MEETING AGENDA

Accessible Biomarkers of Pathogen Tissue Persistence: Identification and Optimization

December 7 - 10, 2025
The Banbury Center, Lloyd Harbor, New York

This meeting was organized by:
Amy Proal, PolyBio Research Foundation
Michael VanElzakker, Massachusetts General Hospital
Shannon Stott, Massachusetts General Hospital; Harvard Medical School
John Wherry, University of Pennsylvania

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PolyBio Research Foundation

SUNDAY, DECEMBER 7, 2025

Afternoon	Arrivals and check-in at Robertson House
6:00 pm	Reception and dinner

MONDAY, DECEMBER 8, 2025

7:15 am	Breakfast
8:30 am	WELCOME Rebecca Leshan, Banbury Center *Welcome, review of Banbury policies and logistics* Amy Proal, PolyBio Research Foundation *Welcome, meeting objectives*
8:55 am	SESSION 1: Why It Matters Tobias Lanz, Stanford University *Chronic diseases and EBV latency: advancements in detection*

Ricardo Maggi, North Carolina State University
Bartonella, breast cancer, and diagnostics

John Harley
Infectious drivers of autoimmune disease

10:40 am   SESSION 2: Immune Biosensors
Mark Painter, University of Pennsylvania
T cells as biosensors of persistent infection

Frances Eun-Hyung Lee, Emory University
MENSA: Pathogen immune snapshots

Felix Scholz, I-Labs
Antigen stimulation-based diagnostics

Plenary Discussion

12:20 pm   Luncheon

2:15 pm   SESSION 3: Extracellular Vesicles & Liquid Biopsy
Shannon Stott, Massachusetts General Hospital; Harvard Medical School
Microfluidic capture of viral particles in blood

Emma Wilson, University of California, Riverside
Neuronal EVs: immune triggers and indicators of chronic parasite infection

Alessandra Luchini, George Mason University
Bioseparation platforms for exploring accessible bacterial EV biomarkers: Borrelia as an example

4:00 pm   SESSION 4: Protein Detection & Nanotechnologies
Louise Hansen, Wyss Institute at Harvard University
Simoa for ultrasensitive pathogen protein detection

Michael Mina, Massachusetts Institute of Technology
Diagnostics: maximizing uptake

Plenary Discussion

6:00 pm   Reception and dinner

TUESDAY, DECEMBER 9, 2025

7:15 am   Breakfast

8:30 am   Introduction to Day Two

8:35 am   SESSION 5: Microbial DNA/RNA
Timothy Blauwkamp, Karius
Optimal identification of microbial cell-free DNA

Morgane Bomsel, Cochin Institute, Paris
Identification of host cell-associated pathogen genetic material

Sarven Sabunciyan, Johns Hopkins University
Liquid biopsies to detect viral infection

10:15 am   SESSION 6: Other Diagnostic Platforms
Jennifer Kyle, Pacific Northwest National Laboratory
Pan-virus host lipid signatures

Martha Clokie, University of Leicester
Phage-based diagnostics

Melanie Ott, Gladstone Infectious Disease Institute
CRISPR-based diagnostics for pathogen identification

Plenary Discussion

12:15 pm   Luncheon

2:00 pm   SESSION 7: Validation with Tissue
Benjamin Readhead, Arizona State University-Banner NDRC
Toward precision Alzheimer's: a salivary HCMV biomarker

Timothy Henrich, University of California, San Francisco
Maximizing unbiased sequencing of tissue (non-human)

Steven Deeks, University of California, San Francisco
Biomarker validation: lessons learned from HIV

3:45 pm   SESSION 8: Uptake – Making it Happen
Thomas Schaus, Wyss Institute at Harvard University
Diagnostic commercialization and uptake: making it happen

Mahdi Moqri, Harvard Medical School
Optimal validation of diagnostics

WEDNESDAY, DECEMBER 10, 2025

7:15 am   Breakfast

8:30 am   Introduction to Day Three

8:35 am   SESSION 9: Roadmap
Creating a Diagnostics Roadmap: Group Discussion

10:20 am   SESSION 10: Summary and Wrap-up
Summary of Meeting Discussions
Planning: Output, Next Steps, Responsibilities, Timelines

12:00 pm   Luncheon; Participant Departures

PARTICIPANTS

Timothy Blauwkamp, Karius

Morgane Bomsel, Cochin Institute, Paris

Martha Clokie, University of Leicester

Steven Deeks, University of California, San Francisco

Christopher Dupont, J. Craig Venter Institute

Louise Hansen, Wyss Institute at Harvard University

John Harley

Timothy Henrich, University of California, San Francisco

Sarah Kalloch, PolyBio Research Foundation

Jennifer Kyle, Pacific Northwest National Laboratory

Tobias Lanz, Stanford University

Frances Eun-Hyung Lee, Emory University

Alessandra Luchini, George Mason University

Ricardo Maggi, North Carolina State University

Michael Mina, Massachusetts Institute of Technology

Mahdi Moqri, Harvard Medical School

Melanie Ott, Gladstone Infectious Disease Institute

Mark Painter, University of Pennsylvania

Michael Peluso, University of California, San Francisco

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