Focus of research group

**Investigators:** Bogaard, Vonk Noordegraaf, de Man, Houweling, Christiaanse, van Tintelen, Wurdinger.

**Post-docs:** Szulcek, Aman
PhD Students: Jansen, Huis in ‘t Veld, Botros, Smits, Manz, Arkani

**Departments:** Pulmonary Medicine, Clinical Genetics, Radiology and Nucleair Medicine, Physiology,

**Current mission, vision and aims:**

1) Early detection of pulmonary hypertension in risk groups (gene variants, pulmonary embolism)

2) Improved strategies for diagnosis, classification and monitoring of PH

2) Identification of new treatment modalities and strategies for PAH and CTEPH
Focus of research group

**Current expertise**
National referral center for PH
Large cohort of patients with idiopathic and heritable PAH
Unique cohort of BMPR2 mutation carriers

State of the art imaging and biomarkers:
- MRI
- PET imaging
- Liquid Biopsy (ECFCs, platelet transcriptomics)
- Tissue bank and patient derived primary lung vascular cells
- Machine learning

**Current funding**
CVON consortium PHAEDRA and PHAEDRA-IMPACT
CVON consortium DOLPHIN-Genesis
Optics consortium (Pharma sponsored)
NWO VICI (Vonk)
NWO VIDI (de Man)
Dekker (de Man)
Pharma: RCT participation
Future plans

**Short term**
- Investigator initiated studies: 6-MP and RVX-208 in PAH
- Diagnostic classification on the basis of clinical parameters in combination with liquid biopsy
- Genetic background of RV adaptation

** Longer term**
- Multicenter approach using adaptive clinical trial design for investigator initiated studies
- FLT-PET as part of precision medicine strategy
- Identification of early pulmonary vascular changes before onset of RV failure
Collaborations

**Institutional**
Many departments, as mentioned

**National**
PHAEDRA, DOLPHIN (LUMC, Twente University, MUMC)
OPTICS
NVALT WPH
Erasmus MC, UMCG

**International**
Imperial college London
Cambridge University
INSERM Paris
Stanford University
University of Giessen
University of Colorado
Max Planck Institute Bad Nauheim
Many others