# Special Issue

# Development of Ultrasound Techniques for Cardiovascular Disease Assessment and Monitoring

## Message from the Guest Editors

As atherosclerosis is a focal disease which predominantly occurs at bends and bifurcations, biomarkers have been developed for a sensitive detection of the dietary and medical therapies. Techniques based on machine learning have been developed for segmentation of the carotid vessel wall and plaques, automated classification for identifying vulnerable plaques, and the generation of biomarkers. Seeking contributions presenting: (1) The instrumentation of novel non-invasive ultrasound imaging techniques; (2) Machine learning methods that can accelerate measurements of atherosclerotic burden and allow for an efficient plaque characterization from ultrasound images; (3) The development of novel biomarkers that allow for accurate stroke risk stratification, the sensitive monitoring of patients treated for atherosclerosis, and the sensitive detection of treatment effects of new anti-atherosclerotic treatments; (4) Techniques for carotid plaque tissue characterization and classification, and the prediction of cardiovascular and stroke from carotid ultrasound images.

## Guest Editors

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## Deadline for manuscript submissions

closed (31 December 2023)

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## Editor-in-Chief

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