

UCLA

PEOPLE
DISCOVERY
BETTER HEALTH
A BRIGHTER TOMORROW

Digital Health Workshop 4.0

From Data to Decisions
in Digital Health

Program Book

September 17–18, 2026
Mong Auditorium, UCLA

DATA
PEOPLE
TECHNOLOGY
HEALTHIER TOMORROWS

MEDICAL
IMAGING
+ AI

DATA
FOR A
HEALTHIER
TOMORROW

WEARABLE
SENSING

GENOMICS
& PRECISION
HEALTH

HEALTH
DATA
IN ACTION



BOLD IDEAS
FOR A
HEALTHIER WORLD



Welcome to Digital Health Workshop 4.0

From Data to Decisions in Digital Health

Two days of focused discussion connecting imaging AI, digital biomarkers, precision health, genomics, wearable sensing, and clinical translation - with an emphasis on what is needed to move from compelling data to decisions that improve health.

WORKSHOP AT A GLANCE

Day 1

Three technical tracks +
cross-cutting panel +
posters & networking

Day 2

Clinical-engineering
matchmaking +
integration & translation panel

CONFERENCE LEADERSHIP

Liang Gao, PhD

Professor, Bioengineering

Conference Co-Chair

Linda Demer, MD, PhD

Distinguished Professor, Departments of Medicine, Physiology, & Bioengineering;
Vice Chair, Department of Medicine;
Executive Co-Director, STAR Program;
Co-Director, Physician Scientist Career Development, DGSOM

Conference Co-Chair

Fang-Yi “Ida” Su, PhD

Assistant Professor, Chemical & Biomolecular Engineering

Conference Co-Chair

Dino Di Carlo, PhD

Chair & Professor, Bioengineering; Armond and Elena Hairapetian Chair in Engineering and Medicine

Host / Track Chair



Day 1 - Morning Program

8:30 - 9:00 **Registration**

9:00 - 9:15 **Welcome & Opening Remarks**
 Dino Di Carlo, Steven Dubinett, Liang Gao, Linda Demer & Ida Su
 UCLA

TRACK 1 | IMAGING AI - FROM ALGORITHMS TO CLINICAL DEPLOYMENT | Chair: Liang Gao

9:15 - 9:30 **Experiences from Model Development to Clinical Implementation**
 Katherine Andriole, PhD
 Associate Dean for Health AI Strategy & Innovation, DGSOM; Director, UCLA Center for AI & SMART Health

9:30 - 9:45 **AI in Digital Pathology**
 Aydogan Ozcan, PhD
 Chancellor's Professor & Volgenau Chair for Engineering Innovation, UCLA

9:45 - 10:00 **Harnessing Imaging, Clinical, and Molecular Data for Precision Diagnosis**
 William Hsu, PhD
 Professor-in-Residence, Radiological Sciences; Professor, Bioengineering, UCLA

10:00 - 10:15 **Predicting Pancreatic Cancer Risk Using AI Analysis of Abdominal CT**
 Debiao Li, PhD
 Director, Biomedical Imaging Research Institute, Cedars-Sinai; Professor of Medicine, UCLA

10:15 - 10:35 **Panel Discussion & Audience Q&A:: Imaging AI Changing Clinical Care**
 Moderator: Liang Gao | Panelists: Katherine Andriole, Aydogan Ozcan, William Hsu, Debiao Li

10:35 - 10:55 **Coffee Break**



Day 1 - Midday & Afternoon

TRACK 2 | DIGITAL BIOMARKERS, WEARABLES & HUMAN-CENTERED HEALTH | Chair: Dino Di Carlo

10:55 - 11:10

Speech-Based Biomarkers for Mental Health

Abeer Alwan, PhD

Distinguished Professor, Electrical & Computer Engineering, UCLA

11:10 - 11:25

Noninvasive Sensing and AI for Disease Detection

Yuzhe Yang, PhD

Assistant Professor, Computational Medicine & Computer Science, UCLA

11:25 - 11:40

Wearable Monitoring for Chronic Disease and Mobility

Bijan Najafi, PhD

Professor of Surgery; Research Director, CASIT; Co-Director, C2SHIP, UCLA

11:40 - 11:55

Cardiovascular digital health / heart failure monitoring

Jeffrey Hsu, MD, PhD

Assistant Professor-in-Residence, Medicine; Bioengineering, UCLA

11:55 - 12:10

Machine learning of dynamic data for behavior modification

Ashutosh Sabharwal, PhD

Ernest Dell Butcher Professor, ECE; Director, Rice Digital Health Initiative, Rice University

12:10 - 12:30

Panel Discussion & Audience Q&A:: From Signals to Action - What Makes a Digital Biomarker Clinically Useful?

Moderator: Dino Di Carlo | Panelists: Abeer Alwan, Yuzhe Yang, Bijan Najafi, Jeffrey Hsu, Ashutosh Sabharwal

12:30 - 2:00

Group Photo, Lunch, Poster Session & Networking

2:00 - 2:15

Overview of PATHS-UP

Gerard L. Côté, PhD

Director, PATHS-UP; Texas A&M; University

2:15 - 2:30

Determining the risk of preterm labor with point of care devices

Jessica Ramella-Roman, PhD

Professor, Department of Biomedical Engineering, Florida International University



Day 1 - Precision Health & Closing Panel

TRACK 3 | PRECISION HEALTH, GENOMICS, BIOCHEMICAL MARKERS & HEALTH DATA | Chairs: Linda Demer and Jeffrey Hsu

2:30 - 2:45

Randomize, Learn, Repeat: Rapid-Cycle Evaluation of Clinical AI

John Mafi, MD

Associate Professor-in-Residence, Medicine, UCLA; Adjunct Physician Policy Researcher, RAND

2:45 - 3:00

Opportunities for Genetic Discovery in the ATLAS UCLA Health System Biobank

Daniel Geschwind, MD, PhD

Senior Associate Dean & Associate Vice Chancellor, Precision Health; Distinguished Professor, UCLA

3:00 - 3:15

Sequencing-Based Diagnostics and Molecular Phenotyping

Valerie Arboleda, MD, PhD

Associate Professor, Pathology & Laboratory Medicine and Human Genetics, UCLA

3:15 - 3:30

Continuous Biomarker Monitoring to Inform Clinical Decisions

Mike McShane, PhD

Department Head & James J. Cain Professor II, Biomedical Engineering, Texas A&M; University

3:30 - 3:45

Translating Genomic Data into Clinical Oncology

Paul Spellman, PhD

Professor, Medicine and Human Genetics, UCLA

3:45 - 4:05

Panel Discussion & Audience Q&A:: Where Can Biochemical Data Have the Most Impact on Clinical Decisions?

Moderators: Linda Demer and Jeffrey Hsu | Panelists: John Mafi, Daniel Geschwind, Valerie Arboleda, Mike McShane, Paul Spellman

4:05 - 4:25

Coffee Break & Poster Viewing

CLOSING CROSS-CUTTING PANEL

4:25 - 4:55

What Will Digital Health Actually Change in the Next 5 Years?

Moderator: Ashutosh Sabharwal | Panelists: Corey Arnold, Jonathan Kao, Paul Lukac, Farzan Sasangohar

4:55 - 5:45

Reception, Poster Viewing & Continued Networking



Day 2 - Collaboration & Translation

8:30 - 9:00 **Coffee & Networking**

MATCHMAKING SESSION | LINKING CLINICAL CHALLENGES WITH NEW TOOLS & TECHNOLOGIES | Chair: Ida Su

9:00 - 10:50 **Digital Health Transformation Lightning Talks & Collaborations**

Introduction: Ida Su & Sean Yamada-Hunter
Welcome remarks from Dean Alissa Park

Hayoung Ahn

MD/MA in Education candidate, David Geffen School of Medicine at UCLA

Jennifer Wilson, PhD / Jessica Rexach, MD, PhD

Bioengineering / Neurology, UCLA

Chao Peng, PhD / Wei Wang, PhD

Neurology / Computer Science & Computational Medicine, UCLA

Attendee self-introductions, team assembly, and breakout discussions follow. Breakout rooms: Cohen and Tannas.

10:50 - 11:10 **Coffee Break**

INTEGRATION & TRANSLATION PANEL

Connecting Measurement, AI, and Clinical Action

11:10 - 12:00

Moderator: Aydogan Ozcan | Panelists: Liang Gao, Debiao Li, Alexander Sandhu, Eleazar Eskin

Closing Remarks & Next Steps

12:00 - 12:15

Dino Di Carlo & PATHS-UP leadership

UCLA / PATHS-UP

Speaker Directory - Imaging AI

KA

Katherine Andriole, PhD

Associate Dean for Health AI Strategy & Innovation; Professor of Radiological Sciences

David Geffen School of Medicine at UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads UCLA health AI strategy and the Center for AI & SMART Health. Her work spans medical imaging informatics, machine learning and clinical translation of AI into health-system workflows.

TRACK 1 SPEAKER

AO

Aydogan Ozcan, PhD

Chancellor's Professor; Volgenau Chair for Engineering Innovation; HHMI Professor

UCLA Electrical & Computer Engineering / Bioengineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops computational imaging and sensing systems that combine optics with AI, including lens-free microscopy and digital pathology approaches designed for scalable, point-of-care diagnostics.

TRACK 1 SPEAKER + DAY 2 MODERATOR

WH

William Hsu, PhD

Professor-in-Residence, Radiological Sciences; Professor, Bioengineering
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops biomedical AI methods that integrate imaging, clinical and molecular data. His translational projects include AI analysis of screening CT and imaging biomarkers for cancer risk and diagnosis.

TRACK 1 SPEAKER

DL

Debiao Li, PhD

Director, Biomedical Imaging Research Institute; Professor of Medicine
Cedars-Sinai / UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads development of advanced MR methods for cardiovascular and abdominal disease. His institute also supports large-scale imaging-AI studies, including data infrastructure for early pancreatic cancer detection.

TRACK 1 SPEAKER + DAY 2 PANELIST

Speaker Directory - Digital Biomarkers

AA

Abeer Alwan, PhD

Distinguished Professor, Electrical & Computer Engineering
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Studies digital speech processing, speech recognition and models of speech production and perception - foundations for extracting clinically useful information from voice and speech signals.

TRACK 2 SPEAKER

YY

Yuzhe Yang, PhD

Assistant Professor, Computational Medicine & Computer Science
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Directs the Health Intelligence Lab, developing multisensory and generative AI for health. His work includes foundation models for wearables, passive heart and sleep monitoring, and clinical deployment of medical AI.

TRACK 2 SPEAKER

BN

Bijan Najafi, PhD

Professor of Surgery; Research Director, CASIT; Co-Director, C2SHIP
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops wearable and remote-monitoring technologies for aging and chronic disease. His research aims to extend care beyond hospitals through digital biomarkers, decentralized studies and home-based assessment of mobility and cognition.

TRACK 2 SPEAKER

JH

Jeffrey Hsu, MD, PhD

Assistant Professor-in-Residence, Medicine; Bioengineering
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

A heart-failure cardiologist and bioengineer whose research connects cardiovascular biology with monitoring and imaging. His digital-health interests include new ways to track heart failure and translate physiological signals into care decisions.

TRACK 2 SPEAKER / TRACK 3 CO-CHAIR

AS

Ashutosh Sabharwal, PhD

Ernest Dell Butcher Professor, ECE; Director, Rice Digital Health Initiative
Rice University

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads the Rice Digital Health Initiative, using devices, machine learning and prospective studies to quantify behavior-biology pathways. His group develops speech, vision and sensing approaches across mental health, diabetes and cardiology.

TRACK 2 SPEAKER + CLOSING PANEL MODERATOR

GL

Gerard L. Côté, PhD

Director, PATHS-UP; James J. Cain Professor I, Biomedical Engineering
Texas A&M; University

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Directs the NSF PATHS-UP ERC and develops wearable, handheld and point-of-care sensing systems. His work emphasizes affordable personalized health technologies and data-driven monitoring for diabetes and cardiovascular disease in underserved communities.

PATHS-UP OVERVIEW

Speaker Directory - Precision Health

JM

John Mafi, MD

Associate Professor-in-Residence, Medicine;
Adjunct Physician Policy Researcher
UCLA / RAND

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Studies health-care value and pragmatic evaluation of new clinical tools. He co-leads UCLA INOVAi and has helped conduct randomized evaluations of generative-AI tools such as ambient clinical documentation systems.

TRACK 3 SPEAKER

DG

Daniel Geschwind, MD, PhD

Senior Associate Dean & Associate Vice
Chancellor, Precision Health
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads UCLA precision-health initiatives and applies systems biology and human genetics to neurologic and psychiatric disease. His work links large-scale genomic data with clinical phenotypes to enable precision medicine.

TRACK 3 SPEAKER

VA

Valerie Arboleda, MD, PhD

Associate Professor, Pathology & Laboratory
Medicine and Human Genetics
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

A molecular genetic pathologist developing sequencing-based clinical diagnostic tests. Her lab combines genomics, computational biology and human cell models to connect genetic variants with molecular and clinical phenotypes.

TRACK 3 SPEAKER

MM

Mike McShane, PhD

Department Head; James J. Cain Professor II,
Biomedical Engineering
Texas A&M; University

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops implantable and insertable biosensors for continuous biochemical monitoring, including multiplexed glucose and oxygen sensing. His work focuses on translating biomaterials and optical sensing into long-term physiological measurements.

TRACK 3 SPEAKER

PS

Paul Spellman, PhD

Professor, Medicine and Human Genetics
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Uses genomic and computational technologies to improve cancer prevention, risk assessment and treatment. His work spans method development, clinical cohorts and implementation studies for hereditary cancer screening and precision medicine.

TRACK 3 SPEAKER

LD

Linda Demer, MD, PhD

Distinguished Professor, Departments of Medicine, Physiology,
& Bioengineering;
Vice Chair, Department of Medicine;
Executive Co-Director, STAR Program;
Co-Director, Physician Scientist Career Development, DGSOM
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Studies vascular calcification using quantitative imaging, biomechanics and computational analysis. Her interdisciplinary work connects biological mechanisms with imaging-derived measures that can improve understanding of cardiovascular risk.

CONFERENCE CO-CHAIR / TRACK 3 CO-CHAIR

Closing Cross-Cutting Panel

CW

Corey W. Arnold, PhD

Vice Chair of Research, Radiological Sciences;
Professor of Radiology and Pathology &
Laboratory Medicine
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads the Biomedical Artificial Intelligence Research Lab, applying machine learning to imaging and clinical data. Projects include cancer risk stratification, stroke imaging and mHealth models using consumer activity trackers.

CLOSING PANELIST

JC

Jonathan C-Y Kao, PhD

Associate Professor, Electrical & Computer Engineering, Computer Science & Neurobiology
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops neural prostheses and brain-machine interfaces that translate neural activity into device control. His group combines neural signal processing, dynamical systems and machine learning to improve clinically useful neurotechnology.

CLOSING PANELIST

PL

Paul Lukac, MD, MBA, MS

Chief Artificial Intelligence Officer; Assistant Clinical Professor of Pediatrics
UCLA Health / DGSOM

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads UCLA Health enterprise AI strategy, governance and deployment. His research focuses on real-world evaluation of generative AI, including randomized trials of ambient AI documentation and workflow tools.

CLOSING PANELIST

FS

Farzan Sasangohar, PhD

Associate Professor, Industrial & Systems Engineering; Mike and Sugar Barnes Faculty Fellow
Texas A&M; University

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Applies human factors to digital health, telehealth, mobile health and remote monitoring. His work designs and evaluates technologies that support decision-making, mental health and safe care delivery in complex health systems.

CLOSING PANELIST

AS

Ashutosh Sabharwal, PhD

Ernest Dell Butcher Professor, ECE; Director, Rice Digital Health Initiative
Rice University

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Builds devices and data-science methods to quantify behavior-biology pathways, with current work in speech and vision AI, wearable sensing and prospective digital-health studies across multiple diseases.

CLOSING PANEL MODERATOR

Matchmaking Session

FI

Fang-Yi “Ida” Su, PhD

Assistant Professor, Chemical & Biomolecular Engineering
UCLA Samueli School of Engineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops bioengineering and nanotechnology platforms for in vivo immune-cell engineering. Her work uses mRNA delivery and precision immunotherapy to create more accessible, programmable approaches to cancer and immune disease.

MATCHMAKING CHAIR / CONFERENCE CO-CHAIR

SY

Sean Yamada-Hunter, PhD

Assistant Professor, Bioengineering
UCLA Samueli School of Engineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Uses protein engineering and synthetic biology to develop next-generation cellular immunotherapies. His lab engineers cell-cell communication and combination therapies designed for mechanistic insight and clinical translation.

MATCHMAKING CO-LEAD

HA

Hayoung Ahn

MD/MA in Education Candidate
David Geffen School of Medicine at UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Co-developed NeuroSense, a digital-health platform designed to improve epilepsy care, and was named a 2026 Red Bull Basement U.S. National Winner for the project.

LIGHTNING TALK TEAM

JW

Jennifer Wilson, PhD

Assistant Professor, Bioengineering
UCLA Samueli School of Engineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops computational network models to predict downstream drug effects and improve target selection. Her work integrates protein-interaction networks with clinical data and has produced tools used in regulatory review.

LIGHTNING TALK TEAM

JR

Jessica Rexach, MD, PhD

Neurology faculty; neurogenetics researcher
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Uses advanced single-cell genomic technologies to study neurodegenerative disease and brain-cell responses. Her work links molecular profiling with clinical neuropathology to uncover mechanisms and potential biomarkers of tauopathies.

LIGHTNING TALK TEAM

CP

Chao Peng, PhD

Associate Professor, Neurology
David Geffen School of Medicine at UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Studies Parkinson's, Alzheimer's and related neurodegenerative diseases using genetic, multi-omics, structural and high-throughput approaches, creating data-rich models for understanding disease progression and therapeutic targets.

LIGHTNING TALK TEAM

WW

Wei Wang, PhD

Chair & Professor, Computer Science; Leonard Kleinrock Chair; Professor, Computational Medicine
UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads the Scalable Analytics Institute and develops big-data, machine-learning, NLP and bioinformatics methods. Her research applies scalable AI to computational medicine, genomics and other data-intensive biomedical problems.

LIGHTNING TALK TEAM

AA

Ah-Hyung “Alissa” Park, PhD

Ronald and Valerie Sugar Dean; Professor, Chemical & Biomolecular Engineering
UCLA Samueli School of Engineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

As dean, Park leads UCLA Samueli across engineering, AI and health-technology programs and helps catalyze cross-school translation. Her own research focuses on sustainable energy and materials rather than digital health.

DAY 2 WELCOME

Integration, Translation & Leadership

LG

Liang Gao, PhD

 Professor, Bioengineering
 UCLA Samueli School of Engineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops next-generation biomedical optical imaging, including hyperspectral, ultrafast and computational imaging. His work aims to improve medical diagnostics and biological measurement through advanced optics and AI-enhanced processing.

CONFERENCE CO-CHAIR / DAY 2 PANELIST

AS

Alexander Sandhu, MD

 Associate Professor-in-Residence, Medicine;
 Cardiology
 David Geffen School of Medicine at UCLA / UCLA Health

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Studies cardiovascular outcomes and digital health, including EHR-based risk models, telemedicine, smartphone disease-management tools and pragmatic trials that test AI-supported approaches for delivering heart-failure care.

DAY 2 PANELIST

EE

Eleazar Eskin, PhD

 Chair, Computational Medicine; Professor, Computer
 Science & Human Genetics
 UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops computational methods for linking human genetic variation with disease. His work in bioinformatics and statistical genetics enables large-scale analysis of genomic data for precision health and clinical discovery.

DAY 2 PANELIST

DD

Dino Di Carlo, PhD

 Chair & Professor, Bioengineering; Armond and
 Elena Hairapetian Chair in Engineering and Medicine
 UCLA Samueli School of Engineering

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops microfluidic and single-cell technologies for diagnostics, drug discovery and cell therapy. Translational work from his lab has supported rapid disease testing and clinically deployed diagnostic technologies.

HOST / CLOSING REMARKS

SM

Steven M. Dubinett, MD

 Dean, David Geffen School of Medicine; Associate
 Vice Chancellor for Research
 UCLA

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Leads translational lung-cancer research spanning biomarkers, immunity and early detection. His collaborations include advanced imaging and data-driven biomarker strategies aimed at improving diagnosis of indeterminate lung nodules.

OPENING REMARKS

JR

Jessica Ramella-Roman, PhD

 Professor, Department of Biomedical Engineering
 Florida International University

DIGITAL HEALTH / TRANSLATIONAL FOCUS

Develops polarization-sensitive optical imaging and point-of-care devices for women's health. Her PPRIM handheld imaging system uses polarized imaging of the cervix to assess structural changes associated with risk of preterm birth.

PATHS-UP SPEAKER