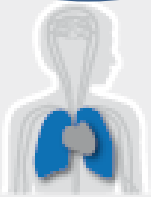
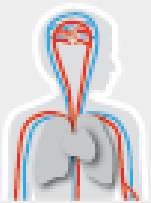


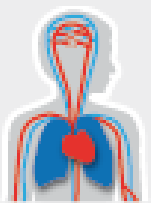
Heart Failure & Arrhythmias



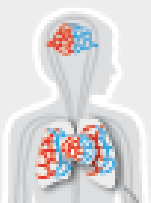
Pulmonary Hypertension & Thrombosis



Atherosclerosis & Ischemic Syndromes



Diabetes & Metabolism



Microcirculation

Focus of research group - HCM

Name PI: Jolanda van der Velden

Department, UMC: Physiology, location VUmc

Size of research group:

Pre-clinic: Diederik Kuster (assistant prof), Ruud Zaremba (technician), Max Goebel (technician), Paul Wijnker (PD), Maike Schuldt (PhD student), Larissa Dorsch (PhD student) & Edgar Nollet (PhD student), Michiel Helmes (CytoCypher).

Clinic: Cardiology location Vumc: Bert van Rossum, Marco Gotte, Tjeerd Germans, Rahana Parbhudayal (PhD student) & Beau van Driel (PhD student).

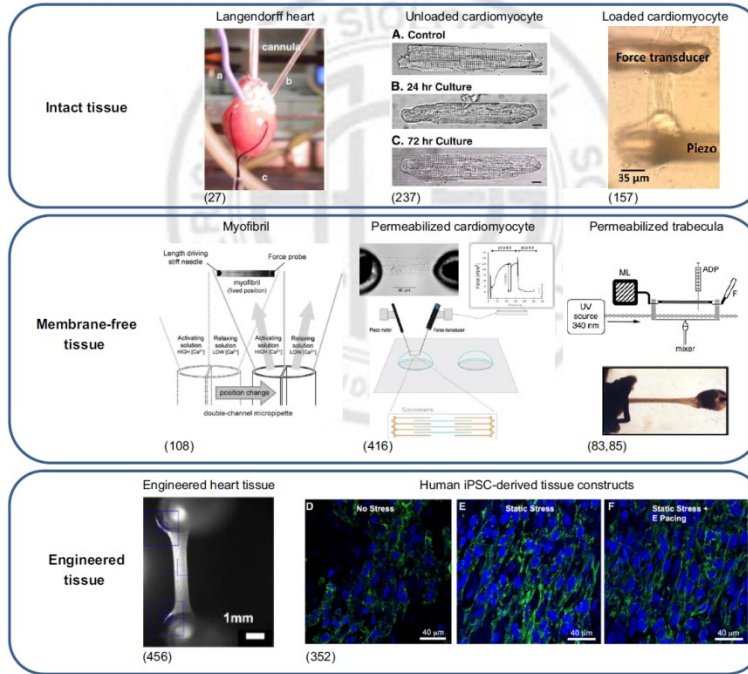
Nuclear imaging: Adriaan Lammertsma, Ronald Boellaard, Bert Windhorst

Current mission, vision and aims

Improve risk stratification and (preventive) treatment of mutation carriers and patients with hypertrophic cardiomyopathy (HCM).

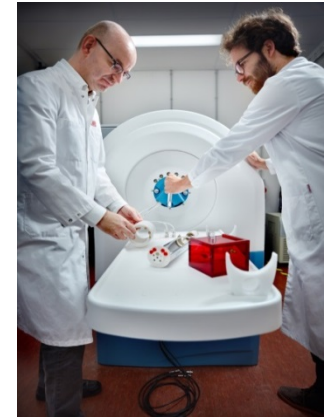
Bench to bedside research on HCM

Current expertise



Experts ex vivo studies

Experts in vivo imaging



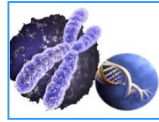
National consortium (CVON-DOSIS)



Brundel, Kuster, vd Velden (Amsterdam UMC)
 de Boer (UMCG)
 Asselbergs, v Tintelen (UMCU)
 Michels (Erasmus MC)

Current funding: CVON-DOSIS, NIH (vd Velden), ZonMW-HS PTO (ENERGY trial), CVON-Prime (ACS: Pinto, vd Velden), VICI (vd Velden), ACS PD & HS Crowd-funding (Wijnker)

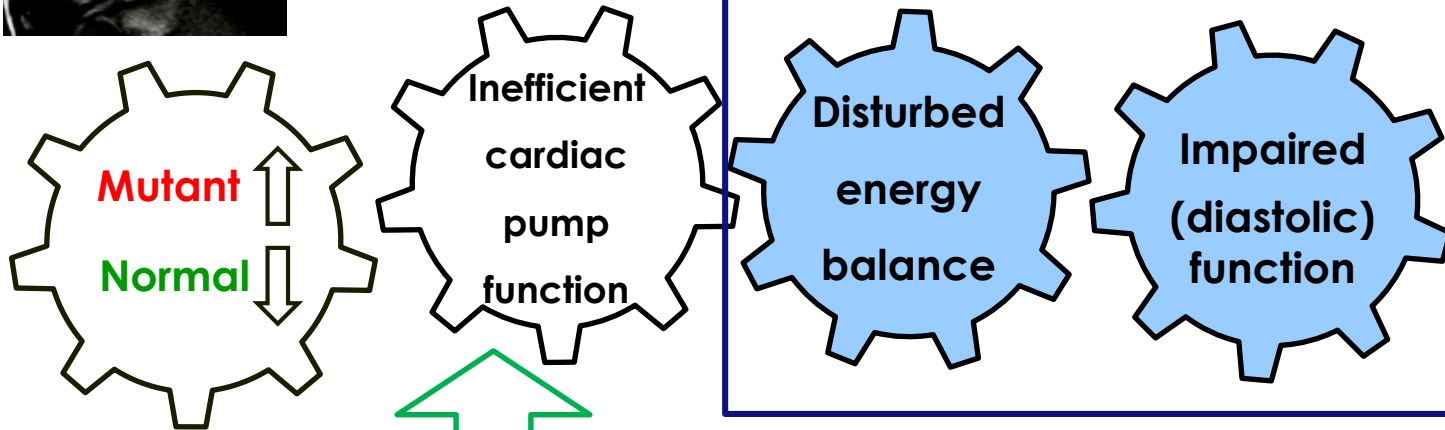
Secondary disease hits



Mutation carrier



Hypothesis to be tested (VICI)



ENERGY trial
Metabolic therapy
in *MYH7*
mutation carriers

Future plans

Short term (1-2 year) plan

Plan: Invest time in (inter)national consortia (submit ITN application; LeDucq)

Necessary infrastructure: available.

Long term (>2 year) plan

Plan: Proof of concept studies for drug repurposing.

Studies to discover (bio)markers (build tissue/blood biobank)

Necessary infrastructure:

Set-up to study interaction between heart muscle and vasculature – joint efforts needed
iPSC facility/expertise

Ongoing collaboration in ACS (at location AMC)

Anesthesiology: Coert Zuurbier

(Experimental) Cardiology: Arthur Wilde, Yigal Pinto, Connie Bezzina, Carol Ann Remme, Ruben Coronel, Anton Baartscheer.

Biomedical Engineering & Physics: Gustav Strijkers, Bram Coolen, Rob Wust

Clin. Genetics: Imke Christaans