Speaker's Biosketch ICoLA 2024

Khurram Nasir (Houston Methodist DeBakey Heart & Vascular Center, USA)

Dr. Khurram Nasir received his medical degree from Pakistan, followed by a master's in public health (MPH) at Johns Hopkins University. He completed his internship at UPMC, internal medicine residency at Boston Medical Center, and cardiology fellowship at Yale University. He received postdoctoral research training at the division of cardiology at Johns Hopkins Hospital and was a recipient of the NIH T-32 fellowship at Massachusetts General Hospital. In 2017, he also earned a master's degree (MSc) in Health Economics and Policy Management from the London School of Economics & Political Science.

Currently, Dr. Nasir is the William A. Zoghbi Centennial Chair in Cardiovascular Health and holds the position of Chief of Cardiovascular Disease Prevention and Wellness at Houston Methodist. He has the privilege of being the founding director of the newly established Centre for Cardiovascular Computational Health & Precision Medicine (C3-PH). Additionally, he holds academic appointments as a Professor of Medicine at Weill Cornell Medical College and as a Professor of Cardiology at the Houston Methodist Academic Institute. Recently, he was honored as a Visiting Professor at the esteemed London School of Economics. Prior to his current roles, Dr. Nasir served as the Director of Population Health & Health System Research at Yale University School of Medicine from 2018 to 2019, and as the Director of the Centre for Health Advancement & Outcomes at Baptist Health South Florida from 2012 to 2018.

Throughout his career, Dr. Nasir has demonstrated an exceptional commitment to advancing cardiovascular research and practice. To date, he has published more than 900 peer-reviewed manuscripts (200+ as senior author) in high-impact journals, including NEJM, JAMA, BMJ, Lancet, Nature Reviews, Circulation, and the Journal of the American College of Cardiology. According to Google Scholar, his work has been cited over 120,000 times, and he is honored to be part of a select group of impactful scholars worldwide with an h-index of over 110. From 2021 to 2023, he has been listed among the top 2% of scientists globally, as reported by Stanford University. During his academic journey, he has mentored more than 50 physician-scientists, many of whom are now associate professors and professors at major academic institutions.

Dr. Nasir's research projects and programs are currently supported by three funded RO1 grants (two as Co-PI and one as Co-I), three investigator-initiated industry-funded grants, an endowed chair, and institutional funds. He is the PI for the prospective Miami Heart Study, a \$10 million-dollar project supported by the Baptist Heart South Florida Foundation. Additionally, he is one of the four site PIs for a collaborative \$15 million contract awarded by PCORI, focusing on community-based strategies for hypertension management in underserved populations. From 2021 to 2023, he raised over \$1.5 million from various philanthropic sources to support educational and R&D efforts at Houston Methodist. He continues to lead the Miami Heart Study and manage substantial funding to support programmatic development and future recruitments.

One of Dr. Nasir's most significant scientific contributions has been the development and

Speaker's Biosketch

ICoLA 2024

implementation of the "Power of Zero" concept. His cumulative scholarship over a decade (2009-2018) informed the conceptual framework for the 2018 US cholesterol management guidelines, which later influenced international guidelines. This shift in guidelines allows more than 28 million adults in the US without established ASCVD to consider CAC testing, offering flexible treatment goals based on their values and preferences. His seminal publications on the Power of Zero have been cited extensively, influencing a paradigm shift in cholesterol management.

Dr. Nasir has also led pioneering work on the financial hardship and toxicity associated with cardiovascular disease. His group was the first in the country to describe various domains of financial toxicity, including difficulty in paying bills, medication non-adherence due to cost, and foregoing medical care. These efforts have resulted in over 50 manuscripts, contributing significantly to technology assessment, cost-effectiveness analysis, evidence synthesis, and clinical decision-making.

In addition to his significant contributions to clinical, research, and educational missions, Dr. Nasir is heavily engaged in issues concerning health equality, diversity, and social justice, particularly in cardiovascular disease prevention. He served as Chief of Division, Faculty Development at Houston Methodist, supporting the academic career development of junior faculty. In 2021, he was appointed Chief of Division, Health Equity and Disparities Research, focusing on illuminating the scope of health inequities and developing pragmatic interventions to eliminate disparities in health and healthcare.

As Director of the Center for Cardiovascular Computational and Precision Health (C3PH) at Houston Methodist since 2021, Dr. Nasir has led efforts to develop a central CVD Big Data informatics platform. This platform supports data harmonization supplemented with national population health datasets to aid faculty and trainees in their academic endeavors. His work in this area aims to train the next generation of cardiovascular physician-scientists in big data and digital healthcare applications. These efforts have led to industry-supported grants, submission of a career development K award, and support for an RO1 submission. The curated data for over 1.2 million individuals at risk for ASCVD supports ongoing efforts towards clinical care integration, improving mortality outcomes, and enhancing outpatient quality of care metrics.

Nationally, Dr. Nasir has served on the board of directors for the Society of Cardiac CT and the American Society of Preventive Cardiology. He is an associate editor for Circulation: Quality & Outcomes Research and a guest editor for the Journal of American College of Cardiology: Cardiovascular Imaging. He is the inaugural chair for the SCCT Future Leadership Program and was recently appointed as a Senior Advisor for the International Atherosclerosis Society. Dr. Nasir also serves as a visiting professor at the London School of Economics and is a joint investigator and steering committee member for a national study in Pakistan (Pak-Sehat).

åIn recognition of his contributions, Dr. Nasir has received the Johns Hopkins Distinguished Alumni Award in 2013, honoring alumni who have brought credit to the University through personal accomplishment, professional achievement, or humanitarian service. In 2020, he received the Arthur S. Agatston Cardiovascular Disease Prevention Award, recognizing individuals whose pioneering efforts have saved lives from coronary artery disease, the leading

Speaker's Biosketch ICoLA 2024

cause of death worldwide. In 2024, Dr Nasir is nominated for the inaugural Game Changer Award by the Texas Asia Society in the category of Innovator, an award that honors individuals, institutions, or corporations breaking barriers in science, technology, healthcare, education, or business.