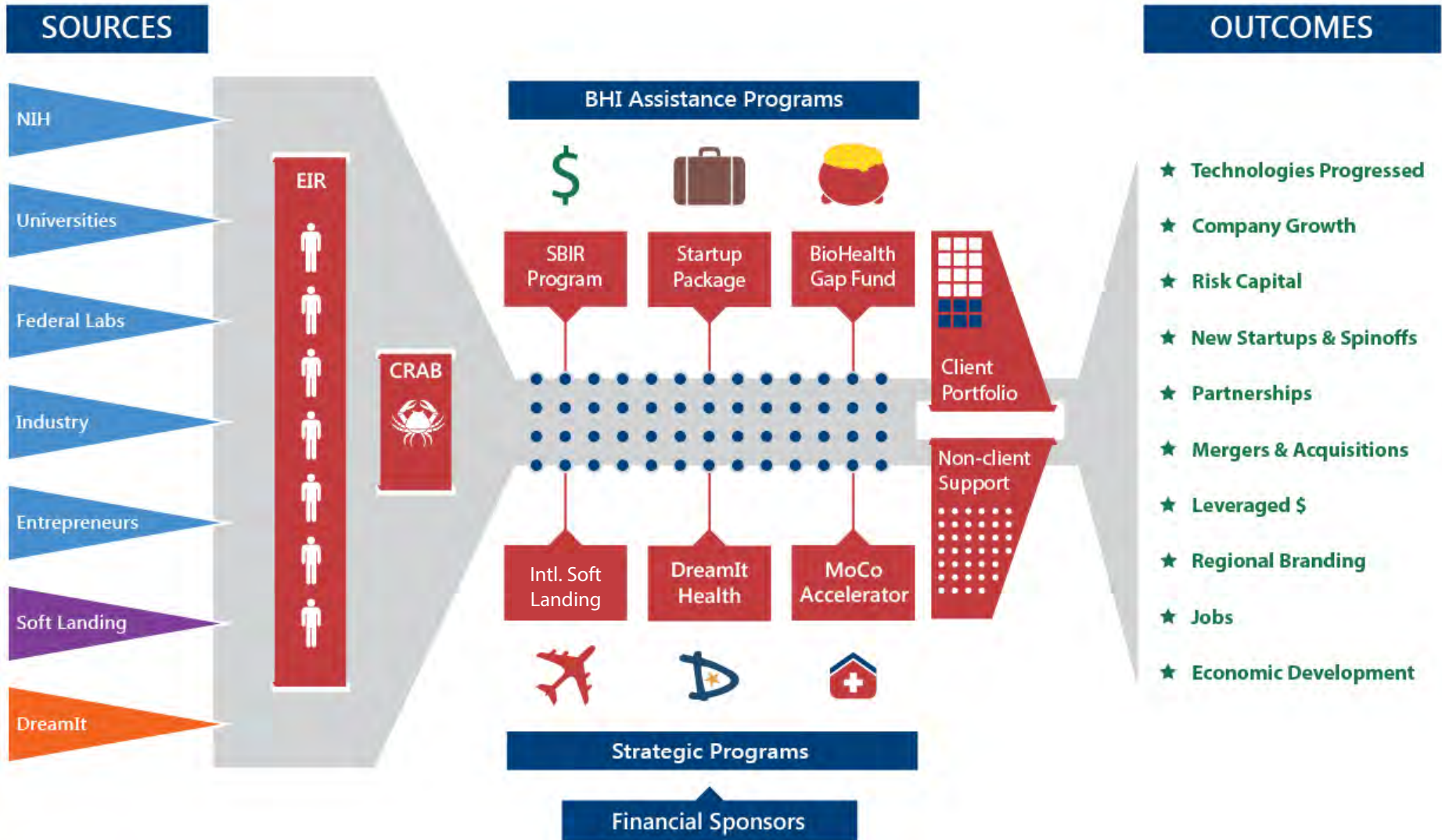


- Regionally-oriented
- Private-public partnership, 501(c)(3) nonprofit
- Market-driven, private sector-led and funded
- Neither a government initiative, nor a membership organization

BHI Board of Directors

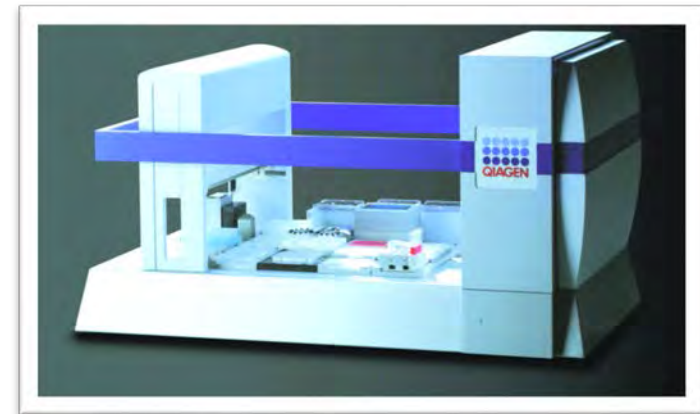
 <p>Daniel J. Abdun-Nabi CEO, Emergent BioSolutions</p>	 <p>Judith Dunn VP, Global Head of Clinical Dev. Roche</p>	 <p>Douglas Liu Senior VP of GO Qiagen</p>
 <p>Michael J. Baader, Esq. General Counsel Greenspring Associates</p>	 <p>Jens Eckstein President SR One (GSK)</p>	 <p>Charles Morton Partner Venable LLP</p>
 <p>Richard A. Bendis President & CEO BioHealth Innovation, Inc.</p>	 <p>David M. Gillice (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



BHI Technology Focus

- Therapeutics
- Diagnostics
- Medical Devices
- Healthcare Services
- E-Health
- Mobile Health
- Electronic Medical Records
- Health Informatics
- BioHealth Cyber Security



BHI Innovation Capital Map



Capital Sources by Investment Stage

Pre-Proof of Concept	Translational Research/ Proof of Concept	Proof of Commercial Relevance/Pre-Seed	Seed/ Start-Up	Early Stage	Later Stage
\$25,000 - \$1,500,000 (over 5 yrs)	\$15,000 - \$750,000 (over 3 yrs)	\$15,000 - \$500,000	\$50,000 - \$1,500,000	\$200,000 - \$2,500,000	\$2,500,000+
<ul style="list-style-type: none"> NIH R01 NIH R03 NIH R21 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 SBIR/STTR Phase 2 ★ SBIR/STTR Federal Funding Assistance Program 	<ul style="list-style-type: none"> Dingman Center Angels (UMD) BioMaryland Biotechnology Dev. Award - Translational Research TEDCO Patent Assistance Program TEDCO Technology Commercialization Fund TEDCO Maryland Innovation Initiative - Phase 3 SBIR/STTR Phase 2 ★ BioHealth Gap Fund 	<ul style="list-style-type: none"> Propel Baltimore Fund TEDCO Veterans' Opportunity Fund Invest Maryland: Maryland Venture Fund BioMaryland Biotechnology Dev. Award - Commercialization Maryland Health Care Product Development Corporation Abell Venture Fund MMG Ventures LLP TDF ★ BioHealth Gap Fund 	<ul style="list-style-type: none"> Maryland Venture Fund Authority ABS Capital Partners Greenspring Associates Novak Biddle Venture Partners Sterling Venture Partners Harbert Venture Partners JMI Equity New Enterprise Associates (NEA)

Funding Type Key

- Academic
- State of Maryland
- Federal
- BioHealth Innovation, Inc.
- Economic Development
- Private Capital

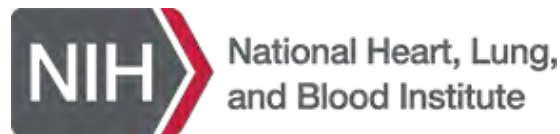
Tax Credits

- Maryland Biotechnology Investor Tax Credit
- Montgomery County Biotechnology Investor Tax Credit

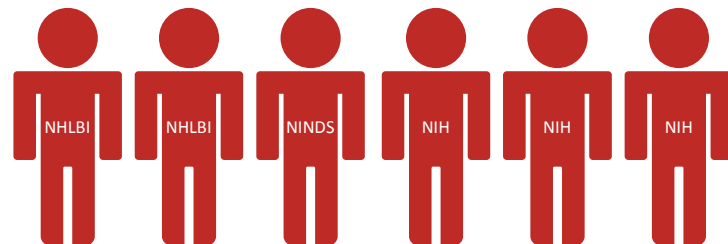
NIH Partnership Agreements



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.



NIH Consulting Entrepreneur Services Contract for 5 NIH Entrepreneurs-in-Residence



Who are the Entrepreneurs-in-Residence?



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.



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.



Todd Chappell (EIR Consultant)

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.

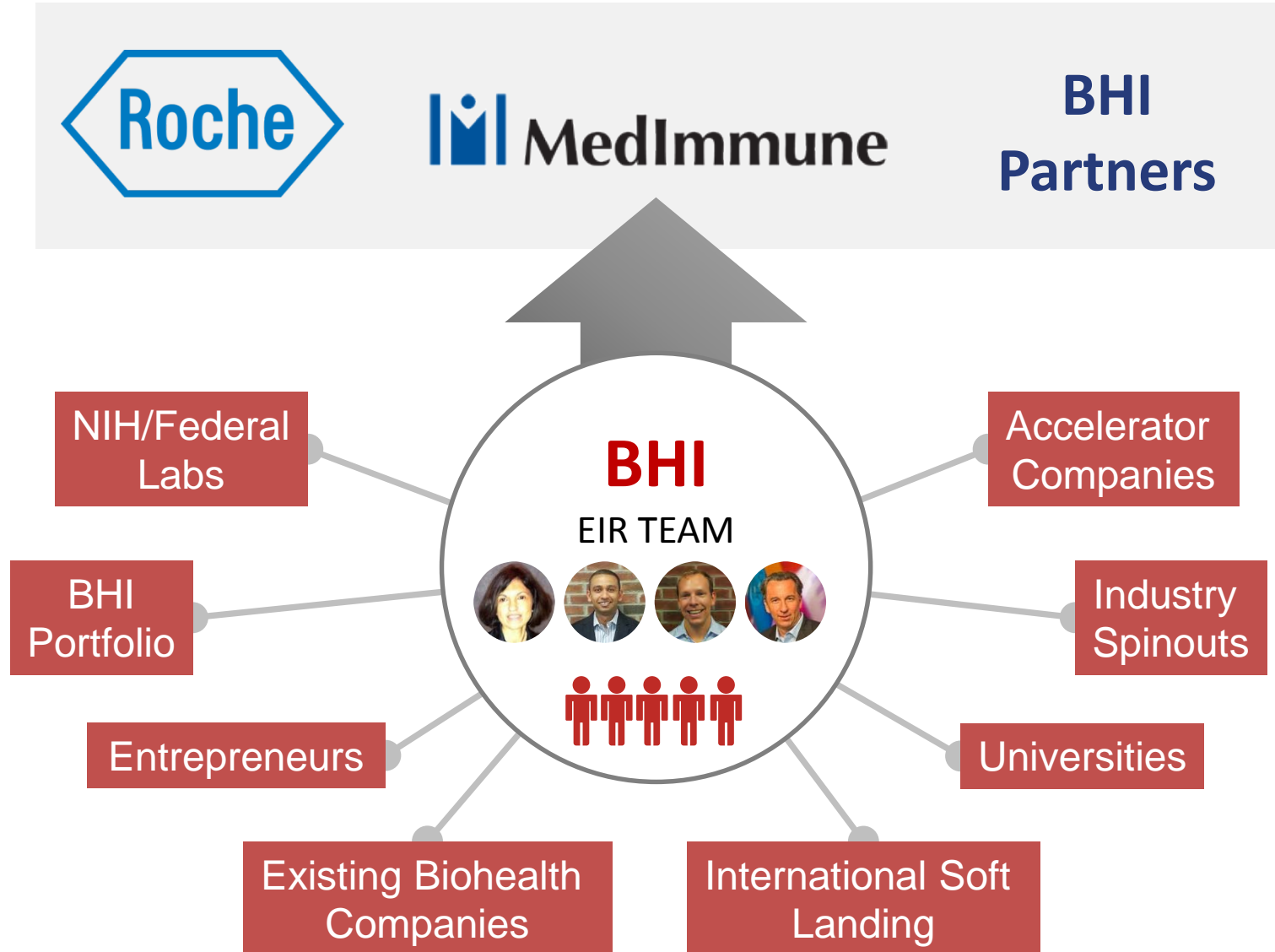


Albine Martin (JHU)

Dr. Albine Martin brings over 20 years of product commercialization and corporate development experience with 3 public companies located in Maryland and representing the biotechnology, diagnostics and life sciences sector. She has also served as a member of Active Angels, Inc where she syndicated and provides diligence for early stage investments.

Pending:
5 new NIH EIRs

BHI Scouting



BHI Startup Package

Corporate Legal



Intellectual Property



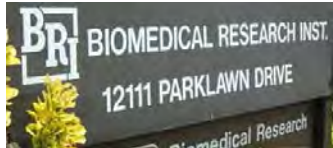
Clinical Services



Accounting



Laboratory Space



Incubation



Banking



Payer Advisory Services



Scientific Data Management Services



Grant Consulting



BHI Incubator

BHI interacts with companies and technologies at various stages in the biohealth industry from the results of basic research to companies currently selling products in the market. At these multiple levels of maturity, BHI evaluates whether the organization can help progress the scientist, inventor, entrepreneur, and/or business manager to support the growth of the entity.

We have a dedicated co-working space at our headquarters in Rockville where we support client companies with the goal of progressing the business model for the company.

The BHI Incubator is a member of MBIA, NBIA, and is a certified Maryland TEDCO Incubator.



MockV
Solutions



Strand
Genomics



Mimetas
US, Inc.



- 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



Relevant Health Accelerator



- Business accelerator for health startups in 2015
- 5 month formal co-working program with 7 month continuation
- Connect founders with a strong mentor network
- Help founders grow into a company ready for pilot testing and
- Cohorts of 8 - 10 companies and their founders recruited globally
- Up to \$50,000 in stipends per company
- Product focus
- Software developer pool
- Long term support/transition into Montgomery County Incubator Network
- Close proximity to NIH, FDA, HHS, Health companies, international trade representatives and BioHealth Innovation



The logo features a stylized DNA double helix on the left, composed of two intertwined strands in red and blue. To the right of the helix, the text "BioHealth Gap Fund" is displayed in a bold, sans-serif font. "BioHealth" is in red, "Gap" is in blue, and "Fund" is in red.

BioHealth Gap Fund

- Will provide direct seed and early-stage equity investments ranging from \$500,000 to \$2,000,000
- Focused on BioHealth companies that fall into the 4 categories: Therapeutics, Medical Devices, Diagnostics, and Health IT
- Goal: Achieve a \$20,000,000 to \$50,000,000 initial fund
- Expectation: 30% of companies generating 10x the original investment
- 2015 – Target first close

BHI International Soft Landing



- | | |
|--------------|---------------|
| China | Korea |
| Estonia | Netherlands |
| Germany | North America |
| Greece | South America |
| India | Spain |

Montgomery County Partnership Opportunities

- Entrepreneur in Residence
- LP in BioHealth Gap Fund
- Partner in Relevant Health Accelerator
- International Soft Landing Partnership

Xie Xie!