

2024 AI for Health Equity Symposium AIM-AHEAD Annual Meeting



Westin Peachtree Plaza Hotel
210 Peachtree St NW,
Atlanta, GA 30303

Contents

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 - 9 Keynote Speakers
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Workshop Series
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Conference Agenda

Tuesday, Aug. 6

8:00-9:00 a.m. Registration (Peachtree Ballroom)

9:00-9:30 a.m. Opening & Welcome Remarks (Peachtree Ballroom)
Presenters: Nawar Shara, Roland Thorpe, and Jamboor Vishwanatha

9:30-10:20 a.m. NIH Keynote (Peachtree Ballroom)
Dr. Susan Gregurick - NIH Office of Data Science Strategy Director

10:20-10:50 a.m. Networking Break

11:00-11:50 a.m. AIM-AHEAD Awardee Presentations

Research Showcase - Peachtree Ballroom
Camille Edwards and Yu Liang

Research Showcase - Breakout Room F
Sonali Tamhankar and Frances Biel

Research Spotlights - Breakout Room G
Ioannis Kakadiaris, Ang Li, and Jerry Diabor

Research Spotlight - Breakout Room H
Tadesse Abegaz, Vivian Huangfu, and Mario Flores

Research Spotlights - Breakout Room I/J
Bo Zhou, Samia Valeria Ozorio Dutra, and Samantha Salvi Cruz

12:00-12:50 p.m. Lunch on your own

Conference Agenda

Tuesday, Aug. 6 cont.

1:00-1:50 p.m. AIM-AHEAD Awardee Presentations

Research Spotlights - Breakout Room F

Anna Zamora-Kapoor, Mark Goldberg, Cheryl Brown and Xiaoquian Jiang

Research Spotlights Breakout Room G

Junier Olivia, Uduak George and Melody Schiaffino, and Marie Guerraty

Research Spotlights - Breakout Room H

Vibhuti Gupta, Farrokh Alemi, and Martine De Cock

Lightning Rounds - Peachtree Ballroom

Felesia Stukes, Sunyang Fu, Emily Bear, Nicole Cook, Todd Brown
Fahmi Khalifa, and Yi Zhu and Peter Matairea

2:00-2:50 p.m. Invited Presentations

AI for Communities - Peachtree Ballroom

Harold Alexander, Thomas Morse, Dedren Snead, Jejuan Stewart, and
Iffat Walker

Artist Residency Video Series Viewing - Breakout Room F

Simone Stanley

**Jump Start with AI for Health Equity Research for New
Researchers - Breakout Room G**

Guodong (Gordon) Gao

AI Implementation in Healthcare - Breakout Room H

Kenyon Crowley

Conference Agenda

Tuesday, Aug. 6 cont.

**Community Based Participatory Research Best Practices -
Breakout Room I/J**
Josh Allison Burbank

3-3:50 p.m. Dinner Keynote
Rama Chakaki - Syrian-American Impact Tech Entrepreneur, Investor
and Philanthropist

4:00-6:00 p.m. 2-hour Poster Session

Wednesday, Aug. 7

9:00-9:50 a.m. Breakfast Keynote
Dr. Renata Rawlings-Goss, IDEaS Director of Industry Engagement -
Georgia Institute of Technology

10:00-10:50 a.m. AIM-AHEAD Awardee Presentations

Research Showcase - Breakout Room G
Suresh Bhavnani and Linda Zanin and Yijun Shao

Research Showcase - Breakout Room H
S. Craig Watkins and Semhar Michael

Research Spotlights - Breakout Room F
Kerry Bet and Shumit Saha

Conference Agenda *Wednesday, Aug. 7 cont.*

Research Spotlights - Breakout Room I/J
Peter Washington, Aisha Montgomery, and Azad Bhuiyan

Lightning Rounds - Peachtree Ballroom
Yaritza Inostroza-Nieves, Rebecca Conway, John Valdovinos, and
Arghya Das, Falk Huettman, and Srijan Aggarwal

11:00-11:20 a.m. Invited Presentations

**AI and Health Informatics: Big Data in Healthcare Research -
Peachtree Ballroom**
Wyatt Bensken and Jessica Lyons

Ethics and Equity Principles - Breakout Room F
Laurie Novak

**Regulatory, Compliance, IRB, and Data Security - Breakout
Room G**
John Ries and Erin Tucker

I-Corps Information Session - Breakout Room H
Legand (Lee) Burge

AI and Health Equity Research Trivia - Breakout Room I/J
Moderated by Harlan Jones and Roland Thorpe

Conference Agenda

Wednesday, Aug. 7 cont.

11:30-11:50 a.m. Invited Presentations

**AI and Health Informatics: Big Data in Healthcare Research -
Peachtree Ballroom**

Wyatt Bensken and Jessica Lyons

**Ethics and Equity Principles - Breakout Room F
Laurie Novak**

**Regulatory, Compliance, IRB, and Data Security - Breakout
Room G**

John Ries and Erin Tucker

I-Corps Information Session - Breakout Room H

Legand (Lee) Burge

AI and Health Equity Research Trivia - Breakout Room I/J

Moderators: Harlan Jones and Roland Thorpe

12-12:50 p.m. Lunch on your own

1:00-3:00 p.m. AIM-AHEAD Program Meetings

Keynote Speakers



Susan K. Gregurick, Ph.D., was appointed Associate Director for Data Science and Director of the Office of Data Science Strategy (ODSS) at the National Institutes of Health (NIH) on Sept. 16, 2019. Under Gregurick's leadership, the ODSS leads the implementation of the NIH Strategic Plan for Data Science through scientific, technical, and operational collaboration with the institutes, centers, and offices that comprise NIH. Gregurick received the 2020 Leadership in Biological Sciences Award from the Washington Academy of Sciences for her work in this role. She was instrumental in the creation of the ODSS in 2018 and served as a senior advisor to the office until her current position.



Rama Chakaki is a Syrian-American Impact Tech Entrepreneur, Investor and philanthropist. Rama is a partner in Transform VC, a Silicon Valley firm enabling 1000 tech founders to impact a billion and make a billion by investing in deep tech with climate and social impact. Rama was instrumental in building the social entrepreneurship ecosystem in the Middle East. In addition to her corporate roles, Rama runs an edTech nonprofit (VIP.fund) supporting youth impacted by conflict. Rama has been featured in Forbes, Bloomberg, the Monitor, Arab Women Rising, a Wharton School of Business Publication and The power of presence, a book by Joy Moore.



Dr. Renata Rawlings-Goss is responsible for interfacing with industry to cultivate industrial partnerships and embedded innovations labs, organizing workshops, retreats on topics relevant to emerging initiatives, job fairs, and numerous other activities. Renata brings rich experience in Big Data technology and policy from the National Science Foundation and the White House Office of Science and Technology Policy. During her tenure, she co-led inter-agency Big Data initiatives and led the formation of the National Data Science Organizers group. She also plays the lead role in managing the NSF South Big Data Innovation Hub from Georgia Tech. Rawlings-Goss has a Ph.D. in Biophysics.

Awardee

Presentations

Research Showcase

Tuesday

Peachtree Ballroom

Camille Edwards, *Consortium Development Project* - "Risk factors for suboptimal treatment in patients with newly diagnosed multiple myeloma"

Yu Liang, *Hub-Pilot Program* - "Generation of AI-enabled Diagnostic and Therapeutic Music from Biometric data to Promote Equity of Medical Services"

Breakout Room F

Sonali Tamhankar, *Leadership Fellowship Cohort 2* - "Generative artificial intelligence and explainable predictive analytics based clinical tool to reduce emergency room visits in sickle cell patients"

Frances Biel, *Consortium Development Project* - "Development of a Natural Language Processing Algorithm for Context-Dependent Exposure in Provider Notes"

Wednesday

Breakout Room G

Suresh Bhavnani, *Consortium Development Project* - "Subtyping Social Determinants of Health in All of Us: Implications for Policy Translation"

Linda Zanin and Yijun Shao, *Hub-Pilot Program* - "AI/ML Training for Middle School Teachers to Enhance Their Confidence and Competence in STEM-H Teaching"

Breakout Room H

S. Craig Watkins - "Inclusive Design: How Stakeholder Engagement Enhances the Development of Health Oriented AI/ML Systems"

Semhar Michael, *Consortium Development Project* - "Computational and ML methods for survival prediction and inference of persons with ESKD"

Awardee

Presentations

Research Spotlights

Tuesday AM

Breakout Room G

Ioannis Kakadiaris, *Data and Infrastructure Capacity Building (DICB)* - "The AIM-AHEAD UH Resource Center of Excellence for Data Curation, Linkage, and Harmonization of Datasets: Progress Report"

Ang Li, *Consortium Development Project* - "Electronic Health Record (EHR) Integration of Thromboembolism Risk Stratification Model in Patients with Cancer in a Safety-net Hospital System"

Jerry Diabor, *Research Fellowship Cohort 2* - "Using ML/AI to explore the correlation between food deserts and health disparities in low-income communities in the United States"

Breakout Room H

Tadesse Abegaz, *AIM-AHEAD: All of Us Training Program* - "The Role of Social Determinants of Health in Predicting Health-Related Quality of Life: A Cross-sectional Analysis of the All of Us Research Program"

Vivian Huangfu, *Research Fellowship Cohort 2* - "Leveraging Machine Learning to Address Obesity Disparities: Predictive Modeling and Targeted Interventions Using EHR Data"

Mario Flores, *Hub-Pilot Program* - "Markers of early identification of patients at high risk for diabetic foot ulcers using spatial biology and Artificial Intelligence"

Breakout Room I/J

Bo Zhou, *Consortium Development Project* - "Low-value Prescribing among Older Adults at Cardiometabolic Risk"

Samia Valeria Ozorio Dutra, *Research Fellowship Cohort 2* - "Improving risk detection of depression among native Hawaiians and pacific islanders"

Samantha Salvi Cruz, *Hub-Pilot Program* - "Ensuring Inclusivity and Cultural Sensitivity: A Feasibility Study of the Bridge2AI Spanish-Translated Protocol"

Awardee

Presentations

Research Spotlights

Tuesday PM

Breakout Room F

Anna Zamora-Kapoor, *Leadership Fellowship Cohort 2* - "Implementing a pilot study using AI-generated text messages to improve lung cancer screening in a rural clinic: Evidence from Washington state"

Mark Goldberg, *Data and Infrastructure Capacity Building (DICB)* - "M-POWER: MATRIX-Provided AI/ML Open-Source Resource Center for Behavioral Health EmpoWERment"

Cheryl Brown/Xiaoqian Jiang, *Consortium Development Project* - "Addressing Health Disparities in Heart Transplant through Fair AI/ML Approaches"

Breakout Room G

Junier Olivia, *Hub-Pilot Program* - "Human + AI Collaborative Systems for Better Medical Decision-Making"

Uduak George and Melody Schiaffino, *Program for AI Readiness (PAIR)* - "Developing AI/ML Infrastructure to Address Inequities Among Diverse Older Adults Diagnosed with Cancer"

Marie Guerraty, *Consortium Development Project* - "Hybrid Intelligence Approaches to Identify Angiography-Based Imaging Biomarkers of Coronary Microvascular Disease and Reduce Healthcare Disparities"

Breakout Room H

Vibhuti Gupta, *Consortium Development Project* - "Histopathology Imaging Data Analytics for an Integrated Model for Prostate Cancer Risk Stratification"

Farrokh Alemi, *Hub-Pilot Program* - "Bias in AI-guided Management of Patients with Major Depressive Disorders"

Weichao Yuwen and Ling-Hong Hung, *Program for AI Readiness (PAIR)* - "Responsible Health AI Lab at University of Washington Tacoma"

Awardee Presentations Research Spotlights *Wednesday*

Breakout Room F

Kerry Bet, *Consortium Development Project* - "Building and sustaining a hybrid, adaptive stakeholder advisory committee to inform firearm violence AI/ML research"

Shumit Saha, *Meharry Medical College* - "Effect of Beta-Blockers on Sleep Efficiency"

Breakout Room I/J

Peter Washington, *Hub-Pilot Program* - "Fair and Accessible Parkinson's Disease Screening using a Machine Learning-Powered Web Platform"

Aisha Montgomery, *Consortium Development Project* - "AI/ML to Identify and Stratify Social Determinants of Health Contributing to Cancer Disparity in Rural Appalachia"

Azad Bhuiyan, *Leadership Fellowship Cohort 2* - "Association of Ethnicity/Race with Phenotypic Characteristics and Clinical Outcomes among Patients with Hypertrophic Cardiomyopathy in the All of Us Research Program"

Awardee Presentations Lightning Rounds *Tuesday*

Peachtree Ballroom

Felesia Stukes, *Program for AI Readiness (PAIR)* - "Building Capacity in Artificial Intelligence for Health Equity Research Outcomes (AI-HEROs)"

Sunyang Fu, *Leadership Fellowship Cohort 2* - "An Informatics Framework for Analyzing Symptom Documentation Variability Among Racial Groups"

Emily Bear, *AIM-AHEAD: All of Us Training Program* - "Exploring the Association of Social Determinants of Health with Type II Diabetes in the Hispanic/Latino Population"

Nicole Cook, *Consortium Development Project* - "Evaluating how firearm violence exposure is documented in EHRs across a multi-state network of community-based, safety-net health centers"

Todd Brown, *Research Fellowship Cohort 2* - "Environmental and Socioracial Determinants of Stress and Cardiovascular Health Among Transgender and Gender Diverse Individuals"

Fahmi Khalifa, *Program for AI Readiness (PAIR)* - "AI/ML Health Equity Lab Using Multimodal Biomedical/Biological Data from Improved Personalized Medicine"

Yi Zhu and Peter Mataira, *Program for AI Readiness (PAIR)* - "Native Hawaiian and Pacific Island (NHPI) Community Informed AI/ML Health Equity Research: Lessons, Challenges, Achievements, and Future Trends"

Awardee Presentations Lightning Rounds *Wednesday*

Peachtree Ballroom

Yaritza Inostroza-Nieves, *AIM-AHEAD: All of Us Training Program* - "Relationship between ET-1 Gene Polymorphism rs5370 and Cardiovascular Disease among Hispanics Using All of Us data"

Rebecca Conway, *Hub-Pilot Program* - "Comparison of Machine Learning Models to for the Early Identification of COVID-19 Infection among Native American/ Alaska Native and Hispanic Dialysis Patients"

John Valdovinos, *Program for AI Readiness (PAIR)* - "Geographical Barriers to Cardiovascular Care for Congenital Heart Disease Patients in the All of Us Research Program"

Arghya Das, Falk Huetteman, and Srijan Aggarwal, *Program for AI Readiness (PAIR)* - "Initiating AI-Based Investigation of Climate Change's Impact on Rural Health of Alaska: A Pilot Study with Algal Blooms' Impact on Paralytic Shellfish Poisoning"

Invited Presentations *Tuesday*

Peachtree Ballroom

Presentation: AI for Communities

Presenters: Harold Alexander, Thomas Morse, Dedren Snead,
Jejuan Stewart, and Iffat Walker

Breakout Room F

Presentation: Artist Residency Video Series Viewing

Presenter: Simone Stanley

Breakout Room G

Presentation: Jump Start with AI for Health Equity Research for
New Researchers

Presenter: Guodong (Gordon) Gao

Breakout Room H

Presentation: AI Implementation in Healthcare

Presenter: Kenyon Crowley

Breakout Room I/J

Presentation: Community Based Participatory Research Best
Practices

Presenter: Josh Allison Burbank



Invited

Presentations

Wednesday 11 AM

Peachtree Ballroom

Presentation: AI and Health Informatics: Big Data in Healthcare Research

Presenters: Wyatt Bensken and Jessica Lyons

Breakout Room F

Presentation: Ethics and Equity Principles

Presenter: Laurie Novak

Breakout Room G

Presentation: Regulatory, Compliance, IRB, and Data Security - Presented by the AIM-AHEAD Regulatory Compliance Office

Presenters: John Ries and Erin Tucker

Breakout Room H

Presentation: I-Corps Information Session - Learn about the I-Corps Program and how to get \$50K to commercialize your AI Health Equity Research

Presenter: Legand (Lee) Burge

Breakout Room I/J

Presentation: AI and Health Equity Research Trivia

Moderators: Harlan Jones and Roland Thorpe

Invited

Presentations

Wednesday 11:30

AM

Peachtree Ballroom

Presentation: AI and Health Informatics: Big Data in Healthcare Research

Presenters: Wyatt Bensken and Jessica Lyons

Breakout Room F

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Presenter: Legand (Lee) Burge

Breakout Room I/J

Presentation: AI and Health Equity Research Trivia

Moderators: Harlan Jones and Roland Thorpe

Poster Session

Candice Adams-Mitchell - "Deep Phenotyping Methods for Early Detection of Pain and Acute Chest Syndrome (ACS) in Individuals with Sickle Cell Disease (SCD)"

Adil Alaoui - "Georgetown University SDOH Data Analytics Workshops"

Adil Alaoui - "SDOH Health Outcomes Explorer: AIM-AHEAD Ecosystem for Health Disparities Research"

Farrokh Alemi - "Bias in AI-guided Management of Patients with Major Depressive Disorders"

Omar Aljawfi - "Enhancing AI/ML in Healthcare Education and Training through the Generation and Utilization of Synthetic Data"

Omar Aljawfi - "Transforming Data Science and Health Equity Curriculum to Empower Frontline Healthcare Workers"

Solmaz Amiri - "ML-Driven Identification of Social Determinants of Health Associated with Age among Patients with Alzheimer's Disease and Related Dementias by Race and Ethnicity"

Janet Antwi - "Using Artificial Intelligence to Investigate Diabetes Disparities among Racial/Ethnic Minority Populations"

Faezeh Babaieasl - "AI-Enhanced Blockchain Framework for Predicting Treatment Response in Triple-Negative Breast Cancer"

Nomita Bajwa - "Building national multi-stakeholder engagement and knowledge through AIM-AHEAD cross-hub collaborations: Lessons from the South Central and Northeast Hubs"

Ashley Bhogal - "Advancing Research Methods: Incorporating Intersectionality into Evaluation of Health Care Algorithms"

Azad Bhuiyan - "Association of Ethnicity/Race with Phenotypic Characteristics and Clinical Outcomes among Patients with Hypertrophic Cardiomyopathy in the All of Us Research Program"

Frances Biel - "Development of a Natural Language Processing Algorithm for Context-Dependent Exposure in Provider Notes"

Chastity Bradford - "Air Pollution Burden and Machine Learning Techniques for Accurate Prediction of Pollutants in Black Belt Communities"

Laura Brandt - "Towards a Framework for Algorithmic Bias and Fairness in Predicting Treatment Outcomes for Opioid Use Disorder"

Catherine Brockway - "The ARCH Collaborative, an AI Resource Concierge for Hawai'i"

Alaysia Brown - "Neighborhood dynamics and health disparities: A machine learning analysis of socioeconomic and non-economic influences on health for African Americans"

Poster Session

Todd Brown - "Environmental and Socioracial Determinants of Stress and Cardiovascular Health Among Transgender and Gender Diverse Individuals"

Cooper Brun - "Scoping Review: Strategies for Promoting DEI in Team Science for AI Research in the Health Sector"

Christian Cabunag - "NIH Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) - West Hub"

Jennifer Cadenhead - "Thromboembolic Risk For People With Covid-19 Receiving Estrogenic Therapies Versus Non-Users: A Comparative Analysis (Research in Progress)"

Mia Campbell - "Health Care Access, Neighborhood Environment, and Depression: Using Machine Learning and GIS to Predict Mental Health Outcomes"

Mia Campbell - "Influences of Socio-Economic and Environmental Factors on Depression Outcomes in Diverse Populations: A Machine Learning Approach"

Christian Cazares - "Socioeconomic Factors Can Predict Age Groups for ADHD Diagnosis"

Godfrey Chaparro - "Social Determinants of Health on EHR and Survey Discordance Among Eye Diseases in the All of Us Research Program Database"

Frances Chen - "Using machine learning to predict outcomes of Day Reporting Center in probation and parole"

Ashenafi Cherkos - "Cluster Analysis of Factors Related to Maternal Mortality and Racial Disparities"

Rebecca Conway - "Comparison of Machine Learning Models to for the Early Identification of COVID-19 Infection among Native American/ Alaska Native and Hispanic Dialysis Patients"

Benjamin Corriette - "Investigating the Impact of Incremental Increases in Physical Activity on the Mental Health of the Blind and Visually Impaired in the U.S."

Jonathon Cummock - "Investigating the Role of Brain Connectivity and Social Environment in Hispanic Adults with Depression and Anxiety: A Multiomics Approach"

Karlene Cunningham - "Mapping of Perinatal Mental Health Care: A First Step Towards a Learning Healthcare System"

Somayeh Dadras - "Prediction of dementia risk in different ethnoracial populations including minorities via data analytics and machine learning techniques"

Arghya Das - "Initiating AI-based Investigation of Climate Change's Impact on Rural Health of Alaska: A Pilot Study with Algal Blooms' impact on Paralytic Shellfish Poisoning"

Poster Session

Sonya Dave - "Social Determinants of Health among Patients with Severe Mental Illness: They Impact COVID-19 Secondary Infections More Than Likelihood of Acquiring COVID-19"

Martine De Cook - "Responsible Health AI Lab at University of Washington Tacoma"

May Rose Dela Cruz - "A Community-Based Partnership That Aims to Build Capacity in AI/ML Tobacco Cessation Research"

Chris Deng - "Predicting Immunotherapy Efficacy in Lung Cancer Across Multiple Ethnic Groups Using Machine Learning"

Youping Deng - "An integrative multi-omics analysis on prostate cancer risk"

Jerry Diabor - "Using ML/AI to explore the correlation between food deserts and health disparities in low-income communities in the United States"

Camille Edwards - "Risk factors for suboptimal treatment in patients with newly diagnosed multiple myeloma"

Merida Escobar - "Artificial Intelligence, Machine Learning, and Promotoras de Salud"

Anita Esquerra-Zwiers - "Predictive Factors of Impaired Milk Production"

Malika Faouzi - "Investigating health disparity in response to immunotherapy among Hawaii's ethnic and racial groups affected by melanoma and other skin cancers"

Mario Flores - "Markers of early identification of patients at high risk for diabetic foot ulcers using spatial biology and Artificial Intelligence"

Sunyang Fu - "An Informatics Framework for Analyzing Symptom Documentation Variability Among Racial Groups"

Gordan Gao - "Program for Artificial Intelligence Readiness (PAIR): Building and Sustaining Multidisciplinary AI and Health Equity Labs at Resource-Limited Institutions"

Wesley Godfrey-Chaparro - "Social Determinants of Health on EHR and Survey Discordance Among Eye Diseases in the All of Us Database"

Steven Golob - "Examining Health Equity Bias in Synthetic Data Generation Techniques"

Marjorie Gondré-Lewis - "Using Machine Learning to Distinguish the Genetic, Social, and Neurological Components of Human Immunodeficiency Virus and Substance Use Disorder"

Ariana Gonzalez-Melendez - "Machine learning methods to predict cardiovascular risk in Hispanic patients with Systemic Lupus Erythematosus"

Poster Session

Nathan Green - "Detecting Changes in Movement Patterns in Underserved Older Adults to Help Reduce the Cost of Care"

Marie Guerraty - "Hybrid intelligence approaches to identify angiography-based imaging biomarkers of coronary microvascular disease and reduce healthcare disparities"

Vibhuti Gupta - "Histopathology Imaging Data Analytics for an Integrated Model for Prostate Cancer Risk Stratification"

Toaiva Penelope Hall - "Application of AI/ML Methods in Predicting Diabetes-related Emergency Department Visits in Diabetic Adults"

Jonathan Hernandez-Agosto - "Use of supervised machine learning algorithms on HPV+ head and neck squamous cell carcinoma for precision medicine in Puerto Rican patients"

Vivian Huangfu - "Leveraging Machine Learning to Address Obesity Disparities: Predictive Modeling and Targeted Interventions Using EHR Data"

Kimberly Huynh - "Empowering Early-Career Researchers to Address Health Disparities through AI/ML: The AIM-AHEAD Research Fellows Program"

Muhammed Idris - "Using AI/ML to Delineate the Complex Role of Environmental Exposures in the Development of Metabolic Syndrome

in Adolescents of Underrepresented Minorities"

Jill Inderstrodt - "Protocol for a Prediction Model for Late-term Preeclampsia in Pregnant People Without Early Pregnancy Biomarkers"

Yaritza Inostroza-Nieves - "Relationship between ET-1 Gene Polymorphism rs5370 and Cardiovascular Disease among Hispanics Using All of Us data"

Amani Itani - "Teaching with Artificial Intelligence: A Scoping Review of Ethical Considerations in Medical Education Settings"

Laleh Jalilian - "Disparities in Receipt of Surgical Procedures Before and During COVID-19 Recovery"

Mayumi Jijiwa - "Profiling transcripts associated with clinical features of breast cancer in Native Hawaiians"

Charlotte Joslin - "Use of Machine Learning in Determination of Predictors for Completed Eye Exams in a diverse group of Hispanic Latinos: An AIM-AHEAD analysis of results from the Hispanic Latino Community Health Study/Study of Latinos (HCHS/SOL)"

Ioannis Kakadiaris - "The AIM-AHEAD UH Resource Center of Excellence for Data Curation, Linkage, and Harmonization of Datasets: Progress Report"

Youjeong Kang - "Social determinants of Health associated

Poster Session

with 30-day rehospitalization by using discharge summaries"

Devrim Kaya - "Predicting Antibiotic Resistance Risk Using EHR Data and Machine Learning"

LaKeta Kemp - "The Effects On Health From Hypertension And Other Conditions Of Saltwater Intrusion"

Jonathan Kim - "SDoH vs Racial Categories as Predictors of Outcome for Type II Diabetes Mellitus without complications in All of Us Database"

Fahmi Khalifa - "AI/ML Health Equity Lab Using Multimodal Biomedical/Biological Data for Improved Personalized Medicine"

Azad Khan - "AIM-AHEAD Federated Network"

Anahita Khojandi - "Stacking Machine Learning Models that Incorporate Genetics and Ancestry to Improve Phenotype Prediction: A Case Study in Severe Asthma"

Sanjeev Kumar - "Health Equity Data Repository (HEDR): A Secure and Scalable Solution for Diverse Data Storage, Curation, and AI Modeling"

Fred Lacy - "High Throughput AI-Based Tools to Predict Hazardous Chemical-Induced Cancer in Underserved Communities"

Claudia Lechuga - " Predicting COVID-19 Severity: Identifying Key Comorbidities in Long COVID (Research in Progress)"

Mi Jung Lee - "Using Machine Learning Algorithms to Determine the Impact of Behavioral Health and Social Determinants of Health on Disparities in Lung Cancer Screening"

Sun Ju Lee - "Survival modeling for CVD risk estimation among a diverse cohort with Type-2 Diabetes"

Frank Li - "Impact of Social Determinants of Health on Accelerated Lung Function Decline in COPD Patients"

Minghui Li - "Mitigating Bias in AI Mortality Predictions for Minority Populations: A Transfer Learning Approach"

Yu Liang - "Generation of AI-enabled Diagnostic and Therapeutic Music from Biometric data to Promote Equity of Medical Services"

Alexander Libin - "Designing needs assessment methodology to advance data science curriculum for historically underserved communities: Embracing AIM AHEAD Networks with AI-LEARN Initiative"

Feifan Liu - "Impact of Diverse Community-level Social Factors on Model's Fairness in Diabetes Risk Prediction"

Simran Makwana - "AIM-AHEAD Secure Data Repository & Cloud Compute (SDRCC): Simple and secure access to data and cloud-based computing resources for AIM-AHEAD researchers"

Poster Session

Kiara Mayhand - "Predicting Kidney Function Decline and Major Adverse Kidney Disease Events in African American Patient Population with Diabetes"

Matthew McCoy - "AIM-AHEAD Introductory Course: AI for Healthcare Applications: A Self-Paced, Online Course on AIM-AHEAD Connect"

Matthew McCoy - "Digital Twin as a tool to explore life stress prediction through electronic health records (EHR)"

David Meléndez - "Development of a culturally tailored CA of assistive technologies for older Hispanics with physical function disabilities"

Joshua Melendez - "Enhancing Healthcare Insights: Interactive Dashboards Incorporating Social Determinants of Health for Comprehensive Analysis and Intervention"

Judy Monestime - "EHR Adoption and AI: Is AI Smart Enough to Predict the Emergence of a Digital "Advanced Use" Divide?"

Aisha Montgomery - "AI/ML to Identify and Stratify Social Determinants of Health Contributing to Cancer Disparity in Rural Appalachia"

Deborah Mudali - "Examining Social and Behavior Determinants in Patients with Long-COVID-19 and Its Impact on Health Disparity"

Jovita Murillo - "Housing Insecurity: evaluation of the use of ICD Codes and Social Determinants Screeners"

Adetoun Musa - "Extraction of Datamarkers of Health and Neurological Sequelae in Cardiometabolic Disease: An Epidemiogenomic Study using AI/ML"

Jennifer Rae Myers - "From Health Disparity to Health Empowerment: Utilizing Natural Language Processing to Drive Community Health Equity"

Adam Natoli - "Depression Screening for Migrant Worker Communities in Texas Using an AI/ML- powered Bilingual Mobile App"

Manan Nayak - "Mental Health Disparities In COVID-19: The Effect Of Age, Sex, Race, And Ethnicity On Developing Signs Of Psychosis During Hospitalization (Research in Progress)"

Mandoye Ndoye - "A Data-driven Characterization of the social determinants of mental health in Southern Black populations"

Suman Niranjana - "Identifying Differences in Key Patient Characteristics that Influence Time to Surgery: A Perspective of Breast, Colorectal and Lung Cancer"

Yui Nishiike - "Risk stratification in Primary Care: Using Machine Learning to Incorporate Social Determinants of Health"

Poster Session

Laurie Novak - "Implementing Ethics and Equity Principles for AI in Healthcare"

Ebelechukwu Nwafor - "Graph representation learning for chronic disease prediction in underrepresented populations"

Victor Nwankwo - "Finding insights within regions that host or are in proximity to correctional institutions"

Monica Ochapa - "Equity in Maternity: Examining Maternal Healthcare Disparities Using the All of Us Database"

Adaku Ofoegbu - "Post-COVID Outcomes in Patients with Hypertension: Healthcare Utilization, Blood Pressure Management, and Mortality (Research in Progress)"

Habeeb Olufowobi - "Improving Health Equity in Algorithmic Decision-Making Using Explainable AI Techniques"

Michael Ortega - "Managing kidney disease in type 2 diabetes mellitus"

Samia Valeria Ozorio Dutra - "Improving risk detection of depression among native Hawaiians and pacific islanders"

Fadekemi Osaye - "Leveraging Machine Learning Algorithms for Early Detection of Cervical Cancer among African Americans"

Oyomoare Osazuwa-Peters - "Immune-exhaustion related genetic variants as risk factors for early

onset breast cancer and differences by race"

Abiodun Otolorin - "A Data-Agnostic Clinical Data Repository: Enhancing Cohort Discovery with Conversational AI"

Chanhyun Park - "Leading Predictors of Cancer-Caused of Mortality Among Texas Residents with Cancer: An Application of Machine Learning with XGBoost and SHAP"

Yifan Peng - "Analyzing Social Factors to Enhance Suicide Prevention Across Population Groups"

Teri Platt - "Framework for Assessing Institutional Capacity to Pursue AI/ML Opportunities"

Channa Prakash - "Promoting Health Equity through Ethical AI/ML: A Collaborative Initiative for Data Governance and Access in Healthcare"

Zahra Rahemi - "Alzheimer's disease risk detection among diverse populations using AI/ML"

Vinay Raj - "Data Harmonization and Integration of scRNA-seq Datasets"

Mrinal Ranjan - "Electronic Health Record (EHR) Integration of Thromboembolism Risk Stratification Model in Patients with Cancer in a Safety-net Hospital System"

Poster Session

Abiel Roche-Lima - "Machine Learning (ML) Methods for Identifying Reference Intervals of Cardiometabolic Related Laboratory Tests for Hispanic Populations - MLM-RIHisp"

Carly Rose - "Examining Racial and Ethnic Differences in Long COVID Diagnoses and Mortality Among Persons with Alzheimer's Disease and Related Dementias with and without COVID Vaccination (Work in Progress)"

Shumit Saha - "Effect of Beta-Blockers on Sleep Efficiency"

Bishnu Sarker - "A semi-automatic Natural Language Processing (NLP) pipeline for identification of SDoH from clinical notes"

Melody Schiaffino - "Developing AI/ML Infrastructure to Address Inequities Among Diverse Older Adults Diagnosed with Cancer"

Prabhjeet Singh - "Bridging the Gap: The Data Bridge from MedStar Health for Inclusive Health AI/ML Research"

Monique Smith - "AI Fairness in a Health Equity Data Sandbox"

Kunmi Sobowale - "Predictive Modeling of Postpartum Depression: Assessing the Impact of Inclusion of Social Determinants of Sleep Health on Model Accuracy and Racial Bias Mitigation"

Simone Stanley - "Engaging Artists in AI/ML and Health Equity-focused Virtual Artist Residency"

Sonali Tamhankar - "Generative artificial intelligence and explainable predictive analytics based clinical tool to reduce emergency room visits in sickle cell patients"

Nii Tawiah - "Exploring the Influence of Opioid Misuse on Demographic Factors and Health Conditions across Diverse Racial and Ethnic Populations Using a Machine Learning Approach"

Debra Terrell - "Building Capacity in Artificial Intelligence for Health Equity Research Outcomes (AI-HEROs)"

Eduardo L. Tosado-Rodriguez - "Harnessing machine learning to understand cervical dysplasia in diverse populations with a special focus on Hispanics"

John Valdovinos - "Geographical Barriers to Cardiovascular Care for Congenital Heart Disease Patients in the All of Us Research Program"

Lyndee Ward - "Is it all in the head? Tracking contributions of upper respiratory anatomy on exacerbations of chronic respiratory disorders"

Chase Waggener - "MIT-UB: A Multi-Domain Unbiased Medical Vision Foundation Model for Breast Cancer Triage"

Poster Session

Honghe Wang - "AI/ML-Based Biomarker Identification and Risk Stratification in Prostate Cancer: Addressing Cancer Health Disparities and Community Concerns in African American Populations"

Peter Washington - "Fair and Accessible Parkinson's Disease Screening using a Machine Learning-Powered Web Platform"

Amy Waterman - "Listening to Patients at Higher Risk for Not Completing Transplant Evaluation: Planning Interventions to Support Underserved Communities"

Jonathan Williams - "Building Capacity for An Iterative Epilepsy Clinic Model Informed by Community-Engaged Research and AI: A Beginner's Guide from Lessons Learned on the Road to Health Equity"

Shayla Williams - "An Analysis on Toxic Chemical Releases and Social Determinants of Health on Health Disparities at the Zip Code Level"

Shayla Williams - "Geospatial Analysis of Toxic Chemical Releases and Social Determinants of Health in Georgia"

Rose Yesha - "Equity-Driven Decision Making in Healthcare Data Science Training: Statistical and Computational Decision Trees"

Elaine Yu - "Comparing the impacts of respiratory virus infections (SARS-CoV-2, RSV, influenza) on new-onset type-1 and -2 diabetes risk"

Jiazheng Yuan - "Establishing an AI Lab to Address Health Equity: Improving Black Maternal Outcomes through Predictive Analytics"

Anna Zamora-Kapoor - "Implementing a pilot study using AI-generated text messages to improve lung cancer screening in a rural clinic: Evidence from Washington state"

Anna Zemke - "Predicting Kidney Function Decline in American Indian and Alaska Native Populations with Diabetes: Cohort Selection"

Qing Zeng-Treitler - "AI-Empowered Art Therapy Innovation for People with Severe and Multiple Disabilities"

Qing Zeng-Treitler - "Assessing and Enhancing Group Fairness in Clinical Risk Prediction Models"

Robin Zhao - "Association of Dysphagia in Patients with Dysphonia in the United States: A National Database Study"

Robin Zhao - "Cross-Sectional Analysis of Dysphagia in Patients with Dysphonia: Findings from the National Institutes of Health's All of Us Research Program"

Bo Zhou - "Low-value Prescribing among Older Adults at Cardiometabolic Risk"

Yi Zhu - "Native Hawaiian and Pacific Island (NHPI) Community Informed AI/ML Health Equity Research: Lessons, Challenges, Achievements, and Future Trends"

Post-Conference Workshops

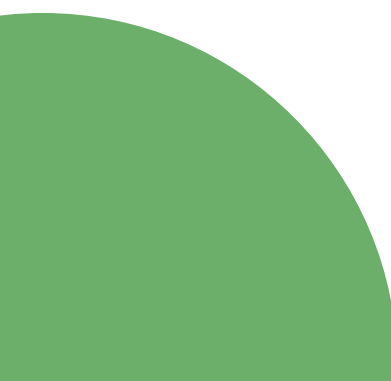
AIM-AHEAD will offer a month of virtual post-conference workshops after the AIHES.

The tentative schedule below. Sessions will be 3:00-5:00 p.m. ET, Monday through Friday, Sept. 2-30.

Overview/Opening Week

- Democratizing AI for Health Equity: A Hands-On Workshop
- Ethics/Advisor and AI Strategist: Implications for Health Equity
- Women in AI
- Bias and Fairness in AI — A Hands-On Workshop
- Data Equity for AI

Legal and Policy Considerations

- How to Navigate AIM-AHEAD Educational Materials for Health Equity Research
 - Do's and Don'ts of ML
 - The Chilling Effect of Recent Policy and Legal Decisions for Health Equity in AI
 - Data Redistribution and Reparative Justice
 - Generative AI - A Friend or a Foe for Health Equity
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Post-Conference Workshops

Pathways to Inclusion

- Citizen Data Science and Social Sciences
- Knowledge Mobilization and Resource Allocation
- Pathways to Inclusion: Empowering Community Not Trained in CS or Data Science in AI Health Equity
- Beyond EHR — AI/ML in Health Outcomes/ Population Health/Public Health
- Privacy Preserving Data Sharing for Research

Knowledge Mobilization

- Advisor and AI Strategist: Implications for Health Equity
- Secondary Data Sources of AI/Health Equity Research
- AI Applications for Underserved Populations
- AI and Social Determinants of Health (Social Interventions)
- AI-driven Telemedicine and Remote Healthcare (Medicine Reaching Community Homes)

**2024 AI for
Health Equity
Symposium
AIM-AHEAD
Annual Meeting**

