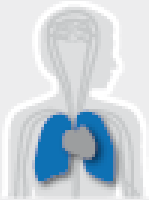
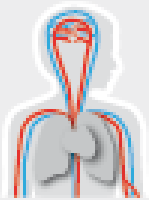


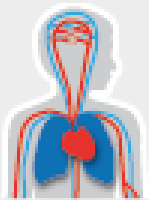
Heart Failure & Arrhythmias



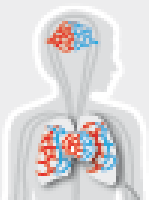
Pulmonary Hypertension & Thrombosis



Atherosclerosis & Ischemic Syndromes



Diabetes & Metabolism



Microcirculation

Interventional Cardiac MRI & Advanced Electrophysiology

- WHAT YOU SEE IS WHAT YOU GET; NO INSIGHT: UNPREDICATBLE OUTCOMES -

PI **iCMR**: Marco Götte

PI **Advanced EP**: Cor Allaart

Dept. Cardiology, AUMC – VUMC

Research group: 2 PI's 1 Physicist
 3 Post-docs 2 MR techs
 2 Fellows 2 Cath.lab techs
 4 PhDs



MISSION

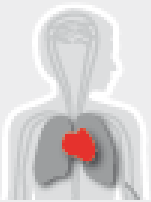
To translate EP procedures from X-ray into a fully integrated MRI guided process.

VISION

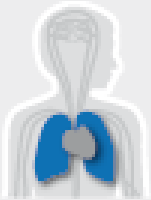
In 2023 AUMC will be a top-leading iCMR center, sharing unique expertise and knowledge to cure more patients from their electropathology than today. iCMR helps more people to stay fit and healthy.

DELIVERABLES

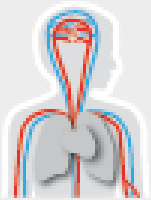
- Precise, non-ionization, non-invasive, 3D diagnostics for electropathology
- Personalized, specific, therapy-stratification
- Accurate peri-procedural guidance and precise, real-time feedback on interventions
- Predictable clinical outcomes and improved therapeutic success



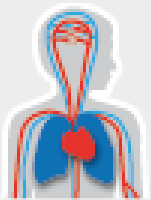
Heart Failure & Arrhythmias



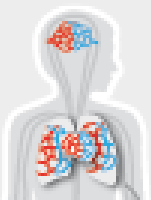
Pulmonary Hypertension & Thrombosis



Atherosclerosis & Ischemic Syndromes



Diabetes & Metabolism

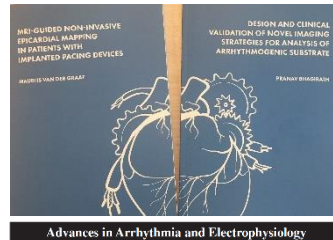


Microcirculation

Interventional Cardiac MRI & Advanced Electrophysiology

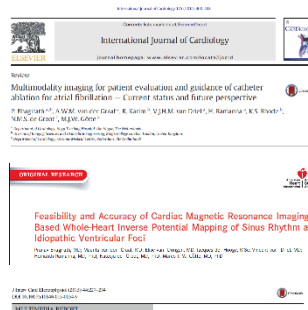
- WHAT YOU SEE IS WHAT YOU GET; NO INSIGHT: UNPREDICATBLE OUTCOMES -

Current expertise:



Interventional Cardiac Magnetic Resonance Imaging in Electrophysiology Advances Toward Clinical Translation

Primo E. Eliazovici, MD, MSc, PhD, Dr. Gerd, MD, Rishad Karim, PhD, Karim Razaie, BSc, PhD, Chrysioula Poulakou, MD, Raza Razaie, MD, FRCC, Ajay Subramaniam, MD, PhD, Marco Conio, MD, PhD

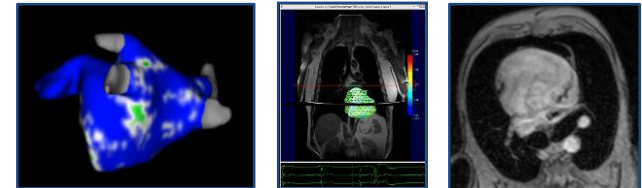
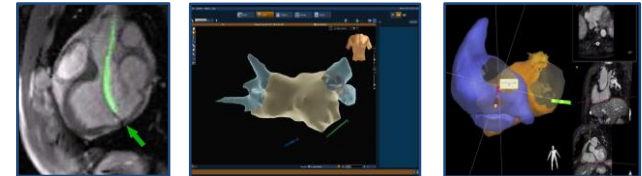


Feasibility and Accuracy of Cardiac Magnetic Resonance Imaging-Based Whole-Heart Inverse Potential Mapping of Sinus Rhythm and Idiopathic Ventricular Foci

Primo E. Eliazovici, MD, MSc, PhD, Dr. Gerd, MD, Rishad Karim, PhD, Karim Razaie, BSc, PhD, Chrysioula Poulakou, MD, Raza Razaie, MD, FRCC, Ajay Subramaniam, MD, PhD, Marco Conio, MD, PhD

Non-invasive focus localization, right ventricular epicardial potential mapping in patients with an MRI-conditional pacemaker system - a pilot study

Primo E. Eliazovici, MD, MSc, PhD, Dr. Gerd, MD, Rishad Karim, PhD, Karim Razaie, BSc, PhD, Chrysioula Poulakou, MD, Raza Razaie, MD, FRCC, Ajay Subramaniam, MD, PhD, Marco Conio, MD, PhD



Current funding

- Dept. Cardiology AUMC-VUMC:
 - 2 PhD
 - MR-compatible equipment
 - Tremendous efforts of multiple co-workers
- Several applications submitted / in preparation

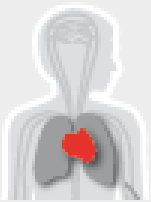


Hartstichting

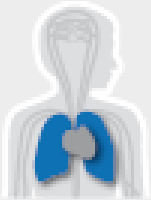


ZonMw

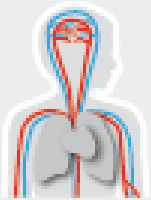




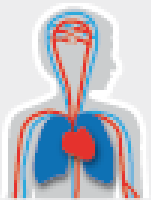
Heart Failure & Arrhythmias



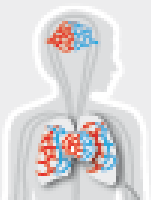
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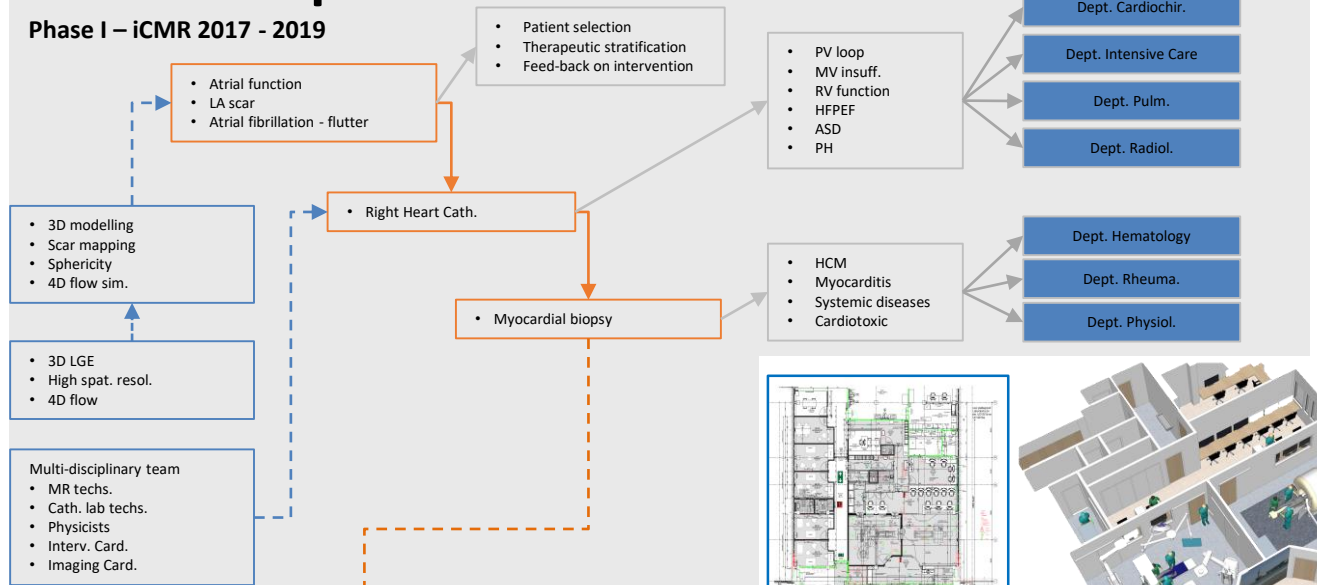
Diabetes & Metabolism



Microcirculation

Future plans

Phase I – iCMR 2017 - 2019



Phase II – iCMR 2019 - 2021

