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**Name of Nominee: \_**Zahra K. Motamed

Dr. Zahra K. Motamed directs Cardiovascular Research Group and is an Associate Professor with the Department of Mechanical Engineering at McMaster University. She holds associate faculty memberships in the Department of Computing and Software, in the School of Biomedical Engineering, and in the School of Computational Science and Engineering. She is a member of the Thrombosis & Atherosclerosis Research Institute (TaARI) and McMaster Institute for Research on Aging (MIRA). Before joining McMaster, she was a postdoctoral fellow in the Institute for Medical Engineering & Science and Harvard-MIT Biomedical Engineering Center at MIT.

Dr. Motamed is a member of the Professional Engineers of Ontario, with more than 25 years of experience in using and advancing engineering fundamentals to solve problems in a wide range of topics from industrial product development and commercialization to functions of biological systems. She has more than 17 years of experience in cardiovascular diseases and their devices from basic science to clinical research. Dr. Motamed pioneered the development of long-needed non-invasive diagnostic and predictive tools for cardiovascular diseases to support personalized interventions and clinical decision making. She has been an invited speaker and a keynote speaker at national and international meetings. Dr. Motamed leads an international collaborative consortium of cardiovascular researchers and clinicians with the goal of advancing and validating new technologies. She has authored/co-authored more than 100 journal and conference proceeding papers, 3 book chapters, and holds 6 issued/pending US/Canada patents.

Dr. Motamed has received an honorific award and has been recognized as the Joseph Ip Distinguished Engineering Fellow at McMaster. She served as the Chair of the 2021 NSERC Research Tool and Instruments (RTI) Selection Committee for Mechanical Engineering. She serves on the editorial board of Scientific Reports (a Nature journal) and is also a member of the Editorial Board in the Journal of Frontiers in Bioengineering and Biotechnology. She was a handling Editor in Frontiers in Cardiovascular Medicine and a Guest Editor in Frontiers in Bioengineering and Biotechnology in Novel methods to advance diagnostic and treatment value of medical imaging for cardiovascular disease. She is currently the invited lead Guest Editor of Frontiers in Bioengineering and Biotechnology: “Novel computational fluid dynamics methods for diagnosis, monitoring, prediction, and personalized treatment for cardiovascular disease and cancer metastasis” and an invited Guest Editor of Scientific Reports on “Computational Fluid Dynamics for the study of cardiovascular disease”. She was a scientific consultant to a number of medical device companies. She also has 9 years of industrial experience in the automotive R&D sector with a proven record of leadership and project and team management. She is currently using her vehicle design experience to contribute to the development of future smart vehicles. Her group is also working towards developing human health monitoring tools for future smart houses.

More information: [https://www.eng.mcmaster.ca/mech/faculty/dr-zahra-motamed/](http://www.eng.mcmaster.ca/mech/faculty/dr-zahra-motamed/) https://motamedlab.com/pi/