PROGRAM GUIDE

Research and Innovation Translation Partnerships Conference and Technology Showcase:

Point of Care Technologies and Digital Health

APRIL 21–22, 2026

WILLIAM H. NATCHER CONFERENCE CENTER

NIH National Institute of Biomedical Imaging and Bioengineering

Contents

Welcome

It is our great pleasure to welcome you to this year's National Institutes of Health (NIH) Research and Innovation Translation Conference and Technology Showcase: Point of Care Technologies and Digital Health. We extend our sincere gratitude to NIH for their leadership and continued support for this important work. We also thank our distinguished speakers and panelists for sharing their insights and expertise, the Point of Care Technology Research Network (POCTRN) Centers for their groundbreaking research and dedication to advancing healthcare solutions, and our technology exhibitors for showcasing innovations that make this progress possible. Most importantly, we thank our attendees for joining us. Your participation, curiosity, and collaboration are what make this gathering so impactful. Together, your contributions create a dynamic forum for discovery, dialogue, and partnership that drives the future of point-of-care technology.

Warm Regards,

Tiffani Bailey Lash, Ph.D.
National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS

Atam Dhawan, Ph.D.
New Jersey Institute of Technology

Conference Organizers

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NIBIB, NIH

Atam P. Dhawan, Ph.D.
New Jersey Institute of Technology

Program Co-Chairs

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Shawn Mulvaney, Ph.D.
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Agenda

NIH Research and Innovation Translation Partnerships Conference and Technology Showcase: Point of Care Technologies and Digital Health

APRIL 21, 2026

Day 1

8:30 AM Auditorium	**Welcome Remarks and Conference Agenda** **Tiffani Bailey Lash, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Atam Dhawan, Ph.D.** New Jersey Institute of Technology
9:00 AM Auditorium	**Emerging Technologies in Action** **Bruce Tromberg, Ph.D., NIBIB Director** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Matthew Memoli, M.D., M.S., Principal Deputy Director** National Institutes of Health, DHHS **Nicole Kleinstreuer, Ph.D., OD** Division of Program Coordination, Planning, and Strategic Initiatives, NIH, DHHS *Introduced by:* **Tiffani Bailey, Lash, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS
10:15 AM	**Break**
10:30 AM Auditorium	**Distinguished Lecture: Heart Disease, Chronic Respiratory, Sleep Diseases: - Leveraging Data Science to Advance Precision Medicine Through Point of Care Technologies for Heart, Lung, Blood and Sleep Diseases** *Moderator:* **Jue Chen, Ph.D.** National Heart, Lung, and Blood Institute, NIH, DHHS **Blanca Himes, Ph.D.** National Heart, Lung, and Blood Institute, NIH, DHHS
11:15 AM Auditorium	**Distinguished Lecture: Cancer - Cancer Prevention/Control without Walls: Screening People Where They Live with Point-Of-Care Testing** *Moderator:* **Tony Dickherber, Ph.D.** National Cancer Institute, NIH, DHHS **Philip E. Castle, Ph.D., M.P.H.** National Cancer Institute, NIH, DHHS
12:00 PM	**Lunch**

	Optional Meet NIH Staff
1:00 PM	**Technical Track Breakout Sessions**
Balconies A, B	**Track 1: Heart Disease, Chronic Respiratory, Sleep Diseases** *Moderators:* **Bryan O. Buchholz, Ph.D.** University of Massachusetts **Apurv Soni, M.D., Ph.D.** University of Massachusetts *Panelists:* **Bryan Nolan** myBiometry **Alexandria Zozos, M.S., R.D.N., L.D.** EatLove **Monique Nadeau, M.P.A.** EatLove **Julia Finkelstein, Sc.D.** AnemiaPhone **Stephanie Willard, M.H.A.** Wellinks
Balcony C	**Track 2: Cancer** *Moderator:* **Tony Dickherber, Ph.D.** National Cancer Institute, NIH, DHHS *Panelists:* **David Erickson, Ph.D.** Cornell University **Aydogan Ozcan, Ph.D.** University of California Los Angeles **Rebecca Richards-Kortum, Ph.D.** Rice University **Philip Castle, Ph.D.** National Cancer Institute, NIH, DHHS
2:30 PM	**Break**
3:00 PM	**Rapid Pitches for Technology Showcase**
Auditorium	*Moderators:* **Kristin Gilchrist, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Rao L. Divi, Ph.D.** National Cancer Institute, NIH, DHHS

	Jessica Falcone, Ph.D. National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Atam Dhawan, Ph.D.** New Jersey Institute of Technology
4:00 PM Atrium	**Technology Showcase and Networking**
5:45 PM	**Non-Federally Sponsored Event: Optional Networking Event** See registration desk for location details

NIH Research and Innovation Translation Partnerships Conference and Technology Showcase: Point of Care Technologies and Digital Health

APRIL 22, 2026

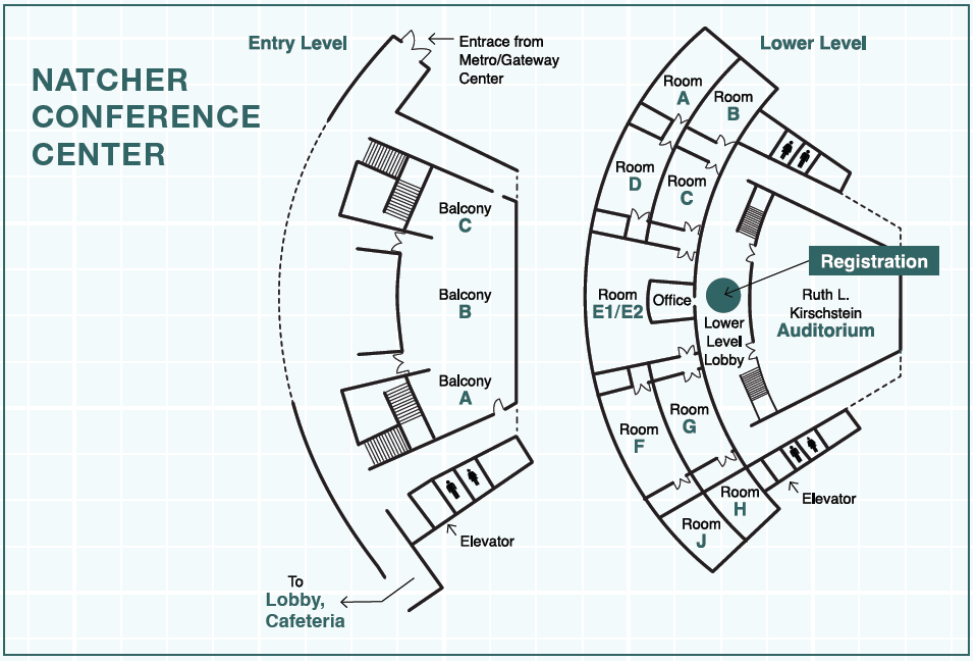
Day 2

8:30 AM Auditorium	**Welcome Remarks and Conference Agenda** **Tiffani Bailey Lash, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Atam Dhawan, Ph.D.** New Jersey Institute of Technology
9:00 AM Auditorium	**Keynote: Technology Innovation in Pregnancy, Pediatrics, and Gynecologic Health: NICHD's Investments in Diagnostics and Devices** **Rohan Hazra, M.D.** National Institute of Child Health and Human Development, NIH, DHHS
9:45 AM Auditorium	**Keynote: Catalyzing Research, Technology, and Innovation in Translational Science** **Annica M. Wayman, Ph.D.** National Center for Advancing Translational Sciences, NIH, DHHS
10:30 AM Auditorium	**Distinguished Lecture: Infectious Diseases - Cheap, Portable Sequencing as a Molecular Readout for Point-of-Care Diagnostics** *Moderator:* **Paul Eder, Ph.D.** National Institute of Allergy and Infectious Diseases, NIH, DHHS **Winston Timp, Ph.D.** Johns Hopkins University
11:15 AM Auditorium	**Distinguished Lecture: Maternal / Fetal / Pediatric Health - Pediatric and Maternal Health Technology: Perspectives of a Patient-Turned-Developer** *Moderator:* **Antonello Pileggi, M.D., Ph.D.** National Institute of Child Health and Human Development, NIH, DHHS **Rob Mannino, Ph.D.** Emory University, Sanguina, Inc.
12:00 PM	**Lunch** **Optional Meet NIH Staff**
1:00 PM Balconies A, B	**Technical Track Breakout Sessions** **Track 3: Infectious Diseases** *Moderator:* **Shawn Mulvaney, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS *Speakers:*

Balcony C	**Ben Larman, Ph.D.** Johns Hopkins University "Biomarker Discovery via Unbiased Antibody Reactome Profiling" **Karen Lacourciere, Ph.D.** National Institute of Allergy and Infectious Diseases, NIH, DHHS "NIAID Tuberculosis Diagnostics Support and Resources" **Nira Pollock, M.D., Ph.D.** Harvard University "Influenza A(H5N1) Preparedness Through a Diagnostic Lens" **Paul Sheehan, Ph.D.** Advanced Research Projects Agency for Health "Detection at the Speed of Biology: Ultra-fast Bacterial Identification and Antibiotic Susceptibility Testing"
	Track 4: Maternal / Fetal / Pediatric Health *Moderators:* **Homa K. Ahmadzia, M.D.** INOVA Health **Monica Longo, M.D., Ph.D.** National Institute of Child Health and Human Development, NIH, DHHS *Panelists:* **Neil P. Ray, M.D.** Raydiant Oximetry **Catherine Liao, Ph.D.** CONNEQT Health **Julie Navarro, M.S.N., R.N.** HemoSonics, LLC **Sheng Xu, Ph.D.** Softsonic and Stanford University **Steve Xu, M.D.** Northwestern University and Sibel Health
2:30 PM	**Break**
3:00 PM Auditorium	**Rapid Pitches for Technology Showcase** *Moderators:* **Kristin Gilchrist, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Rao Divi, Ph.D.** National Cancer Institute, NIH, DHHS **Jessica Falcone, Ph.D.** National Institute of Biomedical Imaging and Bioengineering, NIH, DHHS **Atam Dhawan, Ph.D.** New Jersey Institute of Technology

4:00 PM Auditorium	**Closing Remarks and Next Steps** **Atam Dhawan, Ph.D.** New Jersey Institute of Technology
4:15 PM Atrium	**Technology Showcase and Networking**
5:30 PM	**Conference Concludes**

Conference Center Floor Plan



ENTRY LEVEL

Atrium: POCTRN Centers and Technology Showcase

Balconies: Technical Track Breakout Sessions

Day 1:

Balconies A & B: Track 1 - Heart Disease, Chronic Respiratory, Sleep Diseases

Balcony C: Track 2 - Cancer

Day 2:

Balconies A & B: Track 3 - Infectious Diseases

Balcony C: Track 4 - Maternal/Fetal/Pediatric Health

LOWER LEVEL

Lobby: Registration, badges, and program

Auditorium: Plenary Session

Room A/B: Pop Up Meetings

Room C: Meet the NIH Luncheon

Room D: Quiet Room

Room E1/E2: Meet the NIH Luncheon

Room F: Matchmaking Meet Ups

Room G: Meet the NIH Luncheon

Room H: Speakers / POCTRN Centers Ready Room

CAFÉ HOURS

Breakfast: 7:00 am – 9:00 am

Lunch: 11:00 am – 2:00 pm

Please note that the Natcher cafeteria is open during the conference lunch breaks both days, and snacks and beverages will be available for purchase during conference breaks.

Vending Machines

Located in the gallery area of the upper level near the entrance from the Metro/Gateway Center.

ATM

Located in the lobby of the upper level near the elevators.

Wi-Fi

NIH Wireless Guest Service provides visitors with complimentary Wi-Fi.

NIBIB Director's Session: Emerging Technologies in Action

This section provides information on the organizations that will be presenting their technologies during the NIBIB Director's Session: Emerging Technologies in Action

Calla Health Foundation & Duke University: The Pocket Colposcope

https://callahealthfoundation.com/

The Pocket colposcope is an ultra-portable, high-resolution cervical imaging device designed for point-of-care use in low-resource settings. Small enough to be hand-held and speculum-compatible, it captures clinical-quality still images and video of the cervix without the need for extensive infrastructure or specialist operation. Its cost-effective design and intuitive interface enable non-specialist providers to acquire diagnostically useful images during routine exams, supporting earlier detection of precancerous changes. The device integrates with mobile platforms for secure storage, annotation, and AI-assisted analysis, making it a scalable tool for decentralizing cervical cancer screening and triage globally.

MagIC Lifescience: The MagChipR Platform

https://magiclifescience.com/

MagIC Lifescience, a Stanford spinout, is developing the MagChipR™ Platform that pairs patented GMR biosensors with ultra-fast PCR to deliver lab-quality pathogen and antimicrobial susceptibility results in under 20 minutes at the point of care. This test-and-treat model replaces delayed central-lab workflows and empiric prescribing. Same-visit results enable susceptibility-guided therapy, reduce callbacks, loss to follow-up, and total cost of care, improve outcomes, combat AMR, and unlock new reimbursable revenue streams for clinics.

Rivanna Medical: Accuro Ultrasound Guidance Platform

https://rivannamedical.com/

RIVANNA® is addressing critical procedural and diagnostic gaps in healthcare. The company's AI-powered decision-support platforms enable faster, more confident bedside decisions in neuraxial anesthesia guidance and extremity fracture detection. Backed by 100+ patents and validated across numerous academic medical centers, RIVANNA's products are on 510(k) FDA clearance pathways.

Softsonics: Wearable Ultrasound Monitor

https://curescendo.com/index.html

A wearable ultrasound system for continuous hemodynamic monitoring will be demonstrated. The technology enables noninvasive, operator-independent measurement of arterial blood pressure and vascular dynamics using a conformal ultrasound patch, providing real-time cardiovascular monitoring without the need for conventional ultrasound probes.

Technology Showcase

This section provides information on the organizations that will be presenting their technologies during the rapid pitch and showcase portions of the conference.

Day 1 Technologies

1. Baylor College of Medicine: The OpenFlexure Microscope

The OpenFlexure Microscope is a low-cost (~$300) telepathology platform designed to address critical diagnostic challenges in low- and middle-income countries. Utilizing 3D-printing technology and open-source design, the microscope provides laboratory-grade imaging capabilities with high precision. Because of its small size (15 x 15 x 20 cm, 500g), low energy consumption, and multi-cancer screening capabilities, the microscope offers a potential platform for point-of-care solutions. Furthermore, its simple design and components make it suitable for local manufacturing and maintenance. It features a customizable design, a high precision translation stage, compact optics module, integrated digital camera, and a computer for user-friendly whole tissue imaging. The high-resolution photographs are stored on the device on-site for secure cloud upload when connectivity is available, enabling remote diagnosis by pathologists.

2. Calla Health Foundation & Duke University: The Pocket Colposcope

https://callahealthfoundation.com/

The Pocket colposcope is an ultra-portable, high-resolution cervical imaging device designed for point-of-care use in low-resource settings. Small enough to be hand-held and speculum-compatible, it captures clinical-quality still images and video of the cervix without the need for extensive infrastructure or specialist operation. Its cost-effective design and intuitive interface enable non-specialist providers to acquire diagnostically useful images during routine exams, supporting earlier detection of precancerous changes. The device integrates with mobile platforms for secure storage, annotation, and AI-assisted analysis, making it a scalable tool for decentralizing cervical cancer screening and triage globally.

3. Case Western Reserve University: Point-of-care Non-Invasive Fluorescent Immunoassay Rapid Test for Oral Squamous Cell Carcinoma

www.hemexhealth.com

Oral cancer, which claims the lives of hundreds of thousands of people worldwide every year, is currently diagnosed through a costly, painful and often overused procedure involving a scalpel biopsy. We have developed and validated a non-surgical, painless and highly sensitive laboratory test that measures the ratio of two key proteins from swabbed oral tissue that can help clinicians determine if a lesion is likely to be cancerous, and therefore, if a biopsy is truly necessary. After designing a low-cost rapid lateral flow based chairside test to replace the lab test, we now wish to generate prototypes to evaluate its precision, accuracy and ease of use, testing it in humans to detect oral cancer and eventually utilize it in low and middle-income countries where oral cancer is highly prevalent.

4. Cornell University: KS-Complete & Magnilyzer

Point of care technologies for diagnosing Kaposi's Sarcoma and for processing TB samples in limited resource settings.

5. Duke University & SimplusDx: A POC Platform for HCC Screening and Other High-Need Applications

https://simplusdx.com/

https://chilkotilab.pratt.duke.edu/

We will present a versatile point-of-care testing platform capable of high-sensitivity, multiplexed, and quantitative immunoassays directly from whole blood. After more than a decade of research and development at Duke University, this technology is now being commercialized by SimplusDx. Our showcase will demonstrate the D4 platform's portability, ease-of-use, and rapid workflow using simulated samples, with a focus on screening for hepatocellular carcinoma through multiplexed biomarker panels and machine learning-driven recommendations. We will also highlight initiatives such as tacrolimus therapeutic drug monitoring, underscoring the platform's broad utility across oncology, transplant medicine, and beyond.

6. GPx: CardioID

https://www.gpx.ai

General Prognostics (GPx) is developing AI-enabled diagnostics that transform passive physiological data from consumer wearables into clinically actionable biomarkers. Our platform, CardioID, analyzes multimodal signals—such as photoplethysmography (PPG), heart rate variability, and activity patterns—from widely available smartwatches to estimate changes in NT-proBNP, a key biomarker used to diagnose and monitor heart failure.

In prospective clinical research, CardioID demonstrated strong predictive performance for biomarker-defined heart failure instability (AUC 0.87), showing that passive wearable physiology can anticipate clinically meaningful changes in NT-proBNP.

By converting everyday wearable data into biomarker-level insights, CardioID enables continuous, non-invasive monitoring outside traditional healthcare settings. This approach has the potential to improve early detection of disease deterioration, expand access to monitoring, and support more proactive management of heart failure. CardioID is being developed as a software-as-a-medical-device (SaMD), with an FDA submission planned in 2Q 2026.

7. Hemorai: Vysio™

Vysio™ is a wearable, noninvasive hemodynamic monitoring platform powered by Speckle Plethysmography (SPG), an optical technique that directly measures microvascular blood flow dynamics instead of depending solely on volumetric pulse changes. By capturing both vascular expansion and flow-related signals, Vysio offers richer physiological insights than traditional photoplethysmography (PPG), allowing for earlier detection of blood loss and perfusion issues. Designed for intraoperative, postoperative, and high-risk obstetric patients, including those at risk of postpartum hemorrhage, Vysio combines a lightweight optical patch with built-in processing and wireless connectivity to deliver continuous, real-time monitoring—whether in the operating room, at the bedside, or in low-resource and at-home care environments. The platform is engineered to be less affected by skin-tone variations and motion artifacts, overcoming common limitations of standard optical sensors. Vysio aims to enhance

early detection of hemodynamic instability—supporting clinicians in preventing adverse events, reducing ICU escalations, and promoting equitable, precise monitoring at the point of care.

8. InnoTech Precision Medicine, Inc: Recognize™

https://innotechprecisionmed.com/

InnoTech Precision Medicine is developing Recognize™, a point-of-care platform technology designed to democratize access to advanced cancer diagnostics by bringing rapid, integrated testing closer to the patient. Built for use in real-world clinical settings, Recognize™ uses a simple, non-invasive sample and multiplexed multiomics to detect both cancer-risk and cancer-progression markers in a single assay, enabling more actionable and timely decision-making. Our first indications focus on HPV-driven cancers, including oropharyngeal squamous cell carcinoma (OPSCC), cervical cancer, and anal cancer, where earlier and more precise identification of biologic risk could support better triage, referral, and intervention. By combining multiple classes of biomarkers into one scalable platform, InnoTech aims to make high-value, precision diagnostics more accessible, practical, and impactful across diverse care settings.

9. Oxygen Alarms: AIRS Oxygen Flow Monitor

www.oxygenalarms.com

Following hospital discharge, patients who require supplemental oxygen often receive little to no ongoing monitoring. However, oxygen needs change throughout the day, particularly during physical activity or sleep, and may require adjustments to maintain appropriate oxygen levels. Oxygen demand may also increase during infection or disease flare-ups, making timely monitoring even more important. In addition, common equipment issues—such as disconnected tubing, depleted batteries, or empty oxygen tanks—can interrupt oxygen delivery and place patients at risk.

AIRS is committed to ensuring that individuals who rely on supplemental oxygen have access to reliable remote monitoring solutions. By providing real-time visibility into oxygen therapy, our technology helps identify potential issues quickly and supports care decisions. Recognizing that oxygen requirements may vary over time, AIRS is bringing telemedicine to supplemental oxygen therapy. Our solutions support accurate oxygen titration while offering peace of mind to patients, caregivers, and families, helping them truly “Breathe Easy.”

10. Percy Sleep

https://www.percysleep.com/

Percy is a B2B2C med-tech business that is transforming how doctors diagnose and treat sleep problems. Percy's technology is a non-video, contactless sensor collection device and AI-enabled SaaS platform that provides real-time data collection and analysis of a user’s environment and overt habits to replace the need for patients to self-report what happens at night. Unlike most sleep trackers that measure sleep quality, Percy helps doctors pinpoint why a patient is getting poor sleep and how to fix it.

11. Rivanna Medical: Accuro Ultrasound Guidance Platform

https://rivannamedical.com/

RIVANNA® is addressing critical procedural and diagnostic gaps in healthcare. The company's AI-powered decision-support platforms enable faster, more confident bedside decisions in neuraxial anesthesia

guidance and extremity fracture detection. Backed by 100+ patents and validated across numerous academic medical centers, RIVANNA's products are on 510(k) FDA clearance pathways.

Accuro® 3S is RIVANNA's neuraxial guidance platform, the first FDA-cleared AI-enabled real-time guidance system for neuraxial anesthesia. It features automated spinal landmark detection that identifies midline and measures depth to the epidural space, powered by SpineNav-AI™. Continuous, in-plane needle tip tracking confirms needle position and trajectory throughout advancement, delivered by SafeTrack™. The Dual-Array™ probe and stabilizing patient drape enable midline needle access and focused needle control. Collectively, these components enable Accuro 3S to provide a complete single-operator workflow without the training burden associated with conventional ultrasound.

12. Sanguina: Ruby Health

https://sanguina.com/

Ruby Health is a non-invasive smartphone app that allows you to monitor your blood health using a fingernail selfie.

13. TIVRA Health Inc.

https://www.tivrahealth.com/

TIVRA Health is a digital health infrastructure platform designed to translate continuous physiological data into clinically meaningful insight. As healthcare shifts from episodic encounters to continuous monitoring, TIVRA enables researchers, clinicians, and technology developers to integrate data from wearable sensors, point-of-care devices, and behavioral inputs within a unified, secure environment. The device-agnostic platform structures high-frequency patient-generated data into longitudinal health signals that support earlier detection of physiological changes and more responsive clinical decision-making. By transforming fragmented data streams into interpretable trends over time, TIVRA helps bridge the gap between continuous sensing technologies and real-world clinical use.
TIVRA collaborates with academic researchers, healthcare organizations, and digital health innovators to accelerate the translation of continuous monitoring technologies into scalable applications across maternal health, cardiovascular disease, oncology survivorship, and chronic disease.

14. Tufts University: Precision Metering of Dried Plasma for Decentralized Diagnostics

http://macelab.org

There has been a notable increase in decentralized sample collection to facilitate diagnostic testing or wellness screening conducted by clinical laboratories. Plasma—not blood—is desired to access a majority of the diagnostic testing menu available to patients. Ideally, samples of plasma, which are dried after collection to facilitate stable specimen transport by mail, contain discrete and reproducible volumes that maintain the high purity expected from liquid plasma. We have developed a plasma metering card (PMC) that can divide microsampled plasma from whole blood into multiple, replicate zones and enable hematocrit-independent sampling. These PMCs have the potential to support the rapid growth of decentralized clinical testing by empowering patients to self-collect samples.

15. University of Arizona: WareCare (mmWave-based fall Assessment and pRevEntion)

https://radar.ece.arizona.edu/

We present WARE-Care, an end-to-end, privacy-preserving mmWave radar system for mobility assessment and fall detection designed for real-world deployment in residential care facilities, particularly during low-light night-time hours. Building on our analytics for Balance, Sit-To-Stand (STS), Gait, Timed-Up-and-Go (TUG), and Upper-Extremity Function (UEF), WARE-Care unifies assessment and monitoring in a single non-contact pipeline that avoids identifiable imagery while capturing clinically meaningful movement signatures.

16. University of Notre Dame: Paper Analytical Devices (PADs)

https://padproject.nd.edu/

PADs are a "lab on paper" that detects pharmaceuticals, including multiple chemotherapy products, that contain the wrong type or quantity of ingredients. Preparing and testing a sample takes under 7 minutes; only the PAD and water are required. The PADreader is a mobile app that reads the test result; it is integrated with VERIFY, a software system that tracks sample data and test results. PADs have detected bad quality pharmaceuticals in Kenya, Malawi, Ethiopia, Bangladesh, and Tanzania.

Day 2 Technologies

1. AmplifiDx, Inc.: STI NG Plus Test on DX 100

https://www.amplifidx.com/

AmplifiDx is developing the DX 100, a rapid molecular point-of-care platform enabling multiplex detection of sexually transmitted infections directly from vaginal swabs or urine. The STI NG Plus test uses extraction-free, proprietary Ampli-LITE chemistry to detect Chlamydia trachomatis, Neisseria gonorrhoeae, Trichomonas vaginalis, and antimicrobial resistance markers with PCR-level sensitivity and results in ~15 minutes. Designed for true point-of-care settings, the system requires <1 minute hands-on time and delivers single-cartridge, sample-to-answer testing suitable for clinics, urgent care, and outreach programs. By enabling rapid test-to-treat decisions, the platform aims to improve STI management, reduce unnecessary antibiotic use, and expand access to accurate molecular diagnostics in community and women's health settings.

2. Aviro Health: Pocket Clinic

https://www.avirohealth.com/

Aviro's Pocket Clinic is a suite of quick and easy to customize digital tools that combine: (1) User-friendly data collection and patient/research management for health workers; with (2) Patient engagement, navigation and reporting.

Secure and compliant, Pocket Clinic offers:
Established integrations for data retention, regulatory submissions, and trial management in compliance with global standards (ICH GCP, FDA 21 CFR Part 11, EU Annex 11)
- Fast, flexible adaptation to different protocols, diagnostic tools, languages, services, and external data sources.
- Low resource setting friendly stack - low cost with offline capabilities and relevant channels/design (for

example: WhatsApp, multiple languages).

From recruitment through to surveillance, Pocket Clinic promotes and tracks key behaviours, enhances data, and delivers real-time insights through point-of-care diagnostic pathways to improve outcomes and costs.

3. Cornell Joan Klein Jacobs Center for Precision Nutrition and Health: AnemiaPhone

https://www.cpnh.cornell.edu/

The AnemiaPhone, developed at Cornell University, is a low-cost, easy-to-use diagnostic tool that assess iron deficiency (a leading cause of anemia) using just a finger-stick blood sample and a rapid reader. Its adoption in India was marked by a technology transfer at no cost to the Indian Council of Medical Research (ICMR), enabling its integration into national programs like Anemia Mukt Bharat to facilitate rapid, point-of-need screening and treatment across the country. Read more about it in this Cornell Chronicle story: “New Cornell tech to evaluate anemia to be used across India” (Cornell Chronicle, Dec 2, 2024).

4. CurieDx: StrepAI

https://www.curiedx.com/

CurieDx is a digital health company turning smartphones into diagnostic tools. Our flagship product, StrepAI, screens for strep throat from a throat image, using computer vision and digital biomarkers. Built with clinical rigor and advancing through FDA pathways, with other conditions such as rash, pink eye, and UTI in development, CurieDx is transforming access to care by bringing fast, accurate diagnostics directly to patients and clinicians. CurieDx is a lab in your pocket.

5. Drizzle Health

https://www.drizzlehealth.com/

Almost every infectious disease test fails for the same reason: the sample. Most samples are too dilute, heterogeneous, or high volume for detection chemistry to work reliably. Tests miss up to 80% of targets not because the assay is bad, but because the input is. No amount of PCR or immunoassay optimization fixes a bad sample.

Drizzle solves the input layer for any pathogen, sample type, or downstream method. Our pathogen-matched polymer surfaces selectively capture and concentrate organisms directly from raw samples—no enrichment steps or dilution loss. The same test you run today reads 20× more targets tomorrow. In IRB-approved TB studies, Drizzle increased smear microscopy sensitivity by 60–100% at $2 per test, approaching $25 PCR performance. Platform tunes to typhoid in urine, E. coli in food and wastewater, detecting <1 CFU/mL where standard methods return zero. Founded by Johns Hopkins alumni. Backed by NIH NIBIB, Open Philanthropy, and NAM.

6. HemoSonics, LLC: Hemostasis Management with Quantra Analyzer

The Quantra System is a hemostasis analyzer that uses SEER (Sonic Estimation of Elasticity via Resonance) technology to measure changes in viscoelastic properties during coagulation ex vivo. Testing workflow use a 1-2-3 push in, press down, press start process with a whole blood sample to receive a rapid coagulation assessment during an acute bleeding episode. The rapid results and intuitive interpretation are designed for point of care use when seconds can mean survival from hemorrhage.

7. Intuitive Biosciences: HIV-EV

https://intuitivedx.com/

Intuitive Biosciences is developing a novel at-home lateral flow immunoassay (LFIA) for early detection of acute HIV-1 infection using a simple finger-stick blood sample. Unlike current HIV diagnostics that rely on antibody or combined antigen/antibody approaches, this test uses an antigen-only strategy that detects HIV proteins associated with circulating extracellular vesicles (EVs) in blood. The assay immunocaptures EVs directly within the lateral flow device, enriching HIV antigens, followed by on-strip lysis to release and detect targets p24 and Nef.

By concentrating viral antigens within EVs, the approach enables earlier detection—potentially within three weeks of exposure—in an over-the-counter format from finger-stick blood, with results available in under 30 minutes. The platform integrates EV immunocapture, vesicle lysis, and antigen detection in a single disposable device designed for self-testing. This next-generation diagnostic aims to provide high sensitivity and specificity for early HIV detection, enabling earlier diagnosis and improved public health impact.

8. MagIC Lifescience: The MagChipR Platform

https://magiclifescience.com/

MagIC Lifescience, a Stanford spinout, is developing the MagChipR™ Platform that pairs patented GMR biosensors with ultra-fast PCR to deliver lab-quality pathogen and antimicrobial susceptibility results in under 20 minutes at the point of care. This test-and-treat model replaces delayed central-lab workflows and empiric prescribing. Same-visit results enable susceptibility-guided therapy, reduce callbacks, loss to follow-up, and total cost of care, improve outcomes, combat AMR, and unlock new reimbursable revenue streams for clinics.

9. mPOD, Inc. and Azure: SimplifiDx

Azure and mPOD are developing a fully integrated, next-generation OTC testing platform - SimplifiDx. Leveraging Azure's proven fluorescent lateral flow (FIA) technology in combination with mPOD's low-cost ML-driven reader, SimplifiDx brings POC performance to at-home/OTC settings in a highly accessible, simplified one-step sample collection package, usable even by those with visual and dexterity impairments for less than $5/test.

10. Novel Microdevices, Inc.: Novel Dx

https://noveldx.com/

Novel Microdevices is a Baltimore-based molecular diagnostics company that has developed NovelDx, an ultra-rapid, portable PCR platform designed to bring laboratory-quality molecular testing directly to

decentralized healthcare settings. The system integrates automated sample preparation, magnetic bead-based extraction and purification, rapid PCR amplification, and six-channel real-time multiplex detection in a compact, sample-to-answer instrument capable of delivering results in about 15 minutes. The platform can process up to 1 mL of raw clinical specimen, enabling testing from a wide range of sample types including swabs, urine, saliva, and blood while maintaining high analytical sensitivity. Initial assays target respiratory infections (Flu A/B, RSV, and COVID-19) and sexually transmitted infections, with a broader test menu in development spanning women's health, antimicrobial resistance detection, and a wide range of infectious disease panels to support decentralized diagnostics globally.

11. Pregnancy Health Monitoring

https://irp.nih.gov/pi/amir-gandjbakhche

A multimodal sensor based on functional Near Infrared technology in detecting the placental oxygenation, maternal heart rate and respiratory rate, fetal movements, and uterine contractions will be shown. Pilot clinical study results demonstrating the feasibility of the sensor in the real-time continuous monitoring of transabdominal fetal-maternal- placental physiological parameters to detect at-risk pregnancies and guide timely clinical interventions will be presented. It will be a live demonstration of the sensor on multi-layer phantoms.

12. Prompt Diagnostics: Prompt Dx PCR Platform

https://prompt-dx.com/

Prompt Diagnostics is developing a portable, sample-to-answer molecular diagnostic platform that brings lab-quality testing directly to the point of care. The company has developed a magnetofluidic cartridge technology that automates nucleic acid extraction and PCR from complex samples, enabling rapid, quantitative detection of HIV viral load and sexually transmitted infections without centralized laboratory infrastructure. Backed by the NIH, RADx, CARB-X, the Gates Foundation, and collaborations with Johns Hopkins University and Northwestern point-of-care technology research network centers, Prompt Diagnostics is advancing its HIV viral load test toward FDA clearance with a subsequent launch of a highly multiplexed STI panel on the same platform. The company's flexible architecture supports detection of DNA, RNA, and protein targets across a wide range of sample types, positioning it as a versatile solution for infectious disease management in resource-limited and decentralized care settings.

13. Rhinoswab Junior

https://www.rhinomed.global/

Rhinoswab Junior's standardized and comfortable sample collection process empowers children to take their own sample under adult supervision. Less intrusive, more comfortable & pain free, Rhinoswab Junior reduces anxiety in children and their parents over testing in both clinical and at home settings. Rhinoswab Junior's child friendly features add distraction and fun to the testing process.

14. Sibel Health: ANNE Maternal

https://sibelhealth.com/

ANNE Maternal is an FDA-cleared wireless intrapartum monitoring platform that leverages advanced wearable sensors, mobile devices, and central monitoring.

15. Softsonics: Wearable Ultrasound Monitor

https://curescendo.com/index.html

A wearable ultrasound system for continuous hemodynamic monitoring will be demonstrated. The technology enables noninvasive, operator-independent measurement of arterial blood pressure and vascular dynamics using a conformal ultrasound patch, providing real-time cardiovascular monitoring without the need for conventional ultrasound probes.

16. University of Minnesota: nuBorn SMART Bottle

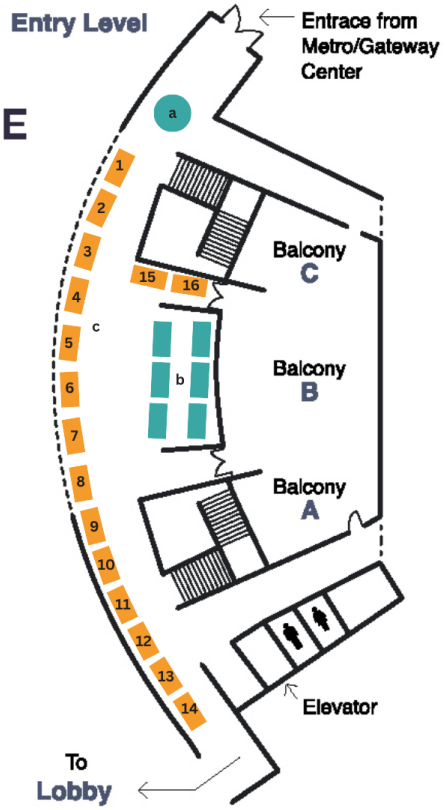
https://www.nubornmedical.com/

It is estimated that up to 25% of infants will suffer from feeding impairments that contribute to impairments in respiratory health and nutritional compromise. Current methods of diagnosing, and thereby treating these impairments, requires the completion of a radiographic exam that exposes infants to harmful radiation and are only offered at large medical centers. The SMART bottle offers a non-invasive method of infant feeding assessment that can be conducted during a typical bottle feed within any setting.

Exhibitor Maps

Day 1

NATCHER CONFERENCE CENTER

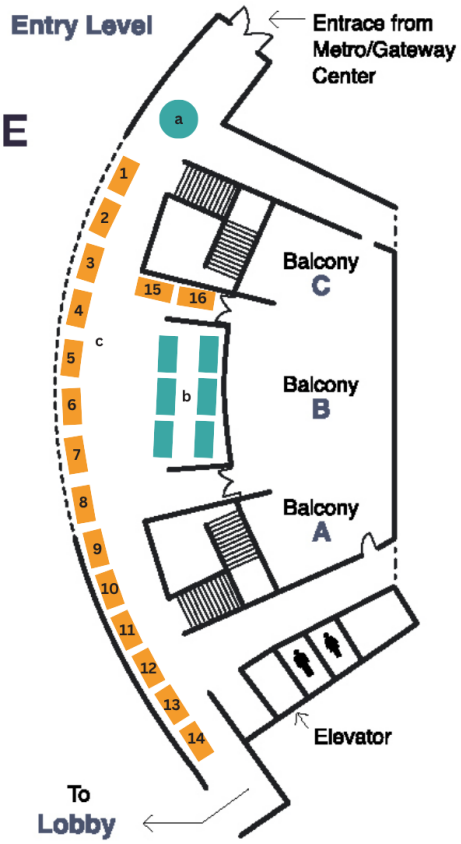


a. Exhibitor Welcome Desk
b. POCTRN Centers
c. Technology Exhibits
1. Baylor College of Medicine: The OpenFlexure Microscope
2. Calla Health Foundation & Duke University: The Pocket Colposcope
3. Case Western Reserve University: Point-of-care Non-Invasive Fluorescent Immunoassay Rapid Test for Oral Squamous Cell Carcinoma
4. Cornell University: KS-Complete & Magnilyzer
5. Duke University & SimplusDx: A POC Platform for HCC Screening and Other High-Need Applications
6. GPx: CardioID
7. Hemorai: Vysio™
8. InnoTech Precision Medicine, Inc: Recognize™
9. Oxygen Alarms: AIRS Oxygen Flow Monitor
10. Percy Sleep
11. Rivanna Medical: Accuro Ultrasound Guidance Platform
12. Sanguina: Ruby Health
13. TIVRA Health Inc.
14. Tufts University: Precision Metering of Dried Plasma for Decentralized Diagnostics
15. University of Arizona: WareCare (mmWave-based fall Assessment and pRevEntion)
16. University of Notre Dame: Paper Analytical Devices (PADs)

Exhibitor Maps (continued)

Day 2

NATCHER CONFERENCE CENTER



a. Exhibitor Welcome Desk
b. POCTRN Centers
c. Technology Exhibits
1. AmplifiDx, Inc.: STI NG Plus Test on DX 100
2. Aviro Health: Pocket Clinic
3. Cornell Joan Klein Jacobs Center for Precision Nutrition and Health: AnemiaPhone
4. CurieDx: StrepAI
5. Drizzle Health
6. HemoSonics, LLC: Hemostasis Management with Quantra Analyzer
7. Intuitive Biosciences: HIV-EV
8. MagIC Lifescience: The MagChipR Platform
9. mPOD, Inc. and Azure: SimplifiDx
10. Novel Microdevices, Inc.: Novel Dx
11. Pregnancy Health Monitoring
12. Prompt Diagnostics
13. Rhinoswab Junior
14. Sibel Health: ANNE Maternal
15. Softsonics: Wearable Ultrasound Monitor
16. University of Minnesota: nuBorn SMART Bottle

POCTRN Centers

The evolving healthcare system includes new delivery models in which primary care physicians and nurses are assuming more significant roles, with the patient more involved in decision-making and self-care. These changes require the development of inexpensive and easy-to-use medical devices and information sharing tools that provide timely health status information at the point of care (POC). NIBIB created the Point-of-Care Technologies Research Network (POCTRN) to drive the development of POC technologies through collaborative efforts that merge scientific and technological capabilities with clinical need.

For more information on the POCTRN coordinating center website.

Atlanta Center for Microsystems Engineered Point-of-Care Technologies (ACME POCT)

Emory University, Georgia Tech, and Children's Healthcare of Atlanta

https://www.acmepoct.org/

The Atlanta Center for Microsystems Engineered Point-of-Care Technologies (ACME POCT) is a nationally renowned academic partnership between Emory University, Georgia Tech, and Children's Healthcare of Atlanta. We were founded in 2018 as part of the National Institutes of Health Point-of-Care Technology Research Network (POCTRN).

Our mission is to foster collaboration among clinicians, technologists, and entrepreneurs to accelerate innovation and translation of microsystems-engineered technologies including microchip-enabled devices such as microelectromechanical systems (MEMs)-based sensors, microfluidics, and smartphone-based systems.

Center for Advancing Point-of-Care Technologies (CAPCaT) in Heart, Lung, Blood, and Sleep Disorders

University of Massachusetts Chan Medical School, Worcester, and University of Massachusetts at Lowell

Center for Innovation and Translation of Point-of-Care Technologies for Equitable Cancer Care (CITEC)

Rice University

https://rice360.rice.edu/citec

The Center for Innovation and Translation of POC Technologies for Expanded Cancer Care Access (CITEC) is a collaboration of bioengineers, oncologists, and international global health partners that will unite a global community of investigators to develop and effectively disseminate point-of-care technologies to detect and treat cancer.
Our collaboration spans three continents and seven organizations, including prominent partnerships within Brazil and Mozambique, Rice360 Institute for Global Health Technologies, Baylor College of Medicine, and The University of Texas MD Anderson Cancer Center.

Under the NIH Point of Care Technology Research Network (POCTRN), our mission is to develop affordable, effective point-of-care technologies that improve early cancer detection in low-resource

settings. Point-of-care technologies deliver health care closer to patients, making care timelier and more convenient, ultimately leading to better health outcomes for the community.

CITEC supports development of POC technologies to promote high priority topics of NIH cancer research, including precision approaches to prevention, screening and early detection, improving cancer outcomes, and building a workforce able to translate POC technologies from research and development to implementation. CITEC works to have a major impact on prevention, diagnosis and early treatment of cancer in the US and worldwide and works with the POCTRN network to build a strong team of partners to strengthen and sustain POC technology development.

Center for Innovation in Point-of-Care Technologies in HIV/AIDS and Emerging Infectious Diseases at Northwestern (C-THAN)

Northwestern University
https://www.poctrn.org/-/c-than

C-THAN leadership will be present to discuss funding, resources, and collaboration opportunities.

Center for Innovative Diagnostics for Infectious Diseases (CIDID)

Johns Hopkins University School of Medicine

https://jhcidid.org/

The Johns Hopkins Center for Innovative Diagnostics for Infectious Diseases (CIDID) has been part of the Point-of-Care Technologies Resource Network (POCTRN) since 2007. The Center focuses on eight different infectious disease areas including, sexually transmitted infections (STIs), HIV/AIDS, respiratory viruses, tuberculosis, acute febrile illness, Hepatitis C, diarrheal disease, and malaria.

The Center's mission is to promote the development of accessible infectious diseases diagnostics through multidisciplinary innovation along the development pipeline from research to impact in different global settings. Companies that have been funded by the Center have gone on to raise more than $200 million in follow-on funding. At the Center, we place a special emphasis on frugal innovation in diagnostic development to improve the likelihood of adoption to impact public health in the US and in low-resource settings.

Point of Care Technologies for Nutrition, Infection, and Cancer for Global Health (PORTENT)

Cornell University
https://pochealth.cornell.edu/

PORTENT advances promising Point of Care technologies through technology development, human validation, user and developer training and rotations, and commercialization. PORTENT translates breakthrough point-of-care diagnostics into rapid, affordable tests that reduce the burden of chronic disease, curb infectious threats, and strengthen prevention efforts across the United States and Internationally. By integrating technology development with clinical validation, training, and lab-to-market programs, PORTENT accelerates earlier detection of conditions - from diabetes, cancers, heart

disease to emerging infections - so providers can intervene sooner, patients stay healthier, and health care costs decline.

Meet the NIH Program Staff Lunch – Day 1

Below you may find the names and locations of NIH program staff who will be hosting conversations during lunchtime on Day 1 of the conference.

Meet the NIH Lunch: Tuesday April 21st

Room	Table #	Name (First, Last, Title)	IC	Portfolio Title or Area of Expertise:
E1/E2	1	Candace Tingen	NICHD	Branch Chief Women's Health & Gynecology
E1/E2	2	Jessica Falcone	NIBIB	Medical Devices and Bioelectronics
E1/E2	3	Elisabet Caler, Ph.D.	Office of AIDS Research, OD	HIV/Infectious Disease
E1/E2	4	Paul Eder, Ph.D., Senior Scientific Officer	NIAID/DMID	Infectious Disease Diagnostics
E1/E2	5	Qi Duan, Program Director	NIBIB	Data Science, Image Processing, Visualization, and Perception
E1/E2	6	Julio Aliberti, Ph.D.	OD/OAR	HIV
E1/E2	7	Afrouz Anderson, Program Director	NIBIB	Optical Imaging and Spectroscopy, Biophotonics
E1/E2	8	Stephanie Davis	NHLBI DLD	Small Business Program Coordinator
E1/E2	9	Tom Hu	NHLBI	Diagnostic Imaging and Drug/Device Development
E1/E2	10	Leah Croucher, Program Officer	NCATS	Diagnostics
E1/E2	11	Stacie Gutowski, Ph.D.	NIBIB	Small Business Programs & RADx Tech
E1/E2	12	Shawn Mulvaney, Ph.D.	NIBIB	Bioanalytical Sensors & RADx Tech
C	13	Jonathan Kulwatno	NIBIB	Biomaterials; Biomanufacturing; Screening Tools
C	14	Tina Gatlin, Program Director	NIBIB	Training & Career Development
C	15	Randy King Ph.D.	NIBIB	Ultrasound/Photoacoustics
C	16	Moria, Bittmann, Ph.D.	NIBIB	Robotics, Bionics, Medical Simulation
G	17	Sahana Kukke, Program Leader	OD, Office of Strategic Coordination, the Common Fund	AI for precision medicine, data science training, rigor and replicability
G	18	Tony Dickherber, Program Director	NCI	Cancer Technologies
G	19	Michelle Hamlet, Ph.D., Program Leader	OD/Office of Strategic Coordination	Multidisciplinary
G	20	Manbir Singh	BARDA	BARDA Ventures and BARDA Accelerator Network
		Eun Mi Lee, Biologist	BARDA	Diagnostics

Meet the NIH Program Staff Lunch – Day 2

Below you may find the names and locations of NIH program staff who will be hosting conversations during lunchtime on Day 2 of the conference.

Meet the NIH Lunch: Wednesday April 22nd

		First, Last, Title)	IC	Portfolio Title or Area of Expertise:
E1/E2	1	Candace Tingen	NICHD	Branch Chief Women's Health & Gynecology
E1/E2	2	Jessica Falcone	NIBIB	Medical Devices and Bioelectronics
		Tuba Fehr, Ph.D.	NIBIB	Cellular and Multicellular Technologies
E1/E2	3	Elisabet Caler, Ph.D.	Office of AIDS Research, OD	HIV/Infectious Disease
E1/E2	4	Paul Eder, Ph.D., Senior Scientific Officer	NIAID/DMID	Infectious Disease Diagnostics
E1/E2	5	Qi Duan, Program Director	NIBIB	Data Science, Image Processing, Visualization, and Perception
E1/E2	6	Julio Aliberti, Ph.D.	OD/OAR	HIV
E1/E2	7	Afrouz Anderson, Program Director	NIBIB	Optical Imaging and Spectroscopy, Biophotonics
E1/E2	8	Stephanie Davis	NHLBI DLD	Small Business Program Coordinator
E1/E2	9	Tom Hu	NHLBI	Diagnostic Imaging and Drug/Device Development
E1/E2	10	Leah Croucher, Program Officer	NCATS	Diagnostics
E1/E2	11	Kari Ashmont, Ph.D.	NIBIB	Small Business
E1/E2	12	Michael Wolfson, Ph.D.	NIBIB	RADx Tech, Blueprint MedTech
C	13	Behrouz Shabestari, Division Director	NIBIB	Medical Imagin, AI, Optical Imaging, Computed Tomography, and all general question about NIBIB and NIH
C	14	Sonia Lee, Branch Chief Maternal Pediatric Infectious Disease Branch	NICHD	HIV and Infectious Disease; Behavioral and Social Science; Pediatrics/Adolescents
C	15	Sai Majji	NICHD	Maternal and Pediatric Infectious Disease Branch
C	16	Leonardo Angelone	NIDA	Medical Devices, Digital Health (Substance Use, Addiction)
G	17	Nicole Espy, Program Officer	NIAID/DAIDS	TB/HIV diagnostics
G	18	Yordan Kostov, Ph.D.	NIDA	Devices in substance use detection and treatment
G	19	Dr. Tatjana Atanasijevic	NIBIB	Molecular Probes & Imaging Agents
G	20	Maria Moroni	BARDA	Diagnostics
		Scrivens, Brian	BARDA	Medical Device

Speakers and Panelists

Here we have listed the speakers and panelists involved in this year's conference, including their headshots and biographies. Please note that this list is in alphabetical order by last name.

Homa K. Ahmadzia M.D., INOVA Health

Dr. Homa K. Ahmadzia is a board-certified obstetrician–gynecologist and maternal-fetal medicine specialist who joined Inova in 2023 as the Deputy Director of the Perinatal Research Unit. She has been practicing medicine since 2008 and is dedicated to advancing maternal and perinatal health through both clinical care and research.

A physician-scientist, Dr. Ahmadzia has presented her work at major national and international conferences, including meetings of the Society for Maternal-Fetal Medicine, the International Society of Thrombosis and Hemostasis, and the Foundation for Women and Girls with Blood Disorders. Over the past seven years, she has received federal research funding through several prestigious awards, including a Clinical and Translational Science Institute KL2 Mentored Career Development Award, a K23 Career Development Award from the National Heart, Lung and Blood Institute, and an R01 research award from the Eunice Kennedy Shriver National Institute of Child Health and Human Development. Her research has also been supported by the U.S. Food and Drug Administration and the Gates Foundation. In addition, she has served as the medical monitor for the Maternal-Fetal Medicine Unit Network.

Her research focuses on the prevention and prediction of postpartum hemorrhage, particularly through the use of tranexamic acid, as well as public health epidemiology and global maternal health initiatives. She is also the founder of UNITE GLOBE (www.uniteglobe.org), an advocacy outreach organization dedicated to reducing global obstetric hemorrhage.

Clinically, Dr. Ahmadzia's interests include ultrasonography, management of high-risk pregnancies, and bleeding disorders and thrombophilias. She is passionate about caring for women during pregnancy and improving maternal outcomes both in the United States and globally.

Bryan O Buchholz, Ph.D., University of Massachusetts

Bryan Buchholz, Ph.D. is Professor Emeritus and former chair of Biomedical Engineering at the University of Massachusetts Lowell (UML). He is one of the MPI's of the Center for Advancing Point of Care Technologies in Heart, Lung, Blood and Sleep Disorders (CAPCaT). CAPCaT's core mission is to support the development and testing of promising point-of-care technologies that can be rapidly deployed to enhance diagnosis, monitoring, management, and prevention of heart, lung, blood, or sleep disorders (National Heart, Lung, and Blood Institute, NHLBI), with an additional interest in projects that incorporate complementary and integrative health approaches (National Center for Complementary and Integrative Health, NCCIH). CAPCaT is a collaboration between UMass Lowell and UMass Chan Medical School. CAPCaT received supplemental funding as part of the NIH-funded $1.5B Rapid Acceleration of Diagnostics (RADx) program

where we similarly supported innovators developing diagnostics for the SARS-CoV-2 virus. CAPCaT was developed out of the Massachusetts Medical Device Development Center (M2D2) of which Dr. Buchholz has been involved since its inception. Much of Dr. Buchholz's current work is involved with entrepreneurship and innovation around the development of medical devices. He is PI on the UMass Lowell Innovative Fellows Training program (LIFT), which is funded by the National Institute of Aging (NIA) and trains doctoral students about entrepreneurship and innovation in order to prepare them for careers outside of academia. He has previously been PI on the BARDA DRIVe center and the EDA SPRINT Challenge program, Innovative Medical Products - Action, Commercialization, Technology (IMPACT) both based at UML.

Philip Castle, Ph.D., M.P.H., National Cancer Institute

Philip E. Castle, PhD, MPH is the Director of the Division of Cancer Prevention (DCP), Acting Director of the Cancer Prevention Fellowship Program in DCP, and Senior, Tenured Investigator in the Division of Cancer Epidemiology and Genetics (DCEG) at the U.S. National Cancer Institute (NCI) (Rockville, MD, USA). From 2014-2020, Dr. Castle was a Professor in the Department of Epidemiology and Population Health at Albert Einstein College of Medicine (Bronx, NY, USA), at which he was granted tenure in 2019. Previously, Dr. Castle was the Chief Scientific Officer of the American Society for Clinical Pathology (ASCP) (2011-2). Dr. Castle was a Senior, Tenured Investigator (2010) and Tenure-Track Investigator (2003-10) in DCEG/NCI. From 1999-2002, Dr. Castle was a Cancer Prevention Fellow in DCP/NCI, during which time he received M.P.H. in Epidemiology in 2000 from the Johns Hopkins University (Baltimore, MD, USA). Dr. Castle received his Ph.D. in Biophysics in 1995 from Johns Hopkins University.

Jue Chen, Ph.D., National Heart, Lung, and Blood Institute

Dr. Jue Chen serves as the Branch Chief of the Atherothrombosis and Coronary Artery Disease Branch within the Adult and Pediatric Cardiac Research Program, Division of Cardiovascular Sciences, at the National Heart, Lung, and Blood Institute (NHLBI). In this role, she oversees a comprehensive research portfolio addressing atherosclerosis and atherothrombosis, and has led several trans-NHLBI initiatives, including the NHLBI Point of Care Technology Research Network Center, the NHLBI Clinical Ancillary Studies Program, administrative supplement grant program for Alzheimer's disease and related dementias, and the DCVS Strategic Vision Implementation Group dedicated to preventing vascular dementia. Dr. Chen has a particular interest in the development and validation of tools and technologies for pre-clinical research. She has contributed to multiple NIH Common Fund programs aimed at advancing research infrastructure and resources to enhance scientific capabilities as well as the NHLBI Catalyze program designed to accelerate translational research.

Dr. Chen earned a Bachelor of Medicine degree in Preventive Medicine and a Master's degree in Public Health with a focus on Environmental Toxicology from the former Shanghai Medical School. She received her Doctor of Philosophy degree in Pharmacology from Emory University, and completed postdoctoral research in the Laboratory of Biochemistry within the NHLBI intramural program. Her research centered on redox biology and its implications for normal aging and age-related diseases.

Atam Dhawan, Ph.D., New Jersey Institute of Technology

Atam P. Dhawan is senior vice provost for research at the New Jersey Institute of Technology (NJIT). He is a tenured Distinguished Professor of Electrical and Computer Engineering, Executive Director of the Center for Translational Research. He is an elected Fellow of the National Academy of Inventors (NAI) and NAI Innovation Ambassador, Fellow of the Institute of Electrical and Electronics Engineering (IEEE), Fellow of the American Institute of Medical and Biological Engineering (AIMBE), and Fellow of the International Academy of Medical and Biological Engineering (IAMBE) and serves on the NAI Board of Directors, NJII Board of Directors, R&D Council of NJ Board of Directors, IEEE Transactions on Biomedical Engineering Scientific Advisory Board, and the NIH Point-of-Care Research Network Advisory Board which he chaired from 2019-2025.

Dr. Dhawan is a recipient of numerous awards including Martin Epstein Award (1984), NIH FIRST Award (1988), Sigma-Xi Young Investigator Award (1992), IEEE EMBS Early Career Achievement Award (1995), Doermann Distinguished Lecture Award (1999), EMBS Distinguished Lecturer award (2012-2013), IEEE EMBS William J. Morlock Award in Excellence in Biomedical Technology (2021) and NJ Innovate 100 Leaders Award (2024). He has received more than $86 million in research grants and contracts as Principal Investigator or Co-PI. He has published over 216 research papers and several books in medical imaging, and image analysis. His patents have been commercialized for screening of skin-lesions for diagnosis of skin-cancers, and treatment of spider vein diseases.

Anthony Dickherber, Ph.D., National Cancer Institute

Anthony Dickherber is a Program Director in the National Cancer Institute's (NCI) Office of the Director, Center for Strategic Scientific Initiatives. Dr. Dickherber is part of the team managing Cancer Grand Challenges, the Innovative Molecular Analysis Technologies program, the Creative Collaborations Foundry, the Cancer Moonshot, and also participates in the Cancer Screening Research Network management team. Tony received his Ph.D. in bioengineering from Georgia Institute of Technology, where his research focused on the development of novel biosensors based on microelectronic acoustic device technology.

Dr. Dickherber joined the National Cancer Institute as an AAAS Science & Technology Policy Fellow in 2009 to assist with the design and development of the Cancer Human Biobank (caHUB) with the Office of Biorepositories and Biospecimen Research. Prior to joining the NCI, Tony's research focused on innovative biosensor platforms for early detection of cancer and arrayable ion-trapping structures for quantum-bit computing at the Georgia Tech Microelectronics Research Center in Atlanta, GA. He also spent four years as a research engineer at the Georgia Tech Research Institute working on military-related telecommunications projects.

Rao Divi, Ph.D., National Cancer Institute

Rao L. Divi, PhD, is a program director in the Methods and Technologies Branch (MTB). His responsibilities include managing a research portfolio and initiatives that focus on the development of methods and technologies to address epidemiologic data collection, study design and analysis, and validation of emerging technologies for application across the cancer control continuum. He is the EGRP representative to the International Lymphoma Epidemiology Consortium (InterLymph); the Chronic Lymphocytic Leukemia Research Consortium (CRC); the Identification of Men with a Genetic Predisposition to ProstAte Cancer: Targeted screening in BRCA1 and BRCA2 mutation carriers and controls (IMPACT) Consortium; and the Prevention and Observation of Surgical Endpoints and Modifiers of Cancer Risk in BRCA1/2 Mutation Carriers (PROSE-Modifiers Studies) (Collaborative Studies of BRCA 1/2 Mutation Carriers) Consortium. Dr. Divi is also a member of the InterLymph Coordinating Committee.

Dr. Divi is a member of the NIH Rapid Acceleration of Diagnostics (RADx) Initiative management team. RADx was launched to accelerate innovation in the development, commercialization, and implementation of technologies for COVID-19 testing. He also serves on the management team of NIH Point-of-Care Technologies Research Network (POCTRN), and as a science officer for The Center for Innovation and Translation of POC Technologies for Expanded Cancer Care Access (CITEC) and The Atlanta Center for Microsystems-Engineered Point-of-Care Technologies (ACME POCT).

In addition, Dr. Divi is the co-program director and contact person for funding opportunities on Assay Validation of High Quality Markers for Clinical Studies in Cancer (PAR-25-074 and PAR-25-075), Academic-Industrial Partnerships for Translation of Technologies for Diagnosis and Treatment (AIP) (PAR-25-337), Exploratory/Developmental Bioengineering Research Grants (EBRG) (PAR-25-321), Revision Applications for Validation of Biomarker Assays Developed Through NIH-Supported Research Grants (PAR-24-304), and NIH Bioengineering Research Grants (BRG).

Dr. Divi joined EGRP in 2008 from NCI's intramural Laboratory of Cancer Biology and Genetics. Since 1997, he had been a member of the Laboratory's Carcinogen-DNA Interactions Section, where he focused on understanding the genotoxicity and carcinogenicity of cisplatin, tamoxifen, PHIP, and polycyclic aromatic hydrocarbons, as well as the mitochondrial toxicity of antiretroviral drugs. A significant portion of Dr. Divi's work focused on identification of molecular markers, development of methods and technologies for the markers, and validation of those markers through intra- and interlaboratory collaborations. He used these molecular markers in collaborative studies that assessed risk in humans and animal models.

Prior to joining NCI, Dr. Divi worked for four years at the National Center for Toxicological Research, which is the research arm of the U.S. Food and Drug Administration (FDA), in Jefferson, AR. Here he conducted research on the antithyroid activity of drugs and environmental toxicants. He also worked for a year on an International Atomic Energy Agency project on health effects of trace elements.

Paul Eder, Ph.D., National Institute of Allergy and Infectious Diseases

Paul Eder leads the Concept Acceleration Program for Diagnostics in the Division of Microbiology and Infectious Diseases at the U.S. National Institute of Allergy and Infectious Diseases. Previously he consulted as Senior Medical Diagnostics Advisor at the Biomedical Advanced Research and Development Authority (BARDA). Before that he served as the Director of Assay Development at QIAGEN, where he used a Gates Foundation grant to create the first WHO pre-qualified HPV screening test for resource-limited communities worldwide. For that he won the Sydney Brenner Award for outstanding accomplishment in global R&D at QIAGEN. He completed a postdoctoral fellowship in catalytic RNA structure-function with Nobel laureate Sidney Altman in the Department of Biology at Yale University. His Ph.D. is in biochemistry from the University of Iowa, where he helped found Integrated DNA Technologies (IDT) from his lab bench.

David Erickson, Ph.D., Cornell University

David Erickson is the SC Thomas Sze Director and Sibley College Professor in the Sibley School of Mechanical and Aerospace Engineering at Cornell University. He is also a joint Professor within the Division of Nutritional Sciences and was previously the Associate Dean of Engineering for Research and Graduate Programs. Prof. Erickson is the director of the NIH POCTRN+ Center "PORTENT – Center for Point of Care Technologies for Nutrition, Infection, and Cancer in Global Health" (https://pocglobalhealth.cornell.edu/) and co-Director of the Cornell Joan Klein Jacobs
Center for Precision Nutrition and Health. Research in the Erickson lab is or has been primarily funded through grants from the NIH, NSF, ARPA-E, ONR, DoD, DOE, DARPA, USAID, USDA, Bezos Earth Fund, Nutrition International, Global Alliance for Improved Nutrition, and others. Prof. Erickson has helped to found numerous start-up companies commercializing: high-throughput pharmaceutical instrumentation, biomedical diagnostics, and energy technologies including Halo Labs (http://halolabs.com – acquired Waters Corporation in 2025) and Dimensional Energy (https://www.dimensionalenergy.net/). Prof. Erickson has received the DARPA-MTO Young Faculty Award, the NSF CAREER Award, the Department of Energy Early Career Award, among others. In 2011 he was awarded the Presidential Early Career Award for Scientist and Engineers (PECASE) by President Obama. Erickson has been named a fellow of the Optical Society of America, the American Society of Mechanical Engineers, the American Institute of Medical and Biological Engineering, and the Canadian Academy of Engineering.

Jessica Falcone, Ph.D., National Institute of Biomedical Imaging and Bioengineering

Dr. Jessica Falcone serves as a program director for NIBIB's Division of Discovery Science and Technology. Dr. Falcone has a background in neural engineering and neuroscience. She received her Ph.D. from the Georgia Institute of Technology, where she studied brain electrodes and how to modulate the immune response and blood-brain barrier to extend chronic recordings. She then joined the Bioelectronic Medicine group at the Feinstein Institute of Medical Research and worked on chronic vagus nerve electrodes for murine models. Most recently, Dr. Falcone was a Technical Sales Engineer at Tucker-Davis Technologies (TDT) – a company that builds research systems for neuroscientists. Her technical expertise at TDT included electrophysiology, fiber photometry, auditory, and behavioral control.

Julia Finkelstein, Sc.D., Cornell University

Dr. Julia Finkelstein is Professor in the Division of Nutritional Sciences at Cornell University, and in the Division of Epidemiology, Department of Population Health Sciences, Weill Cornell Medicine.
She is Director of the Cornell Maternal and Child Nutrition Program, Director of the Cochrane Center, co-Director of the Cornell Joan Klein Jacobs Center for Precision Nutrition and Health and co-leads the clinical core for the NIH Center for Point of Care Diagnostics for Nutrition, Infection, and Cancer (PORTENT). Dr. Finkelstein is the Program Director or MPD of NIH T32 training programs – including among the longest standing training programs devoted to nutrition and maternal and child health in the United States – and the first NIH training grant focused on AI and precision nutrition. Dr. Finkelstein received her Bachelor of Science from McGill University in Montréal, Canada, Master of Public Health degree from Brown University, and Master and Doctor of Science degrees in Epidemiology and Nutrition from Harvard University.

Dr. Finkelstein is an epidemiologist with expertise in one-carbon metabolism, preconception nutrition, and maternal and child health, and the design of randomized trials and cohort studies to inform clinical and World Health Organization guidelines. Her research has been internationally recognized with awards including the inaugural American Society for Nutrition Foundation-Novo Nordisk Foundation Henrik Dam Award for Scientific Discovery in Nutrition, for outstanding research contributions to the understanding of micronutrients, nutritional status, and metabolism, and the National Institutes of Health technology accelerator challenge prize for innovative global health diagnostics, the SUNY Chancellor Award for Excellence in Scholarship and Creative Activities. Dr. Finkelstein has also been recognized for leadership in nutrition and mentorship, including the International Life Sciences Institute Award and the 2025 Anne Anderson Award for promotion of women as leaders and contributors to Cochrane. Dr. Finkelstein was elected Chair of the Federation of American Societies of Experimental Biology (FASEB) B-vitamins and One-Carbon Metabolism and co-chairs the NIH working group on Biology of Nutrition for the NIH ADMIT initiative.

Kristin Gilchrist, Ph.D., National Institute of Biomedical Imaging and Bioengineering

Kristin Gilchrist, Ph.D., is a Program Director for the NIBIB Division of Health Informatics Technologies. Prior to joining NIBIB, Dr. Gilchrist was the Associate Director of Research for the 4D Bio3 Center for Biotechnology at Uniformed Services University as well as an Assistant Professor in the Department of Radiology and Bioengineering. From 2004 to 2021, Dr. Gilchrist was a research scientist at RTI International, where she investigated wearable sensors in combination with advanced analytics for a range of health applications including pre-symptomatic illness detection, assessment of mild traumatic brain injury, and detection of seizures in children with epilepsy. She received a B.E. in Biomedical and Electrical Engineering from Vanderbilt University and an M.S. and Ph.D. in Electrical Engineering from Stanford University.

Rhoan Hazra, M.D., National Institute of Child Health and Human Development

Dr. Rohan Hazra became the Acting Director of the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) on February 28, 2026. Prior to that he served as the Director of the Division of Extramural Research (DER), NICHD's extramural scientific division for six years. Prior to becoming DER director, he was chief of the NICHD Maternal and Pediatric Infectious Disease Branch. In that position he provided scientific leadership for domestic and international research, research training, and career development programs related to the epidemiology, diagnosis, pathogenesis, transmission, treatment, and prevention of HIV and its complications as well as other selected pathogens in infants, children, adolescents, and pregnant women. Prior to joining NICHD in 2007, he conducted clinical studies in pediatric HIV in the National Cancer Institute's intramural program.

Dr. Hazra's research interests include studying the long-term effects of HIV and its treatment on children, adolescents, and young adults who acquired HIV as infants. His research interests also include clinical trials of new antiretroviral medications and treatment strategies for children with HIV, especially in resource-limited countries.

Dr. Hazra received his bachelor's degree in biology from Yale University and his medical degree from the Johns Hopkins University School of Medicine. Following graduation from medical school, he completed a pediatric residency and pediatric infectious disease fellowship at Children's Hospital in Boston. He is certified by the American Board of Pediatrics in both pediatrics and pediatric infectious diseases.

Blanca Himes, Ph.D., National Heart, Lung, and Blood Institute

Blanca Himes is the Senior Advisor for Data Science in the Immediate Office of the Director at the National Heart, Lung, and Blood Institute (NHLBI), where she helps shape the Institute's data science strategy. She has a background spanning physics, bioinformatics, and biomedical data science, and her work has focused on harnessing large-scale data — from genomics and electronic health records to environmental and social datasets — to better understand and treat diseases like asthma. Before joining NIH, she held faculty positions at Harvard Medical School and the University of Pennsylvania.

Nicole Kleinstreuer, Ph.D., National Institutes of Health

Nicole C. Kleinstreuer, Ph.D., is the NIH Deputy Director for Program Coordination, Planning, and Strategic Initiatives. In this role, she leads the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) within the NIH Office of the Director, which oversees trans-NIH programmatic research and strategic policy initiatives, including the NIH Common Fund and offices focused on women's health, data science, AIDS research, disease prevention, behavioral and social sciences, dietary supplements, and tribal health, among others.

Dr. Kleinstreuer is internationally recognized for her leadership in developing innovative, human-relevant research strategies that advance public health protection. Prior to her current position, she served as Director of the National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), within the National Institute of Environmental Health Sciences (NIEHS). She also served as Executive Director of the congressionally mandated Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) and as the US National Co-Coordinator for the Organization for Economic Cooperation and Development (OECD) Test Guidelines Programme. In these roles, she led interagency and international efforts to promote new approach methodologies (NAMs), reduce animal testing, and integrate computational modeling, artificial intelligence, and systems toxicology into regulatory science. Her work spans translational bioinformatics, predictive modeling, and quantitative risk assessment. She has authored over 150 peer-reviewed publications and received numerous honors, including the 2019 Society of Toxicology Achievement Award and the 2025 Enhancement of Animal Welfare Award, as well as multiple NIH Director's and NIEHS Merit Awards.

Dr. Kleinstreuer holds B.S. degrees in biomedical engineering and applied mathematics from the University of North Carolina at Chapel Hill and a Ph.D. in bioengineering from the University of Canterbury. She completed postdoctoral training in computational toxicology at the U.S. Environmental Protection Agency and holds adjunct faculty appointments at Yale University and UNC Chapel Hill. She is deeply committed to mentorship, public health protection, and scientific innovation that enhances the translation of biomedical research to real-world impact.

Karen Lacourciere, Ph.D., National Institute of Allergy and Infectious Diseases

Karen Lacourciere serves as a Program Officer in NIH/NIAID in the Tuberculosis, Leprosy and Other Mycobacterial Diseases section of the Respiratory Diseases Branch. She oversees a portfolio of grants and contracts that conduct research on tuberculosis, leprosy and non-tuberculosis mycobacteria, including systems biology and other "omics" approaches, early-stage drug discovery and mechanisms of drug resistance, tuberculosis diagnostic development and similar topics. Dr. Lacourciere received her B.S. degree in Biochemistry from the University of Massachusetts and her Ph.D. in Biochemistry from Johns Hopkins University.

Benjamin Larman, Ph.D., Johns Hopkins University

Dr Larman trained in physics and bioengineering at UC Berkeley, and then in genetics and materials science at the Harvard-MIT graduate program in health sciences and technology. Here he developed Phage ImmunoPrecipitation Sequencing (PhIP-Seq) in the lab of Steve Elledge. He then did his postdoc at Scripps in the laboratory of Pete Schultz, where he combined multiplexed molecular assays with liquid handling automation. Dr. Larman joined the faculty at Johns Hopkins in 2014, where he is currently an Associate Professor in the Immunology Division of the Pathology Department. His laboratory develops and deploys novel molecular assays to advance our understanding of targeted immune responses. Dr. Larman trains students and postdocs from chemical, biological and engineering backgrounds to develop new techniques and analytical approaches. Alongside his academic career, Dr. Larman also works to translate technological innovations through company formation.

Tiffani Bailey Lash, Ph.D., National Institute of Biomedical Imaging and Bioengineering

Dr. Tiffani Bailey Lash serves as a Health Scientist Administrator for the National Institutes of Biomedical Imaging and Bioengineering (NIBIB) at the National Institutes of Health (NIH). Dr. Lash is the Program Director for the NIH Rapid Acceleration of Diagnostics (RADx®) Tech and Advanced Technology Platforms initiative, NIH Technology Accelerator Challenge (NTAC), and the NIBIB Point of Care Technologies Research Network. She also serves as co-coordinator for the NIH Common Fund's Harnessing Data Science for Health Discovery and Innovation in Africa. Her research portfolio includes Point of Care Technologies and Digital Health, both with the goal of developing biomedical technologies through collaborative

efforts that merge scientific and technological capabilities with clinical need.

Prior to her current position, Dr. Lash worked within the NIH's science policy administration. During that time, she worked at the National Institute of General Medical Sciences and National Heart Lung and Blood Institute, as well as the NIH Office of the Director. Dr. Lash has been selected as a science policy fellow for both the American Association for the Advancement of Science (AAAS) and the National Academy of Engineering. She also has a background in small business innovation and intellectual property. Dr. Lash earned her Ph.D. in Physical Chemistry from North Carolina State University via a collaboration between the Departments of Chemistry and Chemical and Biomolecular Engineering. Her interdisciplinary research interests include microfluidics, biopolymers with controlled molecular architecture, and biosensor technologies.

Catherine Liao, Ph.D., CONNEQT Health

Catherine Liao is Chief Strategy and Commercial Officer at CONNEQT Health, where she leads global strategy for non-invasive cardiovascular diagnostics spanning clinical care, research, and consumer health. Her work focuses on advancing technologies that reveal how arteries are aging, enabling earlier detection of cardiovascular risk and expanding access to preventive cardiovascular care.

Prior to joining CONNEQT, Catherine co-founded and served as CEO of Blumio, a venture-backed health technology company developing radar-based sensing for continuous cardiovascular monitoring. Under her leadership, Blumio partnered with Google and Infineon before being acquired by CONNEQT Health (formerly CardieX) in 2022.

Earlier in her career, Catherine worked in enterprise technology, including roles at Cisco and Riverbed, where she helped bring to market technologies that enabled real-time medical imaging transmission and improved the performance of mission-critical applications. She also contributed to scaling the World Health Organization's web infrastructure during the SARS epidemic, when global traffic surged more than twenty-fold.

Alongside her executive leadership, Catherine is pursuing a PhD in Health Economics at the University of Cambridge, where her research examines the economic burden of vascular aging and the value of scalable preventive interventions. She was selected as a 2026 Presidential Leadership Scholar, a national leadership program bringing together leaders from across sectors to advance solutions to major societal challenges. Catherine holds an MBA from Imperial College London and an MSc in Health Economics from the London School of Economics.

A trained health economist, Catherine has long focused on bridging innovation and real-world impact. Alongside her executive leadership, she is pursuing a PhD in Health Economics at the University of Cambridge, where her research explores the economic burden of early vascular aging and the value of scalable preventive interventions. She also holds an MBA from Imperial College London and an MSc in Health Economics from the London School of Economics.

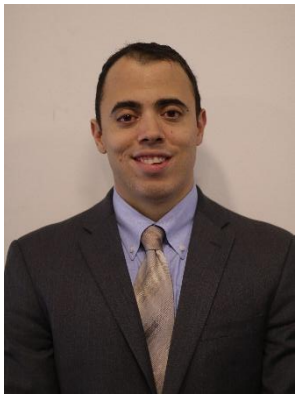
Monica Longo, M.D., Ph.D., National Institute of Child Health and Human Development

Dr. Longo, an obstetrician-gynecologist with subspecialty training in maternal-fetal medicine, joined NICHD in 2021 and has since taken on various roles. She currently serves as the project scientist for the Maternal Fetal Medicine Units (MFMU) Network and the Global Network for Women's and Children's Health Research and is a program officer for several clinical trials. In addition to leading several initiatives in maternal morbidity and mortality, adverse pregnancy outcomes, and stillbirth, Dr. Longo also manages a portfolio on advancing innovative technologies and interventions to enhance maternal and fetal assessment during pregnancy. Understanding maternal physiological adaptations to pregnancy, specifically the association between cardiovascular and metabolic diseases in both mother and offspring, remains a primary focus of her work.

Dr. Longo obtained her medical degree in 1996 from the Faculty of Medicine at the University of Modena, Italy. In June 1997, she joined the research team at the University of Texas Medical Branch at Galveston (UTMB), where she earned her master's degree and then her doctoral degree in preventive medicine and community health. During her residency training in obstetrics and gynecology at UTMB, Dr. Longo Dr. Longo developed a groundbreaking model of fetal programming, with funding from NICHD and the National Heart, Lung, and Blood Institute.

In 2013, Dr. Longo joined the Department of Obstetrics and Gynecology at the University of Texas Health Science Center at Houston (UTHSC), where she established a basic science research laboratory to study pregnancy complications using various animal models. She also completed her fellowship training in maternal-fetal medicine, while serving as an active UTHSC faculty member and contributing to both clinical and research activities.

Dr. Longo's ultimate goal, both at NICHD and throughout her overall professional journey, is to improve outcomes for both mothers and children during all stages of life, starting from preconception and extending into later life. Throughout her career, she has mentored numerous graduate students, fellows, residents, and faculty members.



Rob Mannino, Ph.D., Sanguina

As a patient with transfusion dependent beta thalassemia, Rob has watched improvements in medical technology directly impact his life. This experience instilled in him a desire to develop technology that could improve people's lives, which led him to pursue a Ph.D. in biomedical engineering at Georgia Tech and Emory University. While getting his Ph.D. in Dr. Wilbur Lam's laboratory, Rob developed an image analysis algorithm that can analyze a smartphone image of an individual's fingernail and produce a hemoglobin level estimate. Since graduating, Rob spun this technology into Sanguina, Inc, where he serves as the Chief Technology Officer, leading the development and commercialization of Ruby, a smartphone app incorporating his technology. Rob was named to the 2020 Forbes 30 under 30 Healthcare list for his work with Sanguina. Rob lives in Atlanta with his wife Nicole and 3 young children.

Matthew Memeoli, M.D., M.S., National Institutes of Health

Matthew J. Memoli, M.D, M.S., is the Principal Deputy Director of the National Institutes of Health. He served as Acting NIH Director from January 22, 2025, to March 31, 2025.

Dr. Memoli has worked at NIH for more than 20 years, most recently serving as director of the Clinical Studies Unit within the Laboratory of Infectious Diseases (LID), part of NIH's National Institute of Allergy and Infectious Diseases. He previously served as a staff clinician in the same laboratory.

Dr. Memoli is an internationally known expert in the field of respiratory viruses. He has won multiple awards for his work, including two NIH Director's Awards, multiple National Institute of Allergy and Infectious Diseases (NIAID) Merit Awards, and a National Center for Advancing Translational Sciences Director's Award. He also received the 2017 NIAID Outstanding Mentor Award for his work training clinical fellows and other trainees. In addition, he served on the Governor of Virginia's Medical Advisory Board from 2022 through 2024.

The LID Clinical Studies Unit, a program developed by Dr. Memoli, conducts clinical and translational research, primarily on influenza and other respiratory diseases. His team leads clinical trials to evaluate investigational vaccines and treatments, including novel approaches developed by NIH colleagues. Dr. Memoli has also led clinical studies focused on influenza transmission and immunity, as well as research to understand better how respiratory viruses infect and cause disease in different populations. He has collaborated with researchers across NIH to develop serosurvey techniques to estimate the prevalence of certain diseases in specific populations.

Dr. Memoli is a graduate of the College of William and Mary and received his Master of Science in microbiology from Thomas Jefferson University. He completed medical school at St. George's University School of Medicine. He completed his residency in internal medicine at Georgetown University's program at Washington Hospital Center. Dr. Memoli joined NIH in 2005 to complete his fellowship in infectious diseases.

Shawn Mulvaney, Ph.D., National Institute of Biomedical Imaging and Bioengineering

Dr. Shawn Mulvaney serves as a Health Scientist Administrator for the National Institutes of Biomedical Imaging and Bioengineering (NIBIB) at the National Institutes of Health (NIH). Dr. Mulvaney is a Program Officer for the Rapid Acceleration of Diagnostics (RADx) program working with a variety of companies to develop and commercialize antigen and genomic tests for the detection of SARS-CoV-2. In addition, Dr. Mulvaney oversees a genotyping program for the tracking and reporting of SARS-CoV-2 variants circulating in the United States. Beyond RADx, Dr. Mulvaney also assists with technologies in the Point of Care Technologies and Digital Health portfolios.

Prior to joining NIBIB, Dr. Mulvaney spent more than two decades at the U.S. Naval Research Laboratory working on chemical and biological sensing, biotic/abiotic interfaces, analytical, surface and materials science, and device prototyping. In addition to building biosensor platforms for first responders and in-the-field use by warfighters, Dr. Mulvaney's team performed pre-acquisition, independent verification and validation of diagnostic technologies capable of detecting tropical diseases for the Department of Defense.

Dr. Mulvaney earned his B.S. in Chemistry from the College of William and Mary and his Ph.D. in Chemistry from The Pennsylvania State University. Dr. Mulvaney's thesis focused on the implementation of surface enhanced Raman scattering (SERS) for pharmaceutical and environmental sensing applications.

Monique Nadeau, M.P.A., EatLove

Monique Nadeau is the CEO and Co-Founder of EatLove, a San Francisco-based digital health company behind Nutrition Intelligence®, an AI-powered clinical infrastructure designed to close the translational gap between nutrition evidence and behavior change. The platform supports more than 10,000 clinicians across health systems and clinical practices and their patients, enabling the delivery of individualized nutrition interventions spanning the full spectrum of diagnosed health conditions. Her current technical focus centers on multi-agent AI systems for the automated, scalable application of personalized dietary support.

Nadeau is a Faculty Fellow at Cornell University's Joan Klein Jacobs Center for Precision Nutrition and Health, where she contributes to the Food as Medicine hub, advancing technology-driven approaches to nutrition access and health equity.

Her career spans global finance, health policy, and technology. She rose to become the youngest Managing Director at Dresdner Kleinwort Wasserstein, where she worked across Capital Markets and M&A, before serving as CEO and Board Member of Hope Street Group, a non-partisan public policy organization focused on data-driven healthcare and economic reform.

Nadeau holds an MPA from Harvard University and a BA from American University's School of International Service, with additional academic training at the Université Paris-Sorbonne and the Universidad de Salamanca.

Julie Navarro, M.S.N., R.N., HemoSonics, LLC

Julie Navarro RN, MSN is the medical science liaison at Hemosonics LLC, a medical device company that specializes in hemostasis management. Her role includes advancing clinical practices through establishing key relationships with medical professionals and contributing clinical input toward innovation. She has a long-standing involvement with national blood management initiatives.

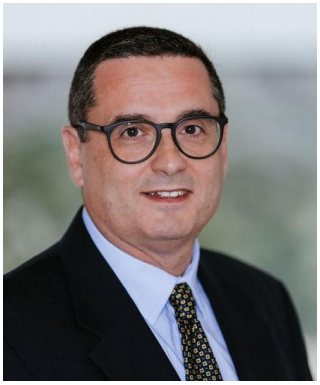
Bryan Nolan, myBiometry

Bryan has 22 years of healthcare experience in developing and commercializing new medical technologies. He is the Founder and CEO of myBiometry, the co-inventor of its technology, and its largest investor. Before founding myBiometry, he held various sales and marketing positions within the Medical Device and Diagnostics Division of Johnson & Johnson, where he focused on Bariatric Surgery and Thoracic Oncology. Before Johnson & Johnson, he was a consultant at a startup working with companies in the health insurance, pharmacy benefit management, and dialysis services segments. Previous clients include UnitedHealth Care, Optum, Wellpoint, DaVita, and BCBS North Carolina. Bryan has a portfolio of 18 patents. He has a bachelor's degree in business and computer science from Franklin & Marshall College.

Aydogan Ozcan, Ph.D., University of California Los Angeles

Dr. Aydogan Ozcan is the Chancellor's Professor and the Volgenau Chair for Engineering Innovation at UCLA and is also the Associate Director of the California NanoSystems Institute. Dr. Ozcan is elected a Member of the U.S. National Academy of Engineering (NAE) and the European Academy of Sciences and Arts, as well as a Fellow of the U.S. National Academy of Inventors (NAI) and holds >90 issued/granted patents in microscopy, holography, computational imaging, sensing, mobile diagnostics, nonlinear optics and fiber-optics, and is also the author of one book and the co-author of >1350 peer-reviewed publications in leading scientific journals/conferences. Dr. Ozcan received major awards, including the Presidential Early Career Award for Scientists and Engineers (PECASE), International Commission for Optics ICO Prize, Dennis Gabor Award (SPIE), Joseph Fraunhofer Award & Robert M. Burley Prize (Optica), Keith Terasaki Innovation Award, SPIE Biophotonics Technology Innovator Award, Rahmi Koc Science Medal, SPIE Early Career Achievement Award, Army Young Investigator Award, NSF CAREER Award, NIH Director's New

Innovator Award, Navy Young Investigator Award, IEEE Photonics Society Young Investigator Award and Distinguished Lecturer Award, National Geographic Emerging Explorer Award, National Academy of Engineering The Grainger Foundation Frontiers of Engineering Award and MIT's TR35 Award for his seminal contributions to computational imaging, sensing and diagnostics. Dr. Ozcan is elected Fellow of Optica, AAAS, SPIE, IEEE, AIMBE, RSC, APS and the Guggenheim Foundation, and is a Lifetime Fellow Member of Optica, NAI, AAAS, SPIE and APS. Dr. Ozcan is also listed as a Highly Cited Researcher by Web of Science, Clarivate.



Antonello Pileggi, M.D., Ph.D., National Institute of Biomedical Imaging and Bioengineering

Dr. Antonello Pileggi is a Program Officer and Associate Chief for the Obstetric and Pediatric Pharmacology and Therapeutics Branch at the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD). His research portfolio includes neonatal pharmacology, bioprinted tissue constructs, medical devices, drug delivery systems, and eHealth activities. He is the NIH co-lead for a multi-stakeholder, public private partnership to advance the National Pediatric Medical Device Ecosystem. He serves as NICHD Liaison to the International Neonatal Consortium (INC). He served as NICHD co-lead of the RADx Tech for Maternal Health Challenge under the NIH Implementing a Maternal Health and PRegnancy Outcomes Vision for Everyone (IMPROVE) initiative.

Dr. Pileggi received M.D. and Ph.D. degrees from the University of Pavia, Italy, and M.Sc. in clinical and translational investigation at the University of Miami. Before joining NIH, he was a research professor at the University of Miami in the Departments of Surgery (primary), Biomedical Engineering, Microbiology and Immunology. He led and contributed to multiple team science, transdisciplinary, translational, and clinical projects in cellular and solid organ transplantation, diabetes mellitus, pancreatic islet biology, immunology, regenerative medicine, and bioengineering. His research received national and international agency and industry support. Member of several professional associations, he served as an editor for scientific journals and professional organization communications, reviewed research applications for national and international agencies, and lectured at national and international institutions. Inventor on three issued patents, he authored 25 book chapters, and 165 peer-reviewed scientific publications.

Dr. Pileggi obtained M.D. and Ph.D. degrees from the University of Pavia, Italy, and an M.S. in clinical and translational investigation at the University of Miami (UM), Florida. He was faculty at UM's department of surgery with secondary appointments in biomedical engineering, microbiology and immunology (2002-2015). Prior to joining NICHD, Dr. Pileggi was Scientific Review Officer (2015-2020) and Referral Officer (2019-2020) at the NIH Center for Scientific Review.

A member of national and international professional associations, Dr. Pileggi served as editor and reviewer for scientific journals and professional organization, peer-reviewed research applications, and lectured at national and international institutions. He is an inventor on three issued patents, has authored 25 book chapters and over 160 peer-reviewed scientific publications.

Nira Pollock, M.D., Ph.D., Harvard University

Dr. Nira Pollock, MD, PhD, D(ABMM) is the Co-Director of the Infectious Diseases Diagnostic Laboratory in the Department of Laboratory Medicine at Boston Children's Hospital. She is also a faculty member of the Division of Infectious Diseases at BIDMC. She is an Associate Professor of both Pathology and Medicine at Harvard Medical School.

Dr. Pollock is an expert in the development and evaluation of novel diagnostics for infectious diseases, with experience ranging from early proof of principle laboratory demonstration through translation to field implementation. Her diagnostics research has spanned a range of diseases including active and latent tuberculosis, C. difficile infection, influenza, malaria, Lyme disease, STDs, Ebola virus disease, HCV, HBV, and COVID-19. Her research has also involved a wide range of technologies, from simple paper-based lateral flow and microfluidic platforms to novel automated platforms for protein and nucleic acid detection, and a wide range of testing scenarios, from the high-complexity molecular laboratory to point-of-care testing (including in resource-limited and outbreak settings).

Since 2023, she has worked part-time as a Senior Scientific Advisor for Diagnostic Development Strategy for the National Institute of Biomedical Imaging and Bioengineering at NIH, providing guidance to RADx/ITAP programs for diagnostic development and assisting with interagency pandemic preparedness efforts.

Dr. Pollock is a member of the American Society of Clinical Investigation and a fellow of the Infectious Diseases Society of America (IDSA).

Dr. Nira Pollock completed her MD/PhD at the University of California, San Francisco; her medical residency at Brigham and Women's Hospital in Boston; and her infectious diseases/clinical microbiology fellowships at Beth Israel Deaconess Medical Center (BIDMC) in Boston.

Neil P. Ray, M.D., Raydiant Oximetry

Dr. Neil P. Ray, MD is the founder of Raydiant Oximetry, Inc – a medical technology company that has developed devices to improve outcomes for both mother & baby during childbirth. Dr. Ray is a board-certified pediatric anesthesiologist and founded Raydiant Oximetry to address the unmet clinical needs that he experienced in his clinical practice.

The flagship product under development is Lumerah TM, a non-invasive fetal pulse oximetry that can potentially improve the detection of fetal distress during labor & delivery. Fetal pulse oximetry could improve the sensitivity/specificity of diagnosing fetal distress over CTG monitoring and potentially lead to a reduction of emergency C-section deliveries as well as a reduction of newborn hypoxic ischemic encephalopathy.

Under Dr. Ray's leadership, Lumerah received FDA breakthrough device designation from the FDA and FDA IDE approval to initiate an early

feasibility study in pregnant women during labor. The study was completed at the Eastern Virginia Medical School in Norfolk, Virginia under the direction of Dr. George Saade (NCT06405984).

To date. Dr. Ray has been awarded almost $10M in non-dilutive funding from the NIH, NSF and the Gates Foundation. He has also raised over $20M from private investments. He is married with 2 teenage girls and remains clinically active in anesthesiology.

Rebecca Richards-Kortum, Ph.D., Rice University

Rebecca Richards-Kortum, Ph.D. is the Rice University Malcolm Gillis University Professor of Bioengineering and co-Director of Rice 360 Institute for Global Health. Her research has been instrumental in improving early detection of cancers and in developing and scaling affordable technologies to improve newborn and maternal health, especially in low-resource settings. She is a recipient of a MacArthur Fellowship and a member of the US National Academy of Sciences, the National Academy of Engineering, the National Academy of Inventors, the American Academy of Arts and Sciences, and the American Philosophical Society. She received her PhD in Medical Physics from MIT and her BS in Physics and Mathematics from the University of Nebraska.

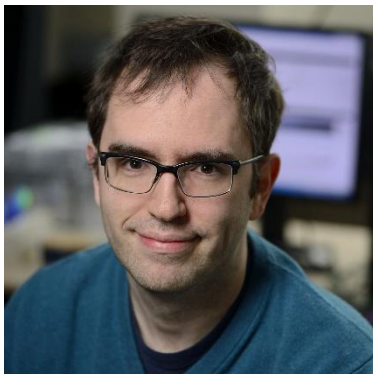
Paul Sheehan, Ph.D., Advanced Research Projects Agency for Health

Dr. Paul Sheehan joined ARPA-H in February 2023 from the Defense Advanced Research Projects Agency (DARPA), where he was a Program Manager in the Biological Technologies Office. His research at that time focused on leveraging developments in synthetic biology to detect and address threats to human health, including novel pathogens in the environment and microbial imbalances in the gut.

Before joining DARPA, Sheehan spent 16 years at the U.S. Naval Research Laboratory where he worked first as a research scientist and then as the head of surface nanoscience and sensor technology. He holds a doctorate in chemical physics from Harvard University and completed a postdoctoral fellowship at the National Research Council. His papers have received over 18,500 citations and have been spotlighted in outlets such as the Economist and the New York Times.

Apurv Soni, M.D., Ph.D., University of Massachusetts

Dr. Apurv Soni, MD, PhD, is Director of the Program in Digital Medicine and Assistant Professor of Medicine at UMass Chan Medical School. He is the co-lead of Clinical Core for CAPCaT and has research expertise in decentralized pragmatic studies and digital health implementation. He led 5+ national siteless studies for RADx-Tech Clinical Studies Core. He leads the Clinical and Translational Science research program funded by UMass CTSA.



Winston Timp, Ph.D., Johns Hopkins University

Winston Timp is an associate professor in Biomedical Engineering at Johns Hopkins University. His lab focuses on developing and applying sequencing technologies to gain a deeper understanding of biology and a more accurate set of clinical tools for human disease. Timp's research integrates the principles of biophysics, molecular biology, and computational biology to create new tools for exploring the genomes, epigenomes, transcriptomes, and proteomes of different lifeforms, ranging in size from the coronavirus to hummingbirds to California redwoods. Based on the knowledge gained from these studies, Timp and his lab apply their toolsets to clinical samples for the diagnosis, surveillance, and treatment of human disease. Recent projects in Timp's lab include new sequencing methods to explore gene isoforms in the brain, the epigenetics of the complete human genome, and examining single molecule epigenetics of cancer.

Bruce J. Tromberg, Ph.D., National Institute of Biomedical Imaging and Bioengineering

Dr. Tromberg is the Director of the National Institute of Biomedical Imaging and Bioengineering (NIBIB) at NIH where he oversees research programs focused on developing, translating, and commercializing engineering, physical science, and computational technologies in biology and medicine. He leads NIBIB's Rapid Acceleration of Diagnostics technology initiative (RADx Tech), established in 2020 to meet an urgent need for increasing SARS-COV-2 testing capacity & performance, and broadened in 2023 to include a wide range of over the counter (OTC) and point of care (POC) medical devices. His laboratory, the Section on Biomedical Optics (SBO) in the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), develops portable, bedside, non-contact, and wearable technologies for quantitative sensing and imaging of tissue composition and metabolism.

Prior to joining NIH in January 2019, Dr. Tromberg was a professor of biomedical engineering and surgery at the University of California, Irvine (UCI). During his 30-year academic career Dr. Tromberg served in multiple leadership roles, including director of UCI's Beckman Laser Institute and Medical Clinic (BLIMC), PI of the Laser Microbeam and Medical Program (LAMMP), an NIH National Biomedical Technology Center, and co-founder of UC Irvine's Department of Biomedical Engineering.

Dr. Tromberg received his undergraduate training in chemistry from Vanderbilt University (1979) and M.S. and Ph.D. degrees in chemistry from the University of Tennessee (1988) where he was a U.S. Department of Energy/Oak Ridge Associated Universities Fellow at the Oak Ridge National Laboratory. He was a Hewitt Foundation Photomedicine Fellow at the BLIMC and joined the UC Irvine faculty in 1990.

Dr. Tromberg specializes in the development of optics and photonics technologies for biomedical imaging and therapy. He has co-authored more than 450 publications and holds 27 patents in new technology development as well as bench-to-bedside clinical translation, validation, and commercialization of devices. Dr. Tromberg has trained more than 80 students and fellows, is co-founder of the biophotonics company, Modulim, Inc, and has served on numerous advisory boards in academia, government, and the private sector.

Honors and awards include the Michael S. Feld Biophotonics Award from Optica, the Britton Chance Biomedical Optics Award from the International Society of Optical Engineering (SPIE), and the Gold Medal from the Academy for Radiology and Biomedical Imaging Research. He is a member of the National Academies of Medicine and Engineering, and a fellow of the American Institute for Medical and Biological Engineering (AIMBE), SPIE, Optica, and the National Academy of Inventors.

Annica M. Wayman, Ph.D., National Center for Advancing Translational Sciences

Annica M. Wayman, PhD, is the deputy director of the National Center for Advancing Translational Sciences (NCATS) within the National Institutes of Health. She works with the NCATS director and has a key role in implementing the center's strategic plan. Wayman manages day-to-day operations of the office and supervises the Division of Extramural Activities; the Office of Policy, Communications and Education; the Office of Special Initiatives; and several special scientific programs and activities.

Before joining NCATS, Wayman was associate dean of the College of Natural and Mathematical Sciences at the University of Maryland, Baltimore County (UMBC). There, she directed the translational life science technology undergraduate degree program; the professional studies in biotechnology graduate degree program; and non-degree, lab-based biotechnology training courses. Before her tenure at UMBC, Wayman worked at the United States Agency for International Development, where her team focused on policies and programs in science for use in international development. One such program was the Partnerships for Enhanced Engagement in Research program, a 10-year, $100 million program that funded more than 400 researchers across more than 57 countries. Wayman also worked at BD, where she served in research and development engineering roles; her activities ranged from advanced technology development to new product development for BD's

anesthesia platform. Wayman has a PhD and an MS in mechanical engineering from the Georgia Institute of Technology. She also has a BS in mechanical engineering from UMBC.

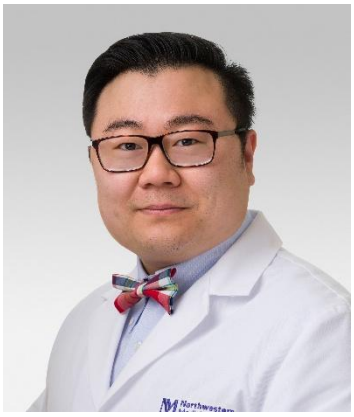
Stephanie Willard, M.H.A., Wellinks

Stephanie Willard is a seasoned healthcare leader with over 15 years of experience driving clinical innovation and respiratory care. As Senior Director of Clinical Innovation at Wellinks, she spearheads transformative initiatives to enhance patient outcomes through technology and strategic partnerships. Previously, as Director of Respiratory Services and Pulmonary Diagnostics, she honed her expertise in delivering high-quality care and advancing technology for diagnostics.

Holding a master's in healthcare administration and a background as a licensed respiratory therapist, Stephanie combines clinical acumen with strategic vision. She led Wellinks' collaboration with their clinical studies to bridge clinical research and practical application to improve chronic disease management. Her work focuses on leveraging innovation to empower patients and healthcare providers alike.

Sheng Xu, Ph.D., University of California San Diego

Dr. Sheng Xu is a Professor and Jacobs Faculty Scholar at UC San Diego. In November 2025, he will join the Department of Anesthesiology, Perioperative and Pain Medicine at Stanford University as a tenured full professor and the inaugural Director of Emerging Technologies. He earned his B.S. degree in Chemistry from Peking University and his Ph.D. in Materials Science and Engineering from the Georgia Institute of Technology. Subsequently, he pursued postdoctoral studies at the Materials Research Laboratory at the University of Illinois at Urbana-Champaign. His research group is interested in developing new materials and fabrication methods for soft electronics, with a particular focus on wearable ultrasound technology. His research has been presented to the United States Congress as a testimony to the importance and impact of NIH funding. He has received numerous honors, including the NIH Maximizing Investigators' Research Award, NIH Trailblazer Award, Sloan Fellowship, IEEE EMBS Technical Achievement Award, ETH Zürich Materials Research Prize for Young Investigators, MRS Outstanding Early Career Investigator Award, and a finalist of the Blavatnik National Awards for Young Scientists. He is a Fellow of AIMBE, IEEE, and MRS.



Steve Xu, M.D., Northwestern University

Steve Xu is a physician-engineer, board certified dermatologist, academic, and entrepreneur. He holds an appointment as the Medical Director at the Querrey Simpson Institute for Bioelectronics at Northwestern University. Dr. Xu has authored more than 120 peer-reviewed publications, which include works in Nature, Science, The New England Journal of Medicine, and the Proceedings of the National Academy of Sciences. Furthermore, he is an inventor on 15 pending and granted patents in the fields of digital health, medical device development, and medical innovation where he has been recognized by MIT as a 35 Under 35 Innovator. He is an NIH, DoD, FDA, Gates Foundation, and Wellcome LEAP funded investigator. He is currently on leave from his academic position at Northwestern University to serve as the CEO of Sibel Health where he is also a co-founder and board member. As of 2025, Sibel has launched advanced monitoring systems and AI algorithms in more than 20 countries for both clinical care and clinical trials, obtained multiple FDA 510(k) clearances, and monitored more than 17,000 individuals with a specific focus on maternal newborn health.

Alexandria Zozos, M.S., R.D.N., L.D., EatLove

Alexandria Zozos, MS, RDN, LD is the Senior Dietitian leading Member Success at EatLove, a precision nutrition technology platform supporting over 10,000 clinicians and providers across major health systems, medical groups, and private practices. Since joining EatLove in 2021, Ale has focused on helping providers deliver Medical Nutrition Therapy for diabetes, heart disease, liver disease, weight management, and more by translating evidence-based interventions into practical, technology-enabled solutions for patients. In her role, Ale bridges clinical expertise with product innovation, leading professional education programs for thousands of clinicians and ensuring clinical best practices are applied effectively through technology. Drawing on her experience as a practicing dietitian, she provides insight into how digital tools can streamline workflows, enhance patient engagement, and scale personalized care. Ale has served as an expert panelist for the Academy of Nutrition & Dietetics Diabetes Practice Group and is the author of “The 30-Day Mediterranean Diet Meal Plan and Cookbook: A Beginner’s Guide to the World’s Best Diet for Long-Term Health and Longevity”. She holds a master’s degree in clinical nutrition and Dietetics from New York University, positioning her at the intersection of clinical practice and digital health innovation.

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