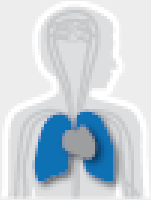
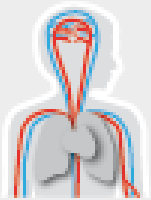


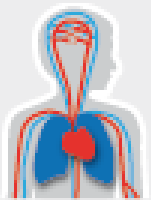
Heart Failure & Arrhythmias



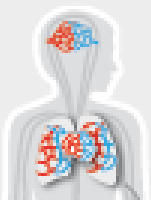
Pulmonary Hypertension  
& Thrombosis



Atherosclerosis  
& Ischemic Syndromes



Diabetes & Metabolism



Microcirculation

# Focus of research group (I)

**Name PI:** Noam Zelcer

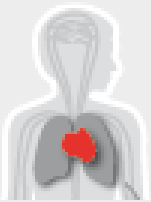
**Department, UMC:** Medical Biochemistry, AMC

**Size of research group:** 4x PD's, 4x PhD's, 3x Tech's (am looking to recruit 3-4 new members)

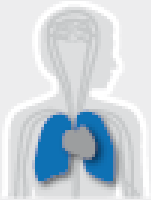
## **Current mission, vision and aims**

**Mission:** To explore the molecular regulation of lipid metabolism at the cellular and organismal level as a means to understand its contribution to development of CVD.

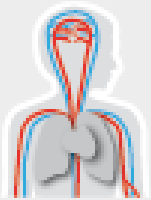
**Vision:** Fundamental science requires a creative, dynamic, and collaborative environment. The institute (i.e. AMC/VUMC/ACS etc) should facilitate/create this. The rest will come by itself!



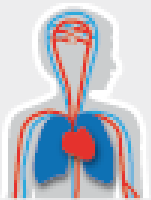
Heart Failure & Arrhythmias



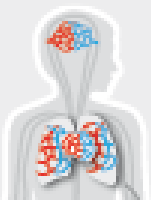
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Diabetes & Metabolism



Microcirculation

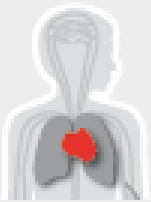
# Focus of research group (II)

## Current expertise

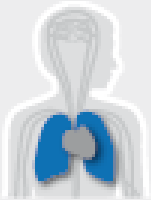
- Ubiquitin biology in lipid metabolism
- CRISPR-based genome editing
- Genome wide functional genetics screens (haploid- or CRISPR-based)
- Mouse metabolic models

## Current funding

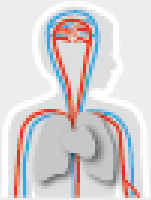
- ERC Consolidator grant
- NWO Vici
- Dutch Heart Society Established Investigator award
- Stichting Zabawas
- Ara Parseghian Medical Research Fund
- AMC/ACS



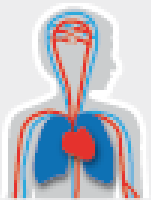
Heart Failure & Arrhythmias



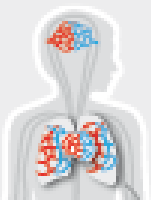
Pulmonary Hypertension  
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Diabetes & Metabolism



Microcirculation

# Future plans

## Short term (1-2 year) plan

Plan:

- Clarify the role of March6 in the liver, fat, and macrophages
- Identify genetic modifiers of NPC1
- Initiate studies of Rnf145 and SPRING

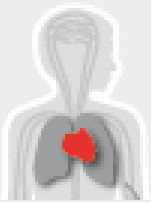
Necessary infrastructure:

- State-of-the-art facilities to study mouse metabolic phenotypes. Current infrastructure and support is outdated and insufficient
- Proteomics unit (easy access/quick turn-around)

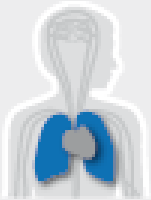
## Long term (>2 year) plan

Plan:

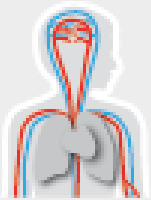
- Continue with Rnf145 and SPRING
- Shift/expand studies towards Lp(a) and TG metabolism
- Identify the Lp(a) receptor(s)
- Focus and expand on the ERs role in lipid metabolism and answer how cholesterol is delivered from the lysosome to the ER



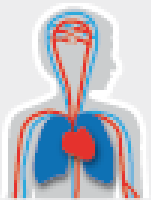
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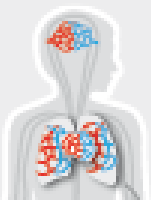
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Microcirculation

# Future plans

## Collaboration in ACS (ongoing projects/experiments)

### VUMC:

- Peter Hordijk (OOTB)
- Elga de Vries (OOTB)

### AMC:

- Kees Hovingh
- Onno Holleboom
- Carlie de Vries