



BIOHEALTH
CAPITAL REGION

Advancing Science. Accelerating Innovation.

FORUM



Welcome to the



Please make sure to check-in at Registration.

Breakfast is being served in Chesapeake & White Oak Break Area,
We will start promptly at 8:30 AM.

Please download the mobile App and create a profile.

WOMEN IN BIO Networking Breakfast In the Café Atrium

Hosted By:

Sherri-Gae Scott

Sponsorship Vice Chair, Women in Bio

8:00 – 8:30 AM

APRIL 20, 2017

#BHCRForum17



WELCOMING REMARKS



Dr. Bahija Jallal

Executive Vice President, AstraZeneca and Head of MedImmune

8:30 – 8:40 AM

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KEYNOTE:

A CONVESATION WITH SENATOR VAN HOLLEN



Hosted By:

Mark Walsh

Former Head of Innovation and Investment,
US Small Business Administration



Senator Chris Van Hollen

United States Senator, State of Maryland

8:40 – 9:10 AM

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Accelerating Innovation

PANEL DISCUSSION:

RAISING VENTURE CAPITAL FINANCING: HOW TO SUCCEED BIGLY (Big League)



Moderator:

Samuel Wu
Managing Director,
Acuris Partners



Panelist:

Hooks Johnston
Managing Director,
Inova Strategic Investments



Panelist:

Rick Kohr
CEO,
Evergreen Advisors LLC



Panelist:

Kristen Kosofsky
Senior Managing Director,
Hercules Capital



Panelist:

Sara Nayeem
Partner,
New Enterprise Associates

9:20 – 10:20 AM

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~BREAK~
30 minute Networking
Refreshment in
Chesapeake & White Oak

10:20 – 10:50 AM

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Are you currently seeking funding?

- 0-\$500K
- \$500K -\$2M
- \$2M - \$5M
- More Than \$5M

I am not currently

Start the presentation to activate live content
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Accelerating Innovation

PANEL DISCUSSION:

A CALL TO ACTION: DEVELOPING THE TALENT PIPELINE



Moderator:

Wendy Penry

Chief Human Resources Officer,
Aeras



Panelist:

Chris Frew

Vice President, Breezio and Executive Director,
BioBuzz Workforce Foundation



Panelist:

Sanjay Rai

Senior Vice President for Academic Affairs,
Montgomery College



Panelist:

Scott Ralls

President,
Northern Virginia Community College



Panelist:

Kelly M. Schulz

Secretary,
Maryland Department of Labor, Licensing & Regulation

10:50 AM – 11:50 AM

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KEYNOTE:

PERSONALIZED MEDICINE INITIATIVE



Eric Dishman

Director, All Of Us Research Program, National Institutes of Health

12:00 – 12:30 PM

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The *All of Us* Research Program

Accelerating Precision Health For All

BioHealth Capital Region Forum
April 20, 2017



Eric Dishman
Entrepreneurial Patient & Advocate
Director, *All of Us* Research Program



My story of precision medicine.

**Starting here: first week of chemo,
Summer 1989, Chapel Hill**

The limited studies of older people with kidney cancer taught almost nothing on what to do for a 19-year old. But new data types—understanding my DNA patterns—helped to save my life.

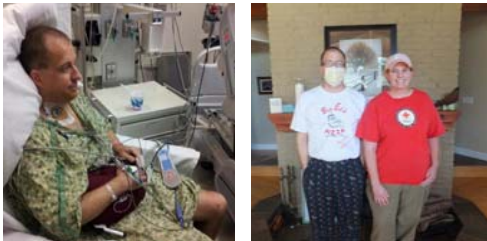
Mission & Values of the *All of Us* Research Program

Why Do We Need the *All of Us* Research Program?



People/ Patients

- Health care is often targeted to the average patient, not the individual
- Health problems can take years to unravel, with significant trial and error



23 years as a cancer patient;
30 years as a patient advocate



Professional Providers

- Not enough research to draw on for clinical evidence
- Medical records scattered in different places
- Not enough time for analysis one patient at a time



Two decades of fieldwork
with families and providers



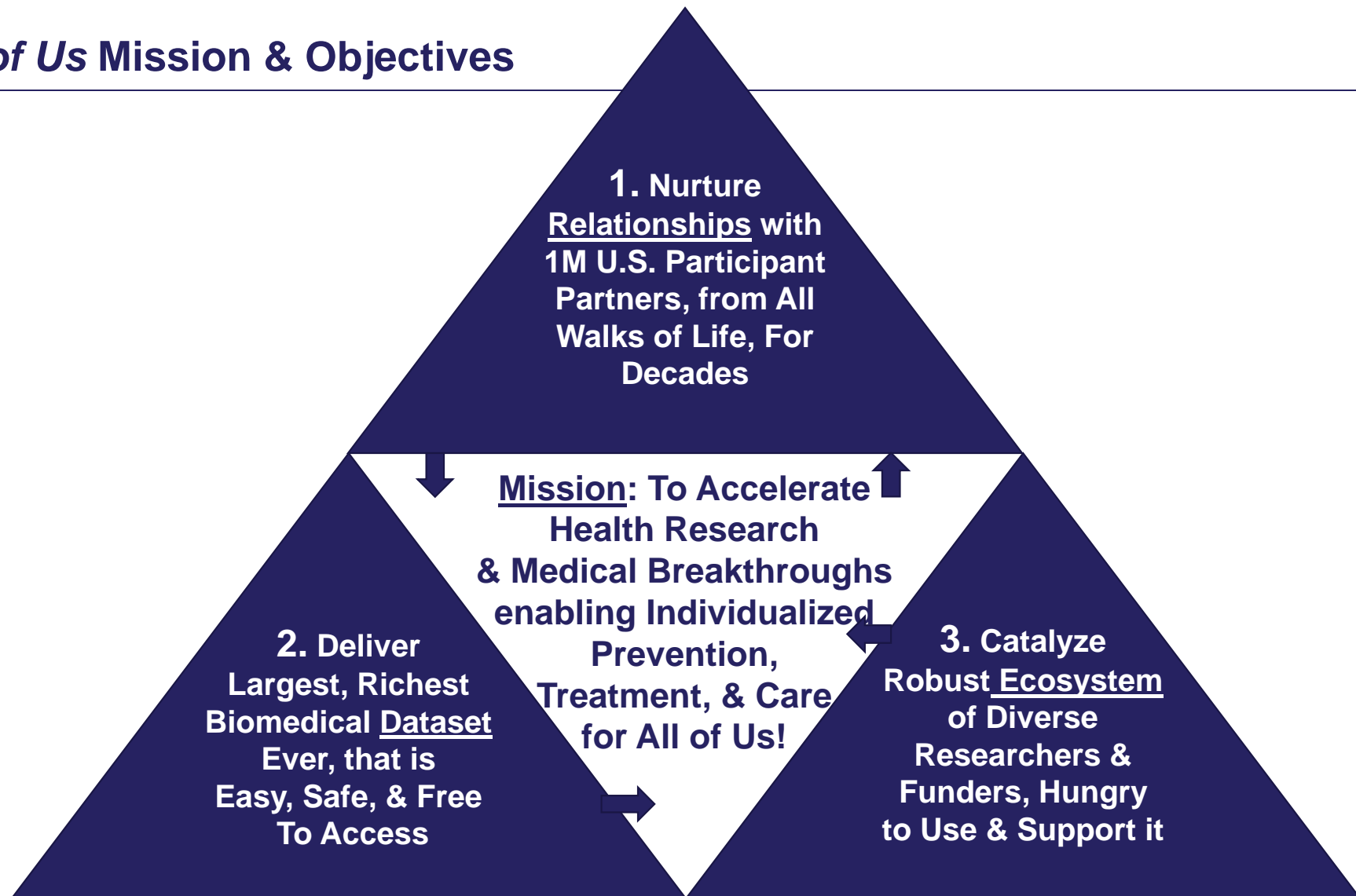
Biomedical Researchers

- Enormous time/cost spent building IT systems vs. doing research
- Silo'd data resources and funding opportunities
- Challenges acquiring large and diverse sample sizes

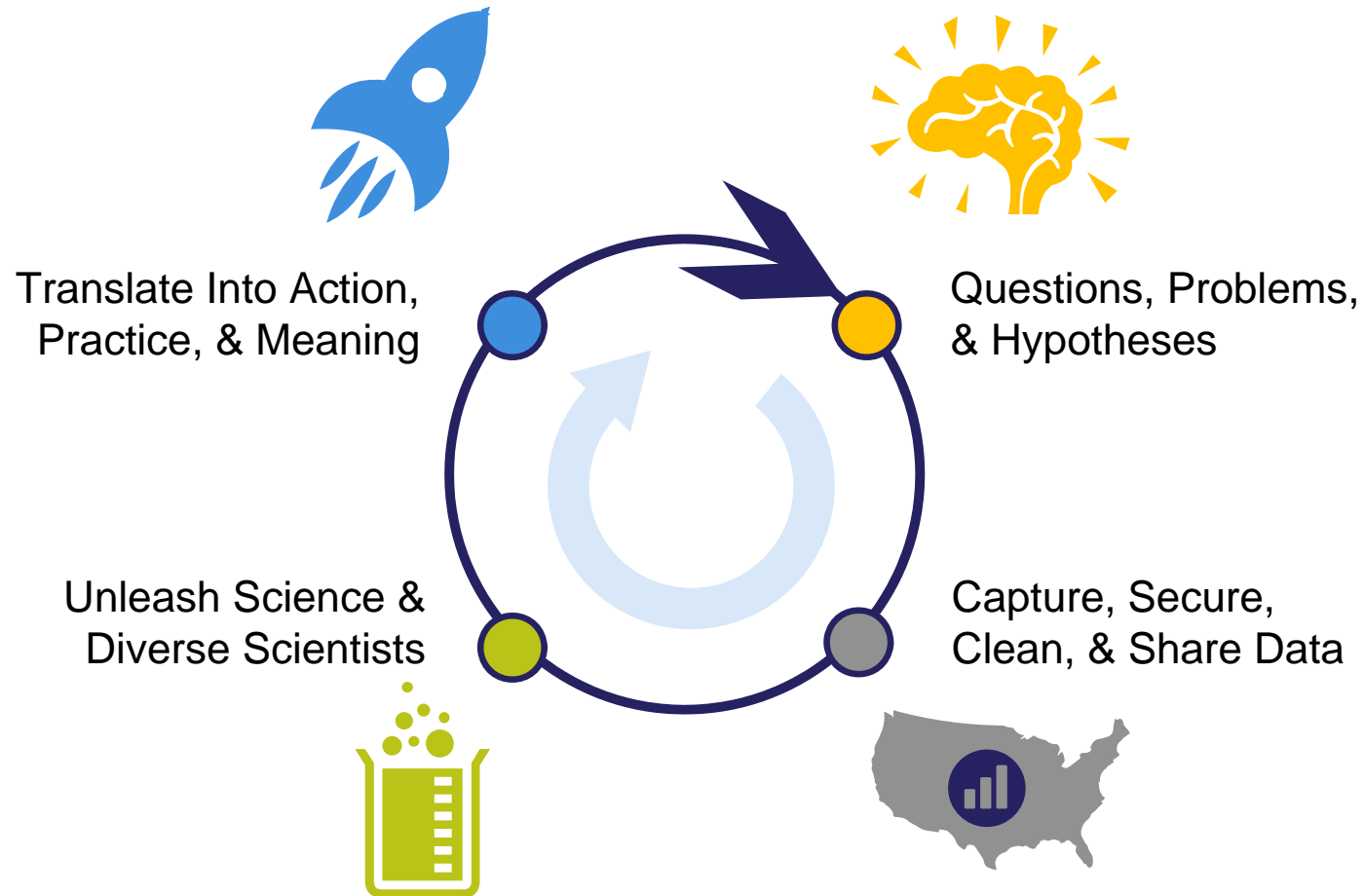


Three decades of fieldwork,
understanding researchers

All of Us Mission & Objectives



All of Us: Accelerating Knowledge Turns & Breakthroughs!



***All of Us* Core Values**

- Participation in the *All of Us* Research Program will be **open** to interested individuals.
- The Program will reflect the rich **diversity** of America.
- Participants will be **partners** in the Program.
- Trust will be earned through robust **engagement** and full **transparency**.
- Participants will have **access** to information and data about themselves.
- Data from the Program will be broadly **accessible** to **empower research**.
- The Program will adhere to the PMI **Privacy** and **Trust** Principles and the PMI **Data Security** Policy Principles and Framework.
- The Program will be a catalyst for **innovative research** programs and policies.

Program Overview

Overview: *All of Us* Research Program

- **Mission:** To **accelerate** health research and medical breakthroughs, enabling **individualized prevention, treatment, and care** for all of us.
- **How:** Deliver a **national resource** of deep clinical, environmental, lifestyle, & genetic data from **one million participants** who are consented & engaged to provide data on an ongoing, **longitudinal basis** (60+ years!)
- **Priority:** Reflect the **broad diversity** of the U.S.—all ages, races/ ethnicities, gender, SES, geo, & health status—by over-recruiting those **underrepresented in biomedical research**
- **Priority:** Build the **tools & capabilities** that make it easy for researchers from citizen scientists to premier university labs to make discoveries using the **data & biosamples** and through **ancillary studies** w/ the cohort



Major Building Blocks of the Research Program

DATA AND RESEARCH CENTER (DRC)

Big data capture, cleaning, curation, & sharing in secure environment

Vanderbilt, Verily, Broad Institute

BIOBANK

Repository for processing, storing, & sharing biosamples (35+M vials)

Mayo Clinic

PARTICIPANT CENTER

Direct volunteer participant enrollment, digital engagement innovation, & consumer health technologies

*Scripps Research Institute
(with multiple partners)*

PARTICIPANT TECHNOLOGY SYSTEMS CENTER

Web & phone-based platforms for participants

Vibrent Health

HEALTH CARE PROVIDER ORGS (HPOs)

Clinical & scientific expertise network, enrollment & retention of participants

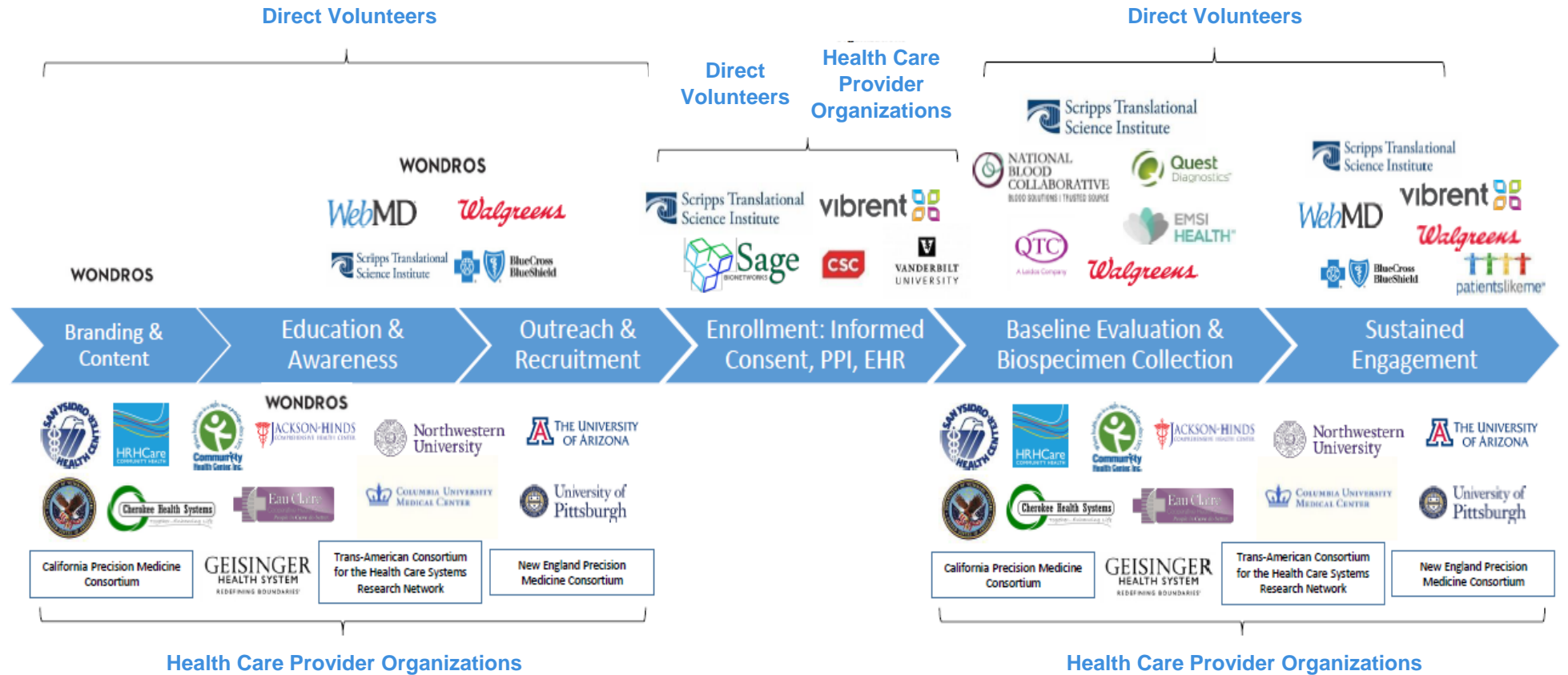
20+ regional med centers, FQHCs, VA, future awards to grow network

COMMUNICATIONS & ENGAGEMENT

Comms, marketing, & design expertise; Engagement coordination & community partners network

Wondros, HCM, future awards to grow network of community partners

Current Consortium Members & Their Roles



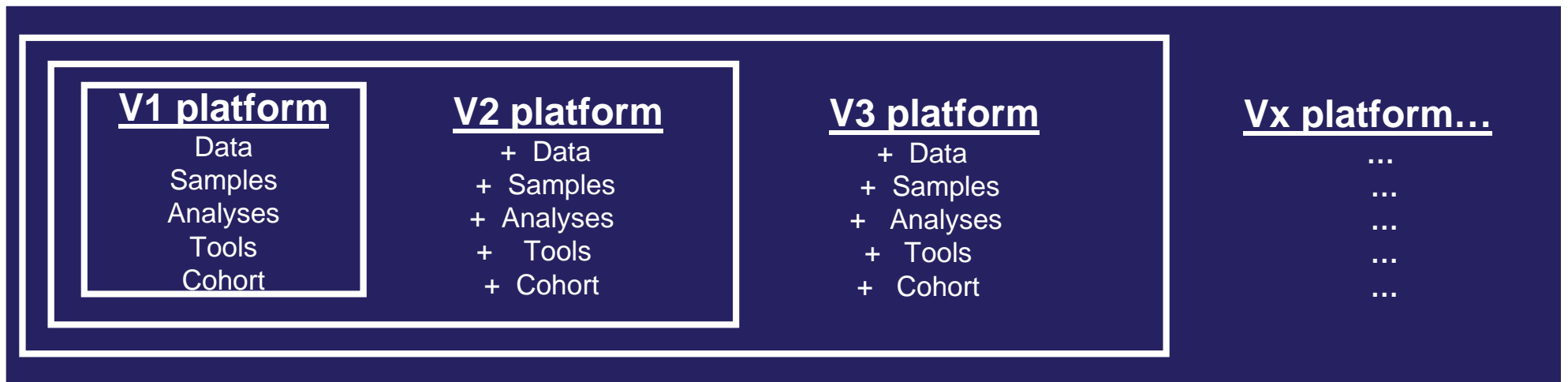
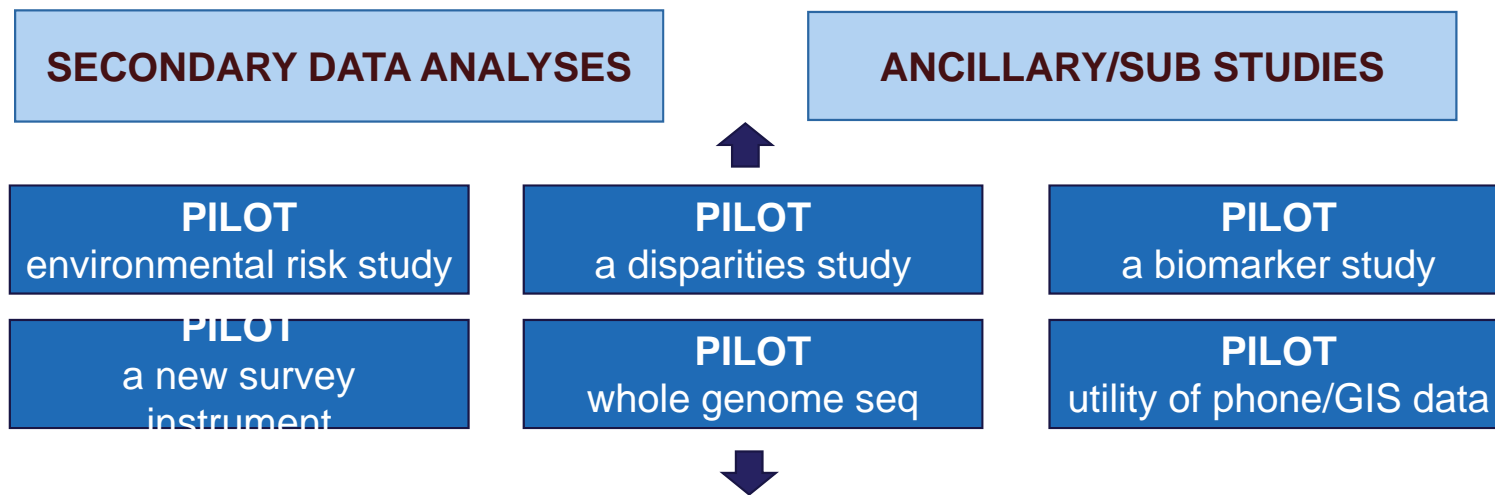
Status of *All of Us*

- Built robust network of 50+ academic, provider, technology, & community partners
- Have plans/methods to recruit 75% of 1M as underrepresented in biomed research
- Pilot test completed on language, concepts, interfaces
- Version 1 protocol submitted to IRB (consent, EHR authorization, 5 initial surveys, blood & urine collection, physical measures)
- Biobank capacity ready for alpha/beta launch, on schedule for national launch (35M+ vials)
- Enrollment website, 1-800#, smartphone apps, and data center developed with early testing & training begun
- Final end-to-end security testing, user testing, workflow testing, & training starts this month



Pending testing results & IRB approval, aiming for Alpha/Beta launch in May & National launch in Oct

We are building a Foundation for others (e.g., you) to drive your science



The Health Care Industry & *All of Us*

Ecosystem orientation and thinking



My Lessons From Intel

- 1) No one achieves big things alone
- 2) Know the megatrends/signals early
- 3) Enlist & incentive an ecosystem
- 4) Drive shared, audacious goals

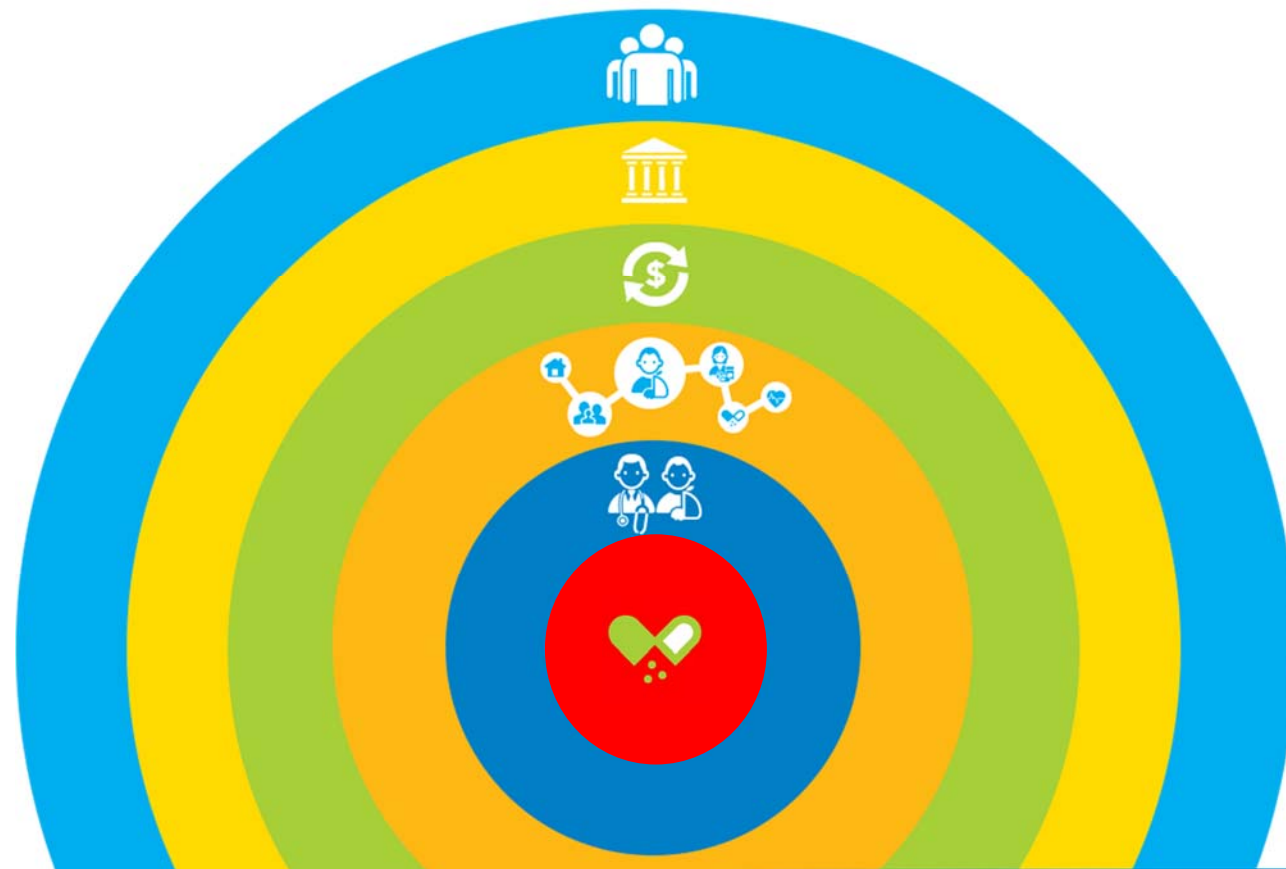
Ecosystem analysis: maps, plans, measures

- Care models presumed?
- Key kinds of organizations involved?
 - Kinds of players?
 - Specifics of key players (disruptors)?
 - Strong & weak bonds or resistances?
- Economic flows (dollars, goods)?
 - New incentives? New biz models?
- Workforce & workflows (bottlenecks)?
 - New kinds of care workers?
- Government/policy hinge factors?
- New social/cultural roles for key actors?
 - Providers, patients, family caregivers...

Regional BioHealth Ecosystem Partners



What ecosystem do we assume our translation occurs in? Can we change it?



- Encounter = problem driven, reactive
- Intervention = a pill or drug
- Provider = professional, specialized
- Physician = all-knowing, solo
- Patient = passive
- Location = an institution

Grand challenges to accelerate translation into better health for all of us

1) Diverse, Longitudinal Engagement at Scale: how to achieve, especially in times of increasing social division?

2) Taming Wild New Data Types: which are meaningful to research? Standards & comparability? Roadmap of future?

3) Researching New Business Models: what do insurers, pharma, providers look & act like in precision health era?

4) Expanding the Researcher Pool: from citizen science to comm colleges? New incentives to data/knowledge share?

5) Great Expectations for Providers and Patients: new roles & responsibilities? Social covenant? How to change?



**START WITH A HOLISTIC VISION/VIEWPOINT ON WHAT THE ERA OF PRECISION HEALTH LOOKS AND FEELS LIKE,
THEN WORK BACKWARDS ON HOW WE ALL COLLABORATE TO GET THERE?**

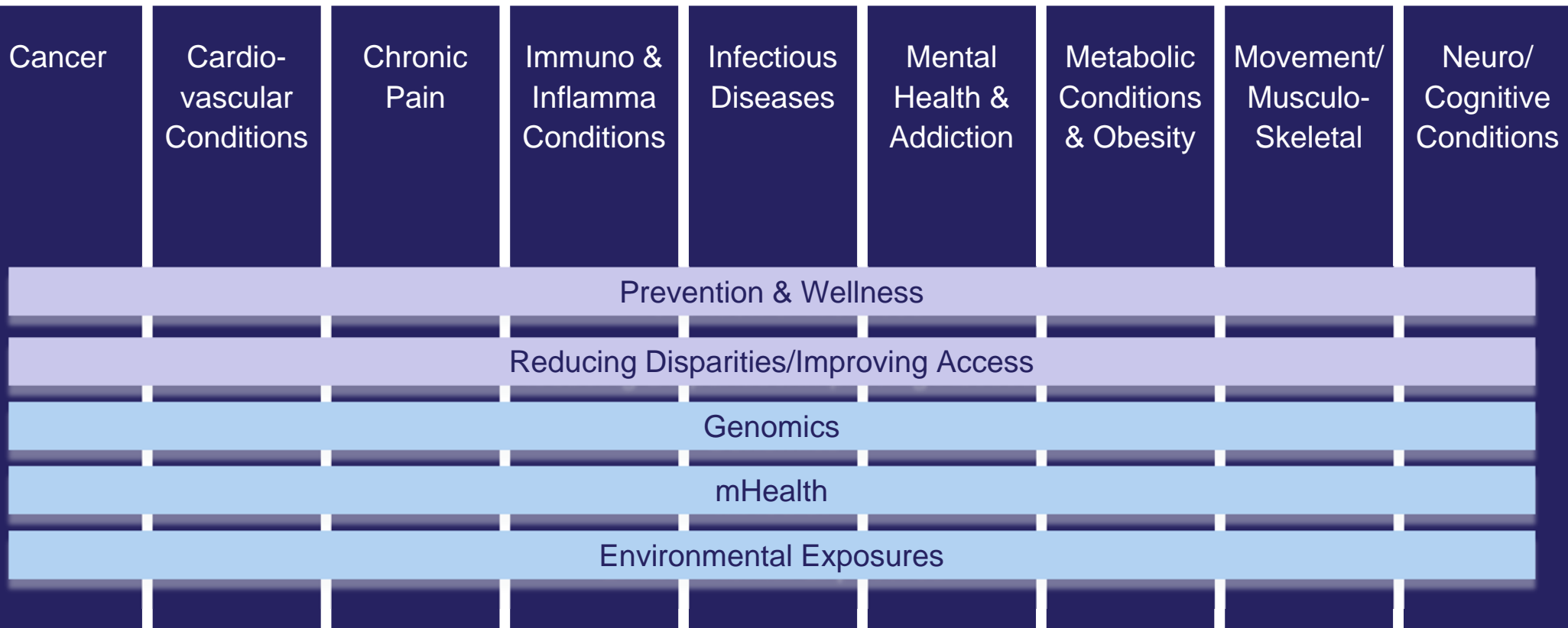
Questions?

Sign up for updates:

<https://www.nih.gov/allofus-research-program>

Backup Materials

Our Draft Scientific Framework



Verticals = High level condition/disease areas; Horizontals = Cross cutting areas of interest / themes

Preparing to Fund Research Priorities Workshop: Spring 2018

Premise

Imagine *All of Us* exists only to accelerate *your* body of thought and research in a particular domain!

Three Big Questions

1) Near Term

What are low-hanging fruit questions/measures for which the scale of *All of Us* could help accelerate knowledge & breakthroughs?

2) Mid-Term

What kinds of questions might this Program answer where additional work selecting among measures/instruments is needed?

What kinds of questions are ripe for a program of this size but for which we need fundamental science & tech to develop the instruments and methods?

Kinds of Attendees

Research experts, co-funders, participant/advocacy orgs, providers, etc.

What We'll Do

Fund & manage the workshops and report writing within certain size/cost limits

Factor analysis of common needs across multiple knowledge domains = our “versions”

Partner with domain stakeholders to grow funding for unique areas = sub-studies

~LUNCH~

Café Atrium

12:30 – 1:30 PM

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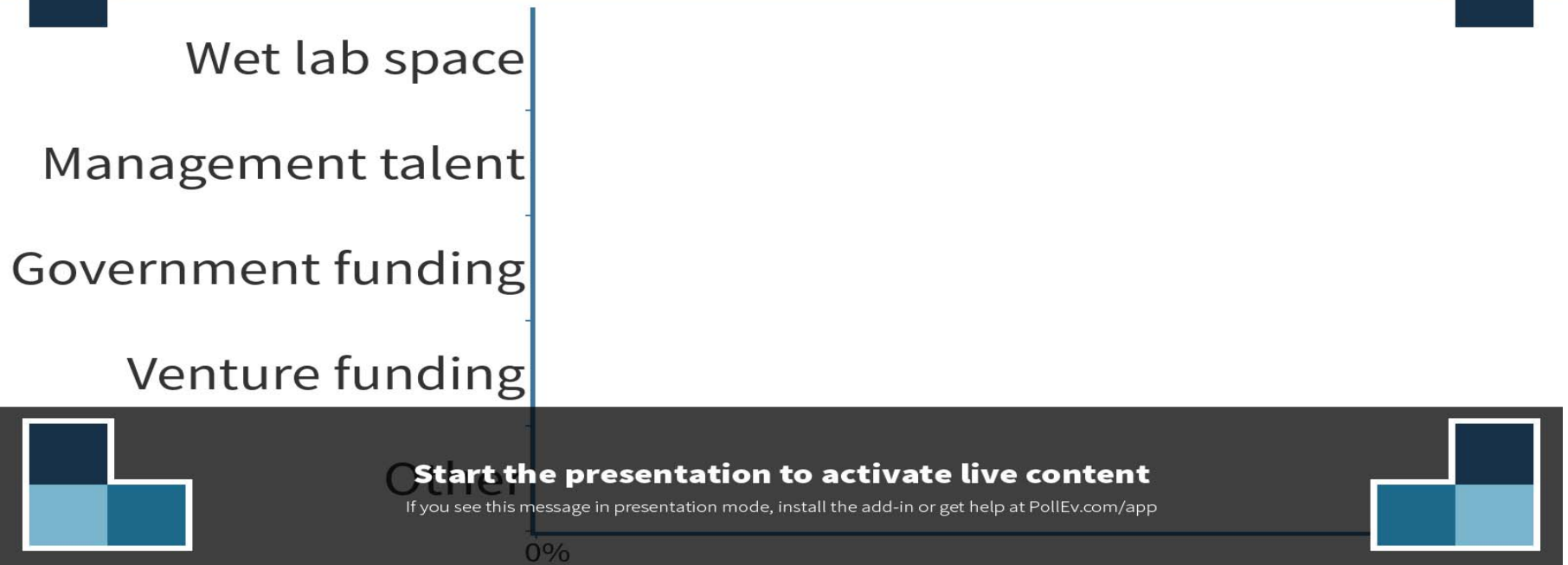
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What is the biggest deterrent to accelerating the growth of the region to becoming a Top 3 Hub by 2023?



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PANEL DISCUSSION:

FOSTERING INNOVATION LED ECONOMIC DEVELOPMENT



Moderator:

Tom Sadowski

Vice Chancellor for Economic Development,
University System of Maryland



Panelist:

Ed Albrigo

President & CEO,
Center for Innovative Technology



Panelist:

Gerald L. Gordon

President & CEO,
Fairfax County Economic Development Authority



Panelist:

John Wasilisin

President & COO,
TEDCO



Panelist:

Christy Wyskiel

Senior Advisor to the President & Head of Technology Ventures,
Johns Hopkins University

1:40 – 2:40 PM

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~BREAK~
to allow
track attendees
to return to the Auditorium

2:40 – 2:50 PM

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PANEL:

PUTTING THE PUZZLE PIECES TOGETHER



Moderator:

Rich Bendis
President & CEO,
BioHealth Innovation Inc



Moderator:

Jeffrey M. Gallagher
CEO,
Virginia Bio



Panelist:

Ripley Ballou
Vice President & Head of US R&D, Vaccines,
GSK



Panelist:

Jarrod Borkat
Senior Director, Partnering & Strategy,
MedImmune



Panelist:

Douglas Liu
Senior Vice President, Global Operations,
Qiagen



Panelist:

Donald L. Trump
CEO & Executive Director,
Inova Schar Cancer Institute

2:50 – 3:40 PM

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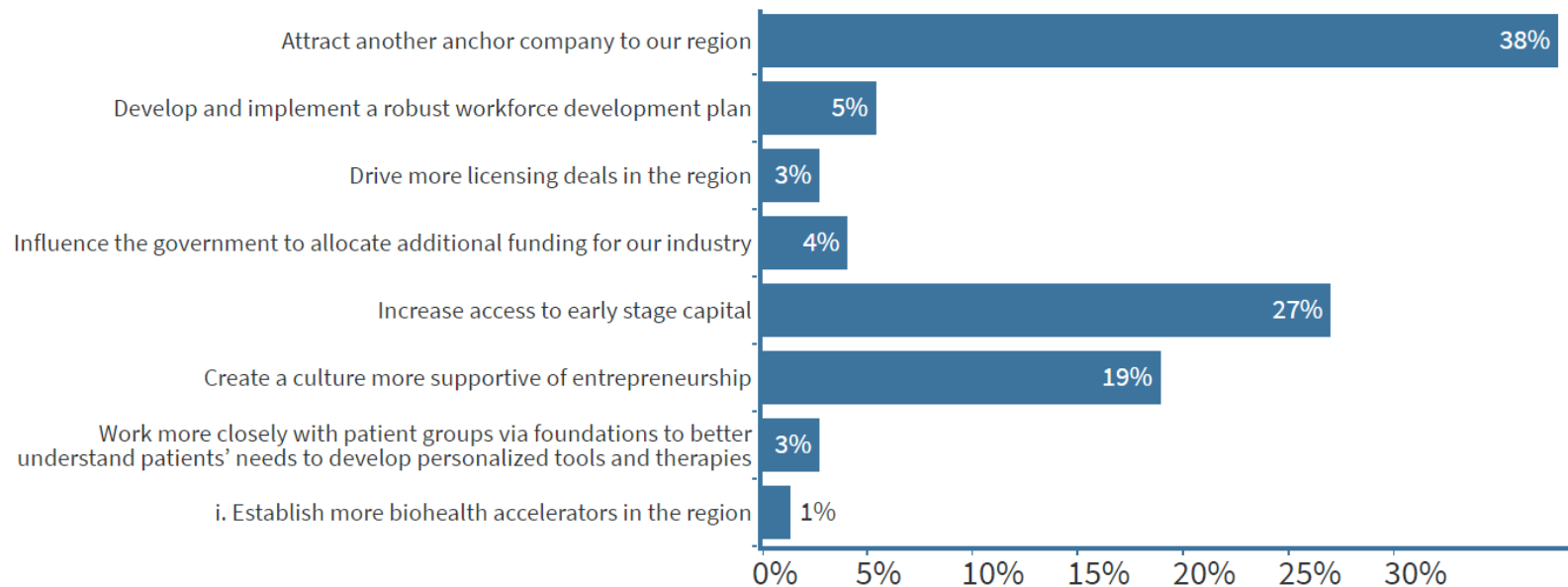
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In your opinion, what is the most important action that we need to take, as the BioHealth Capital Region, to continue to grow towards our vision of becoming a Top 3 BioTech Hub?

 **Poll locked.** Responses not accepted.



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The BHCR Has All of the Puzzle Pieces



We ALL need to work on connecting the pieces to become:



Top 3 by 2023

ONCOLOGY INNOVATION INITIATIVE



Bill Hearl
CEO,
Immunomic Therapeutics, Inc.



Rosemarie Truman
Founder & CEO,
The Center for Advancing Innovation

3:40 – 3:50 PM

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~CRAB TRAP~



Moderator:
Rich Bendis
President & CEO,
BioHealth Innovation Inc



Judge:
Shaun Grady
Vice President, Business Development Operations,
AstraZeneca



Judge:
Peter Jobse
Managing Director,
Inova Strategic Investments



Judge:
Jason Fuller
Principal, Washington DC,
New Enterprise Associates



Judge:
Paul Silber
Founding Principal,
Blu Venture Investors



Judge:
Robert Silverman
Head, External Drug Discovery,
Roche Partnering

3:50 – 5:00 PM

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~CRAB TRAP~ Presenters



Presenter: Alex Meltzer, COO + Co-Founder



Presenter: Kevin Colbert, Director of Operations



Presenter: Anthony Saleh,, PhD, CEO



Presenter: Crystal R Icenhour, PhD, CEO



Presenter: William L. Rust, CEO

3:50 – 5:00 PM

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For More Info...



BioHealthCapital.com



**20% of the top influencers
worldwide in vaccine
development**

MD | DC | VA

Our Goal: To become a Top 3 BioHealth Hub by 2023.

We are the research engine for the nation and the world. A lifeblood of support for taking new medicines to market. A place where health policymakers and patient advocates seek a better way forward. A home to the established and the startup, pioneering big ideas for human health and hope.

5:00 PM

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~CLOSE OF MEETING~ Thank You For Coming!



Save the Date... April 23 + 24, 2018

5:00 PM

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