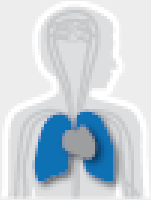
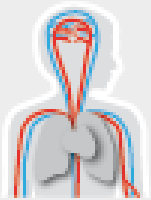


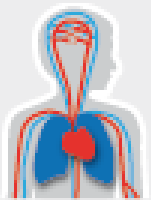
Heart Failure & Arrhythmias



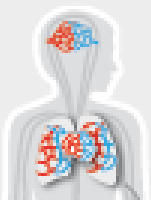
Pulmonary Hypertension  
& Thrombosis



Atherosclerosis  
& Ischemic Syndromes



Diabetes & Metabolism



Microcirculation

# Focus of research group (I)

Name PI: Esther Creemers

Department, UMC: Experimental Cardiology, AMC

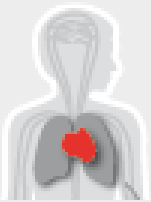
Size of research group: 2

## Current mission, vision and aims

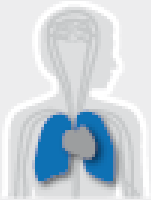
Our *mission* is to uncover novel disease mechanisms underlying heart failure

We *envision* that heart failure mechanisms depend on the genetic make up of the patient. Therefore, therapy should be tailored to the individual patient.

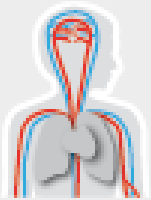
Our *aim* is to study specific facets of RNA processing, such as alternative splicing, circular RNA formation and the function of RNA binding proteins in the setting of heart failure.



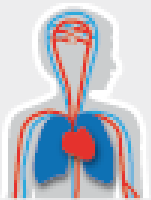
Heart Failure & Arrhythmias



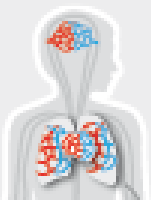
Pulmonary Hypertension  
& Thrombosis



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Diabetes & Metabolism



Microcirculation

# Focus of research group (II)

## Current expertise

RNA sequencing

Bioinformatics

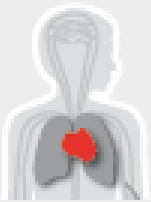
Standard molecular biological techniques

Cardiac phenotyping in mice

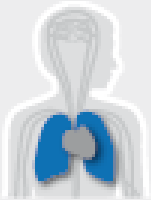
## Current funding

Rembrandt grant

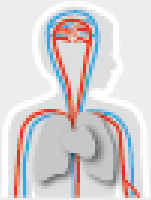
ACS Out-of-the-box



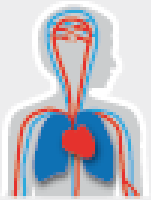
Heart Failure & Arrhythmias



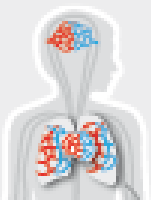
Pulmonary Hypertension  
& Thrombosis



Atherosclerosis  
& Ischemic Syndromes



Diabetes & Metabolism



Microcirculation

# Future plans

1. Study function of RNA binding proteins in the mouse heart (e.g. QKI, Rbm20)
2. Study the role of splicing in heart failure (alternative splicing and circular RNA formation)
3. Test therapeutic options in Rbm20 KO mouse

## Necessary infrastructure

Mouse models (Rbm20, QKI, LMNA)

Core facility genomics

Confocal imaging

Fluorescent-based cellular electrophysiology

Cell culture (MLI and MLII)

hiPS facilities

## Collaboration in ACS

Yigal Pinto

Carol Ann Remme

Arjan Houweling

Alex Postma

Vincent Christoffels

Jolanda van den Velden

Bianca Brundel