

# Transforming Hypertension Diagnosis and Management in the Era of Artificial Intelligence

Day 1, March 29, 2023 and Day 2, March 30, 2023

Virtual Meeting

Day 1 – March 29, 2023	
11:00 – 11:25 AM	<b>Welcoming Remarks and Meeting Overview</b>
11:00 – 11:05 AM	<b>Introduction:</b> <i>Erin Iturriaga, DNP, Meeting Organizer</i>
11:05 – 11:15 AM	<b>Welcome:</b> <i>David Goff, MD, PhD, Director DCVS/NHLBI</i>
11:15 – 11:25 AM	<b>Goals and Overview of Sessions Co-Chairs:</b> <i>Rashmee Shah MD, MS and Daichi Shimbo, MD</i>
11:25 – 11:45 AM	<b>KEYNOTE:</b> <b><i>The Blood Pressure Nexus:</i></b> <i>Erica Spatz, MD, MHS</i>
<b>SESSION 1: <i>Bridging the Communication Gap Between Population-Health, Clinical Medicine, and Engineering</i></b>	
Moderator: Rashmee Shah, MD, MS	
11:45 AM – 12:00 PM	<b><i>AI Terms Everyone Should Know</i></b> <i>Bobak (Jack) Mortazavi, PhD</i>
12:00 – 12:15 PM	<b><i>Engineers are from Mars and Clinicians are from Venus</i></b> <i>Zachi Attia, PhD</i>
12:15 – 12:40 PM	<b><i>The Blood Pressure Data Puzzle Pieces (i.e. BP cuffs, wearables, mHealth, EHRs, etc), Interoperability, and Harmonization</i></b> <i>Faraz Ahmad, MD, MS</i>
12:40 – 12:55 PM	<b>Panel Discussion with All Session Speakers with Moderator</b>
12:55 – 1:15 PM	Break
<b>SESSION 2: <i>Blood Pressure Measurement, Hypertension Risk, and Blood Pressure Control</i></b>	
Moderator: Keith Ferdinand, MD, FACC, FAHA, FASPC, FNLA	
1:15 – 1:30 PM	<b><i>Blood Pressure Measurement Inside &amp; Outside Of The Office</i></b> <i>Marwah Abdalla, MD, MPH</i>
1:30 – 1:45 PM	<b><i>Determining Blood Pressure Using Novel Technologies via AI</i></b> <i>George Stergiou, MD, PhD, FRCP</i>
1:45 – 2:00 PM	<b><i>Prevalence, Awareness, Treatment, and Control of High Blood Pressure</i></b> <i>Paul Whelton, MB, MD, MSc</i>
2:00 – 2:15 PM	<b><i>Using AI to Predict Hypertension Status and Blood Pressure Control</i></b> <i>Sonya Makhni, MD, MBA, MS</i>
2:15 – 2:30 PM	<b>Panel Discussion with All Session Speakers with Moderator</b>
2:20 – 2:40 PM	Break
<b>SESSION 3: <i>Making a Dent in the Problem</i></b>	
Moderator: Daichi Shimbo, MD	
2:40 – 2:55 PM	<b><i>Using AI for Primary Prevention Of CV Disease with a Focus on Hypertension: Precision Public Health</i></b> <i>Jane Leopold, MD</i>
2:55 – 3:10 PM	<b><i>AI-Enabled Healthbots to Support Patient Self-Management</i></b> <i>Sheana Bull, PhD, M.P.H.</i>
3:10 – 3:25 PM	<b><i>Using AI to Predict Response to Antihypertensive Medication, Cardiovascular Risk Benefit with Intensive Blood Pressure Targets, and Risk of Adverse Events From Antihypertensive Medication</i></b> <i>Rohan Khera, MD MS</i>
3:25 – 3:40 PM	<b><i>Using AI to Predict Blood Pressure-Related End-Organ Sequelae Including Heart Failure, Kidney Disease, and Impaired Cognition</i></b> <i>Alexander Chang, MD, MS</i>
3:40 – 4:00 PM	<b>Panel Discussion with All Session Speakers with Moderator</b>
4:00 PM	<b>Adjourn Day 1</b>

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11:00 – 11:10 AM	<b>Welcome and Overview of Sessions:</b> Co-Chairs: <i>Rashmee Shah, MD, MS and Daichi Shimbo, MD</i>
<b>SESSION 4: Real World Implementation Challenges and Issues</b> Moderator: Yvonne Commodore-Mensah, PhD, MHS, RN	
11:10 – 11:30 AM	<b>Health Inequity in Hypertension: Explorations Across Multiple Data Sets</b> Ritu Agarwal, PhD, MBA, MS
11:30 – 11:55 AM	<b>How AI Could Worsen or Improve Health Inequity in Hypertension</b> Clyde W. Yancy, MD, MSc, MACC, FAHA, MACP, FHFSA, FASPC (Hon.), FRCP
11:55 AM – 12:20 PM	<b>Use of AI for Clinical Decision Support for Hypertension Diagnosis and Management</b> Mintu Turakhia, MD, MAS
12:20 – 12:40 PM	<b>Integration of AI Algorithms into the Clinical Workflow using Interoperable Electronic Health Record Add-on Apps</b> Ken Kawamoto, MD, PhD, MHS
12:40 – 12:55 PM	<b>Regulatory Challenges</b> Sanjeev Bhavnani, MD
12:55 – 1:10 PM	<b>AI is not "anonymous intelligence."</b> Lucia Savage, JD
1:10 – 1:30 PM	<b>Panel Discussion with All Session Speakers with Moderator</b>
1:30 PM	<b>Next Steps from Meeting Organizer</b>
1:30 – 2:00 PM	<b>Adjourn Day 2</b>
1:30 – 2:00 PM	Break

## Invited Participants Only

### SESSION 5: Breakout Sessions (two rooms) - each room will have one moderator

*The rooms would have a mix of clinically-oriented and technically-oriented people. The moderators would be charged in making sure that all individuals are heard – i.e., it is not all technical people talking or all clinical people talking. Each room will be charged with addressing the below three questions.*

2:00 – 3:00 PM	<b>Break out rooms (Invited Participants Only):</b>  Each room will identify (1) research gaps and high priority questions in AI and Hypertension, (2) current barriers to addressing these gaps and questions, and (3) recommendations on how to overcome the barriers (i.e., what is needed to move forward)  Moderator Room # 1: James Luo Moderator Room # 2: Gabriel Anaya
3:00 – 3:45 PM	Return to the main room. Co-Chairs for each room will report on the summary of the discussion.
3:45 – 4:00 PM	<b>Closing Including Next Steps – Young Oh, PhD</b>

Except for the keynote, each speaker will finish their talk with the following information:

- What are the most promising scientific areas currently in this area? (list 3-5)
- What are the gaps in knowledge, and what is needed to move the field (as it relates to your area) forward? (list 3-5)
- What are the key challenges/barriers hindering progress in this area? (list 3-5)