

# KATRIEN VANDOORNE

In vivo Multi-Scale Imaging lab

## **1. ACADEMIC DEGREES**

**2016-2018:** Research Fellow/ Career Development, MGH/Harvard Medical School (USA), Center for Systems Biology, Mouse Imaging Program. Host: Dr. Matthias Nahrendorf

**2007-2012:** PhD, Weizmann Institute of Science (Israel), Life Science. Supervisor: Dr. Michal Neeman & Dr. Alon Harmelin

**2003-2006:** Master (Magna Cum Laude), Ghent University (Belgium), Veterinary Medicine

**2000-2003:** Bachelor (Magna Cum Laude), Ghent University (Belgium), Veterinary Medicine

## **2. ACADEMIC APPOINTMENTS**

**2020-present:** Assistant Professor, Technion, Faculty of Biomedical Engineering,

**2018-2020:** Visiting Scientist, Weizmann Institute of Science (Israel), Department of Biological Regulation

**2018-2020:** Eindhoven University of Technology (The Netherlands), Department of Biomedical Engineering, Soft Tissue Engineering

**2013-2016:** Assistant Professor, Eindhoven University of Technology (The Netherlands), Department of Biomedical Engineering, Biomedical NMR

## **3. RESEARCH GRANTS**

**2021-2022:** "Multichannel optical imaging to reveal the bone marrow roots of cardio-metabolic inflammation" - Technion EVPR Fund - Mallat Family Research Fund

**2022-2024:** Metabolic MRI – a new noninvasive approach in clinical diagnosis, treatment, and real time investigation of human diseases – Technion Human Health Initiative – PI Aharon Blank, one of 4 co-PI

**2021-2026:** Multiplex imaging tools to reveal cardio-metabolic inflammation, Israel Science Foundation research grant

**2020:** Developing multi-scale systems imaging to study the dynamics of AI-programmed nanomaterials for cancer treatment, Wolfson Foundation – Applicant (co-PI), together with Dr. Avi Schroeder (co-PI) and Dr. Shulamit Levenberg (co-PI), Dr. Yossi Shamay and Dr. Yuval Shaked

## **4. FELLOWSHIPS, AWARDS AND HONORS**

**2022** Bergmann Award for excellent grant proposal from US-Israel BSF

**2016-2018** Career Development Grant, awarded by Eindhoven University of Technology, Harvard Medical School

**2013** Finalist, Young Investigators Award (top 3), European Molecular Imaging Meeting

**2010** First place, Best Poster, World Molecular Imaging Conference

**2010& 2011** Travel Awards, International Society of Magnetic Resonance Imaging Meeting

**2008 – 2009** Research Scholarship, bilateral cooperation Flanders - Israel,

**2007** Prestigious personal Fellowship of Research Foundation Flanders (FWO) for a 4-year PhD (declined due to PhD at Weizmann Institute of Science)

**2006** First place, Pfizer Animal Health Award for Excellent Master Thesis

## **5. PUBLICATIONS**

Number of citations in 2023: 777 citations, H-index 14

24 publications (8 first author, 5 last author) + 2 book chapters (First author)- Selection:

1) Rohde, D\*, **Vandoorne, K\***, et al. Bone Marrow Endothelial Dysfunction Promotes Myeloid Cell Expansion in Cardiovascular Disease. Nature Cardiovascular Research. **2021**, 1–17. \* The authors contributed equally to this paper. | **Covered in News & Views of Nature.**

2) Heyde A, Rohde D, McAlpine CS, Zhang S, Hoyer FF, Gerold JM, Cheek D, Iwamoto Y, Schloss MJ, **Vandoorne K**, et al.. Increased stem cell proliferation in atherosclerosis accelerates clonal hematopoiesis. Cell. 2021;184(5):1348-1361.

3) van den Boomen M, Kause HB, Nguyen C, Dankers PYW, Bouten CVC, **Vandoorne K**. Triple-marker cardiac MRI detects sequential tissue changes of healing myocardium after a hydrogel-based therapy. Nature Scientific Reports 2019; 9(1):p1-15 :19366.