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| **Curriculum vitae** |

# Personal details

Harm Jan Bogaard, MD, PhD, FAHA

Position: Professor of Pulmonary Medicine

Date and place of birth: Woerden Sept 9th 1972

Nationality: Dutch

BIG Registration #: 39049302901

**Work Address:**

Department of Pulmonary Medicine

VU University Medical Center

PO Box 7057

1007 MB Amsterdam

The Netherlands

**Education**

## Master's (‘doctoraal’)

University: VU University Medical Center, Amsterdam

Date: 30/08/1996

Study: Medicine (with honors)

# Doctorate

University: VU University Medical Center, Amsterdam

Date: 18/11/1998

Supervisor (‘promotor’): Prof. Dr. P.E. Postmus

Title of thesis: The haemodynamic response to exercise in health and pulmonary disease

Medical Doctor (MD)

University: VU University Medical Center, Amsterdam

Date: 15/01/1999

Study: Medicine (with honors)

Residency Internal Medicine

University: Academic Medical Center, Amsterdam

Date: 3/2001-3/2003

Supervisor: Prof. Dr. P. Speelman

Clinical fellowship Pulmonary Medicine

University: Academic Medical Center, Amsterdam

Date: 4/2003-11/2006

Supervisors: Prof. Dr. H.M. Jansen ; Dr. J.S. van der Zee

**Additional training**

2006 Radiation Safety for Pulmonary Specialists

2007 Laboratory Animal course (‘Proefdierkunde, artikel 9’)

2010 BROK (Course on Regulations for and Organization of Clinical Research)

2012 Training for tutors, 3rd year Bachelor, Medicine

Teach the teacher: “Interactie: de basis voor onderwijs, opleiden en toetsen”

2013 PhD supervision ( Amstel Academy)

# Work experience

2017-present Professor of Pulmonary Medicine, VU University Medical Center, Amsterdam, the Netherlands

2013-2017 Associate Professor of Pulmonary Medicine, VU University Medical Center, Amsterdam, the Netherlands

2010-2013 Assistant Professor of Pulmonary Medicine, VU University Medical Center, Amsterdam, the Netherlands

2008-2010 Assistant Professor of medicine, pulmonary division, Virginia Commonwealth University, Richmond, VA

2007-2008 Visiting scientist Voelkel lab, Virginia Commonwealth University, Richmond VA

2007 Visiting scientist Voelkel lab, Colorado Health Sciences Center, Denver CO

2006 Pulmonologist, VU University Medical Center, Amsterdam

2001-2006 Residency Internal Medicine and Fellowship Pulmonary Medicine. Academic Medical Center, Amsterdam

1999-2001 Post-doctoral research fellowship at the division of physiology, University of California San Diego, San Diego, CA

**Administrative positions**

2018-present Member Commission Talent and Faculty Development VU University Medical Center

2018-present Member and European Ambassador of the American Heart Association 3CPR Committee

2018-present Board Member Netherlands Respiratory Society

2018-present Member of the Scientific Advisory Board Lung Foundation of the Netherlands

2017-present Co-director Amsterdam Cardiovascular Sciences

2014-present Fellow of the American Heart Association

2014-present Theme leader “Pulmonary Hypertension and Thrombosis”, Amsterdam Cardiovascular Sciences (Research Alliance VU University Medical Center / Academic Medical Center)

2012-present Advisory Board of Medidact Longziekten

2015-2018 Member American Thoracic Society Working Group for the assessment of right ventricular failure in the research setting

2014-2017 Member of the American Heart Association 3CPR Early Career Committee

2012-2015 Member Young Investigators Board, Netherlands Respiratory Society

2012-2014 Leader of pulmonary hypertension advisory team, Netherlands Respiratory Society

2011-2014 Think Tank of the Institute for Cardiovascular Research at the VU University Medical Center

2011-2013 WHO taskforce for the 2013 World Symposium on Pulmonary Hypertension

2010-present Associate Editor European Respiratory Journal; Associate Editor PlosOne

2010 National Institute of Health-Heart Lung Blood Institute taskforce for strategic planning of lung vascular research

**Awards**

2006 Dekker Award (Netherlands Heart Foundation)

2000 Fulbright Award for post-doctoral fellowship at the UCSD, dept of Physiology

2000 Dutch Royal Academy of Sciences Talent Stipendium

1998 Hippocrates Foundation Study Prize for best Dutch Medical Thesis

**Patient Care**

I am currently involved in patient care for about 40% of my time. My activities include two outpatient clinics, the performance of procedures (bronchoscopies, right heart catheterizations), supervision of fellows and attendance of multi-disciplinary meetings. As member of the team of four pulmonologists at the VU University Medical Center Knowledge Centre for Pulmonary Hypertension, I receive many tertiary referrals from colleagues throughout the country. To the referring physicians I offer clinical expertise in pulmonary hypertension, gas exchange abnormalities and exercise physiology, as well as skills in the performance of right heart catheterizations. As a consultant for the critical care unit I am part of the early response team for pulmonary embolism, the team for Extracorporal Membrane Oxygenation (ECMO team) and the balloon pulmonary angioplasty (BPA) team for chronic thromboembolic pulmonary hypertension. My work experience as a pulmonologist includes two years of staff membership in the division of pulmonary medicine and critical care at the Virginia Commonwealth University / MCV Hospital. I was permitted to work on a specific university license, and was involved in outpatient care, performance of procedures and training of clinical fellows. In 2017, I was re-certified as a registered pulmonologist in the Netherlands.

**Teaching**

My current teaching activities comprise approximately 20% of my time. Over the past years I have been involved in the general training of medical students, interns, fellows (internal medicine, cardiology, pulmonary medicine). I have also trained medical specialists (cardiologists and pulmonologists) and nurses in pulmonary hypertension.

**Contributions to science**

My most important contribution to science is helping to put the right heart chamber on the map. Long before I started working in the field, others had shown that patients with pulmonary hypertension died from right heart failure. Nevertheless, researchers in the field focused exclusively on mechanisms of pulmonary vascular disease, and never asked themselves: why does the right heart fail? This surprised me, because I saw considerable differences between patients in adaptive capacity of the right heart. I first used a literature search on mechanisms of left heart failure to better understand right heart failure. My review compiling the possible differences between left and right heart failure was an eye opener to many and was cited >400 times. I then developed and used animal models of right heart failure to show for the first time the importance of right heart fibrosis and capillary rarefaction and to identify potential drugs to treat right heart failure. While overseeing clinical studies translating my findings, I have continued to study pulmonary vascular remodeling. My lab is one of the very few in the world that can isolate and culture lung endothelial cells from pulmonary hypertension patients. Using this unique patient material, we made significant scientific contributions.

**Societal impact**

2018 Featured in the movie “De langste adem”, a documentary that depicts the unique drive of doctors involved in the care for patients with pulmonary hypertension

2018 Interview in “De papillon”: quarterly magazine of Dutch Chapter of Pulmonary Hypertension Association

2016 Interview Reformatorisch Dagblad: Application of Balloon pulmonary angioplasty for chronic thromboembolic pulmonary hypertension

2016 Co-founder patient advisory board Dutch Pulmonary Hypertension Association

2015-present Editor of E-Health Modules for PH patients

2015 Member Round table iPulmonologist Venous thrombo-embolism

2014 Co-developer e-Learning CTEPH for pulmonologists and cardiologists

2013-present Regular interviews for web cast iPulmonologist

2012 Pulmonary Hypertension special. “De apotheker” RTL4

2012 Meet the scientist presentation at the Longdagen

2012-present Contributor to newsletter Pulmonary Hypertension Knowledge Center VUmc

2012-present Co-organizer and speaker at national PH patient day

**Research Collaborators**

*Collaborators in Pulmonary Hypertension Center of Knowledge*

* Anton Vonk Noordegraaf
* Frances de Man
* Anco Boonstra

*Institutional Collaborators*

* Peter Hordijk (Physiology)
* Pieter Koolwijk (Physiology)
* Coen Ottenheim (Physiology)
* Lilian Meijboom (Radiology)
* Reina Mebius (Cell Biology)
* Bert Windhorst (Nuclear Medicine and PET Research)
* Marc Huisman (Nuclear Medicine and PET Research)
* Arjan Houweling (Clinical Genetics)
* Tom Wurdinger (Neuro-oncology)

*National*

* Peter ten Dijke (Molecular Cell Biology, Leiden University)
* Marie-Jose Goumans (Molecular Cell Biology, Leiden University)
* Daphne Merkus (Experimental Cardiology, Erasmus University, Rotterdam)
* Rolf Berger (Pediatric Cardiology, University Medical Center Groningen)
* Beatrijs Bartelds (Pediatric Cardiology, University Medical Center Groningen)
* Erik Verschuren (Pulmonary Medicine, University Medical Center Groningen)
* Wim Timens (Pathology, University Medical Center Groningen)
* Judith Homberg (Behavorial Neurogenetics, Radboud University, Nijmegen)
* Mirjam Kool (Pulmonary Medicine, Erasmus Medical Center, Rotterdam)
* Jan Stolk (Pulmonary Medicine, Leiden University Medical Center)
* Andries van der Meer (Twente University)

*International*

* Marc Humbert (Pulmonary Medicine, University Paris-Sud, Paris, France)
* Christophe Guignabert (INSERM U999, Paris, France)
* Frederic Perros (INSERM U999, Paris, France)
* Peter Dorfmuller (INSERM U999, Paris, France)
* Antonio Abbate (Virginia Commonwealth University, Richmond, VA)
* Laszlo Farkas (Virginia Commonwealth University, Richmond, VA)
* Paul Yu (Cardiology, Harvard University, Boston, MA)
* Nick Morrell (Pulmonary Medicine, University of Cambridge, UK)
* Ralph Schermuly (Pulmonary Medicine, Giessen, Germany)
* Bakyt Kojonazarov (Pulmonary Medicine, Giessen, Germany)

**Grants**

*2018*

CVON consortium: “PHAEDRA-IMPACT”

Role: Principal Investigator in Work Package 1; co-PI in the other Work Packages

Amount: €4,900,000.00

*2018*

CVON consortium: “Detection of Latent Pulmonary Hypertension in Genetically Susceptible Subjects (DOLPHIN-GENESIS)”

Role: Research Leader; co-PI in Work Package 2

Amount: €1,765,973.00

*2018*

NWO grant, Translational Adult Stem Cell Program: “Halting progression of pulmonary emphysema”

Role: PI Work Package 6

Amount: €120,000.00

*2017*

Boehringer Ingelheim Restricted Grant “Nintedanib in experimental pulmonary hypertension”

Role: Principal Investigator

Amount: €40,000.00

*2017-2020*

*Icar-VU PhD Grant: “Lung on a Chip”*

*Role: Principal Investigator*

*Amount: €200,000.00*

*2015-2017*

Icar-VU Scientific Excellence Grant: “The PHACTS: Pulmonary Hypertension at the Crossroads of Thrombosis and Shear Stress”

Role: Principal Investigator

Amount: €200,000.00

*2014-present*

Actelion Restricted Grant: “Optiek” (Co-sponsor contract)

Role: Principal Investigator

Amount: €240,000.00

*2014-present*

Therabell Restricted Grant: “Optiek” (Co-sponsor contract)

Role: Principal Investigator

Amount: €240,000.00

*2014-2018*

GSK Restricted Grant: “Optiek” (Co-sponsor contract)

Role: Principal Investigator

Amount: €140,000.00

*2014-2017*

Bayer Restricted Grant: “Optiek” (Co-sponsor contract)

Role: Principal Investigator

Amount: €180,000.00

*2013-2018*

CVON consortium: “Pulmonary Hypertension and associated Right Heart Failure (Phaedra): breaking the vicious cycle”

Role: Principal Investigator in Work Package 4; co-PI in the other Work Packages

Amount: €9,734,945.00

*2012-2016*

Lung Foundation (former Astmafonds) Rare Chronic Lung Diseases grant: “The pulmonary endothelium fails to adapt to increasing shear stress: Role of blood flow velocity in the development of pulmonary arterial hypertension”

Role: Principal Investigator

Amount: €240,000.00

*2011-2015*

Boehringer Ingelheim Restricted Grant “BIBF1000 in experimental pulmonary hypertension”

Role: Principal Investigator

Amount: €225,000.00

*2012-2014*

ICaR-VU Start-up Grant “Go with the flow, but against the current. Reconciling pathogenic paradigms in PAH”

Role: Principal Investigator

Amount: €150,000.00

*2010-2014*

ZonMW Tranlational Research Grant “Betablocker therapy in pulmonary arterial hypertension”

Role: Co-Principal Investigator

Amount: €500,000.00

*2012, 2013*

ICaR-VU Equipment Grant “Hypoxic Chamber”

Role: Principal Investigator

Amount: €30,000.00

*2010-2012*

NIH/GCRC grant for a “Pilot study of carvedilol in PAH patients”

Role: Principal Investigator

Amount: $50,000.00 (co-financed by a Glaxo Smith Kline Restricted Grant)

*2006-2008*

Netherlands Heart Foundation Dekker Stipend: “The role of rho-kinase in pulmonary arterial hypertension”

Role: Principal Investigator

Amount: €100,000.00

**Supervision / co-promotorschappen**

*Successful PhD Graduations as co-promotor*

2011 J Drake: The molecular signature of right heart failure (VCU)

2013 H Groepenhoff: Clinical value of exercise testing in pulmonary hypertension (VUmc)

2013 B. Boerrigter: Cardiopulmonary interactions in COPD (VUmc)

2014 M. van de Veerdonk: Right ventricular remodeling and function in pulmonary arterial hypertension (VUmc)

2016 M de Raaf: Validation of animal models for pulmonary hypertension (VUmc)

2016 Robert Szulcek: Endothelial adaptation to shear stress in PAH

2017 Onno Spruijt: Right ventricular function at rest and during exercise in pulmonary

Hypertension (VUmc)

*Expected PhD Graduations as promotor*

2019 Anna Huis-in-‘t-Veld: Optimizing diagnostic strategies in pulmonary hypertension (VUmc)

2019 Chris Happé: The role of shear stress in pulmonary vascular remodeling (VUmc)

2019 Nina Rol: TGFβ/BMP balance in endothelial shear responses (VUmc)

2019 Lonneke Rotteveel: ALK5 inhibitor tracer to detect pulmonary hypertension (VUmc)

2020 Josien Smits: Endothelial Cell Forming Colonies in pulmonary hypertension (VUmc)

2020 Xiaoqing Sun: Metabolic remodeling in pulmonary hypertension and associated right heart failure (VUmc)

2020 Liza Botros: Vascular leak, thrombosis and pulmonary hypertension (VUmc)

2020 Dieuwertje Ruigrok: Chronic Thrombo-embolic Pulmonary Hypertension

2021 Natalia Braams: Chronic Thrombo-embolic Pulmonary Hypertension

2021 Xue Manz: Thrombosis on a chip (VUmc)

2022 Samara Janssen: detection of latent pulmonary hypertension

Post-doctoral Supervisor

2016 J. Gomez Arroyo: genomics of pulmonary hypertension (VUmc)

2016 Robert Szulcek: Endothelial adaptation to shear stress in PAH (VUmc)

2013-2015 HJ Harms: Lung PET scanning in pulmonary hypertension (VUmc)

2010-2013 J. Gomez Arroyo: animal models for pulmonary hypertension (VCU)

2010-2013 A Al Hussainy: the role of thyroid hormone in pulmonary hypertension (VCU)

2008-2009 S Mizuno: genetic and epigenetic control of lung vascular maintenance (VCU)

**Membership Editorial Boards**

* Associate Editor Thorax
* Associate Editor PlosOne
* Associate Editor Biomed Research International
* Associate Editor Pulmonary Therapy
* Past Associate Editor European Respiratory Journal

**Reviewing Activities**

*Manuscript reviewer for:*

* Circulation
* Circulation Research
* American Journal of Respiratory and Critical Care Medicine
* European Respiratory Journal
* American Journal of Physiology
* PlosOne
* Heart
* Chest
* Experimental Physiology

*Grant reviewer for:*

* Dutch Society for Rheumatology
* 2014: Member of British Heart Foundation Review Panel for BHF chair Prof N Morrell, University of Cambridge
* 2013,2014: Fund for Scientific Research, Belgium
* 2013: German-Israeli Foundation
* 2012,2013,2014: Austrian Science Fund
* 2012: French National Research Agency

**Membership Professional Organizations**

* Fellow of the American Heart Association
* Fellow of the Pulmonary Vascular Research Institute
* Member of the American Thoracic Society (Pulmonary Circulation Assembly)
* Member of the European Respiratory Society
* Member of the Netherlands Respiratory Society
* Member of the Nederlandse vereniging van artsen voor longziekten en tuberculose

**Lectures: invited lectures and oral presentations at international meetings**

Invited lectures

1. Lung Amsterdam 2018 (Amsterdam, October 18th): “Diagnosis and treatment of pulmonary arterial hypertension”
2. Right ventricular Summit at the Royal College of Physicians 2018 (London, UK, October 11th): “How can molecular biology be used to guide treatment of right ventricular failure?”
3. European Respiratory Society 2018 (Paris, France, September 16th): “Right ventricular function and pulmonary hemodynamics”
4. Pulmonary Hypertension Association Annual Meeting 2018 (Orlando, FA, June 29th): “Novel therapies targeting the right ventricle”.
5. American Thoracic Society 2018 (San Francisco, CA, May 20th): “Capillary loss drives Right Ventricular Failure in Pulmonary Arterial Hypertension”.
6. Annual Meeting of the Chinese Medical Association 2018 (Guyang, China, April 14th). Keynote lecture: “Pulmonary hypertension and right heart failure”.
7. Sixth theoretical and practical course on applications and development of cardiopulmonary exercise testing and stress echocardiography 2018 (Milan, Italy, April 6th): “Right ventricular-arterial coupling”.
8. Sixth theoretical and practical course on applications and development of cardiopulmonary exercise testing and stress echocardiography 2018 (Milan, Italy, April 6th): “Imaging of the right heart at rest and during exercise”.
9. Bronkhorst Colloquium 2018.” (Blankenberge, Belgium, February 9th): Keynote lecture: “Pulmonary Hypertension
10. European Pediatric Cardiology 2017 meeting (Groningen, the Netherlands, October 13th. “Use of liquid biopsy in PAH”
11. University of Giessen, Pulmonary Hypertension center of excellence (Giessen, Germany, October 10th 2017) “Precision Medicine in PAH”
12. University of Minnesota, dept of Cardiology Grand Rounds (Minneapolis, USA, May 26th): “The long road towards precision medicine in pulmonary hypertension”
13. American Thoracic Society 2017 (Washington DC): Pure Adrenaline: Role for Targeting the Sympathetic Nervous System in RV Failure?
14. Virginia Commonwealth University, Wright Center Clinical and Translational Research Seminar (Richmond, USA, May 20th 2017): Right ventricular pulmonary artery interaction in left-sided heart failure
15. Pulmonary Vascular Research Institute (Miami, USA, January 27th 2017): RV failure in PAH is initiated by RV ischemia – Pro
16. American Heart Association 2016 (New Orleans): The Beta-Adrenergic Receptor in in Pulmonary Arterial Hypertension: A Novel Therapeutic Target?
17. American Heart Association 2016 (New Orleans): Angiogenesis in the Skeletal Muscle
18. American Heart Association 2016 (New Orleans): Pulmonary Vasculature and Right Ventricle in Diastolic Heart Failure
19. European Right Heart Meeting (London, UK, October 12th 2016): Treatment for Pulmonary Hypertension: good for the heart but bad for the lung
20. Swiss Cardiology and Critical Care Meeting (Montreux, Switzerland, September 23rd 2016): Beta-adrenergic blocade in Pulmonary Hypertension
21. European Respiratory Society 2016 (London): Pulmonary arterial hypertension: future therapeutic approaches
22. American Thoracic Society 2016 (San Francisco): Clinical Year in Review: Pulmonary Vascular Disease.
23. Annual meeting of the Portugese Society of Cardiology (Vilamoura, Portugal, April 25th 2016): Role of multimodality imaging in pulmonary arterial hypertension and right heart failure.
24. AMSTOL symposium (Amsterdam, April 8th 2016): Pioneering in chronic thromboembolic pulmonary hypertension
25. Cleveland Clinic Abu Dhabi Pulmonary Hypertension Summit (Abu Dhabi, United Arab Emirates, March 18th 2016): Upfront combination therapy in pulmonary arterial hypertension
26. 3rd Scientific Seminar on pulmonary hypertension: Connecting expertise in a rare disease in 2015 (Lund, December 11th 2015): “Pathophysiology and Pathogenesis of Pulmonary Arterial Hypertension”
27. American Heart Association 2015 (Orlando): “Go with the Flow in Pulmonary Hypertension”
28. American Heart Association 2015 (Orlando): “Inflammation and right ventricle failure”
29. American Heart Association 2015 (Orlando): “Post-translational oxidative modification: A key mechanism underpinning pulmonary vascular disease”
30. American Heart Association 2015 (Orlando): “Tomorrow's therapy for right ventricular failure in PAH”
31. American Heart Association 2015 (Orlando): “The impact of pulmonary vascular stiffness on right ventricular function”
32. American Heart Association 2015 (Orlando): “RV Failure: Late Arrival for an Important Player”
33. European Teratology Society meeting 2015 (Amsterdam, August 31st 2015): “The right ventricle; pulmonary hypertension and fetal programming”
34. PAH forum Lisbon (Lisbon, June 19th 2015): Clinical significance of compliance and ventricular-arterial coupling in PAH”
35. Special Symposium on Drug-induced PH – 50 years after the Aminorex tragedy (Vienna, June 12th 2015): ”Potassium Channels”
36. European Society of Cardiology: Heart Failure 2015 (Sevilla, May 25th 2015): Targeting right ventricular failure”
37. American Thoracic Society 2015 (Denver): “Cardiopulmonary Hemodynamics in  
    PH-COPD: A Hemodynamic Roller Coaster”
38. Pulmonary Vascular Research Institute Annual Meeting 2015 (Guangzhou, January 15th 2015): Cardiac output, coupling and compliance in pulmonary hypertension.
39. Tongji University Grand Rounds (Shanghai, January 13th 2015): “Right heart failure in pulmonary hypertension”
40. Toronto Congenital Cardiac Center for Adults Academic Teaching Rounds 2014 (Toronto): “Right heart failure: mechanisms and therapeutic interventions”
41. Toronto Ottawa Heart Summit 2014 (Ottawa): “Diagnosis and Classification of Pulmonary Hypertension”
42. American Heart Association 2014 (Chicago): “Targeted Right-Heart Therapy in PAH: Role for Beta-Blockade, Metabolic Modulation and Pacing”
43. Rembrandt Symposium 2014 (Noordwijkerhout): “Go with the flow in Pulmonary Hypertension”
44. European Society of Heart and Lung Transplantation 2014 (Wengen): “Right heart failure: mechanisms and treatment”
45. ISRD&ATS 2013 (Shanghai): “Right ventricular imaging: gold standards and emerging approaches”
46. American Heart Association 2013 (Dallas): “Capillary rarefaction, RV function and ventriculo-arterial coupling in PAH”
47. Right Heart Failure Summit 2013 (Boston): “Treating Right Heart Failure In Pulmonary Hypertension: Why Does The Art Of Medicine Lead The Science?”
48. European Respiratory Society 2013 (Barcelona): “Cancer treatment in pulmonary hypertension: cause or cure?”
49. Grover Meeting 2013 (Denver): “HDAC inhibition in pulmonary hypertension: Con”
50. VU University Medical Center: Honorary Symposium Prof GJ Tangelder (Amsterdam, June 21st 2013): “Free Radicals in Pulmonary Hypertension”
51. Ludwig Boltzmann Institut for Lung Vascular Research 2013 (Graz, Austria): “Pathophysiology of right heart failure; lessons from preclinical research”
52. Thalys Meeting 2012 (Brussels): “What have we learned from animal models of right heart failure”
53. Chest 2012 (Atlanta): “Right Ventricular Dysfunction in PAH”
54. American Heart Association 2012 (Los Angeles): “Why the Right Ventricle Is Not the Left Ventricle”
55. Finnish Cardiological Society 2012 (Helsinki, Finland): “Goal-orientated treatment strategies in idiopathic and associated pulmonary arterial hypertension”
56. European Congress of Pharmacology 2012 (Granada, Spain): “Treatment of Right Heart Failure”
57. PVRI meeting 2012 (Cape Town, South Africa): “Be it resolved: The most important target of therapy in advanced WHO category 1 Pulmonary hypertension is the right ventricle. Pro”
58. American Heart Association 2011: “Experimental models of right ventricular hypertrophy and lessons for the clinic”
59. American Heart Association 2011: “Clinical Trials and Targeted Right-Heart Therapy in Pulmonary Hypertension Associated with Left-Heart Failure”
60. American Heart Association 2011: “Right Ventricle Imaging: Gold Standards and Emerging Approaches”
61. Second integrated Pulmonary Circulation Research Meeting 2011 (Tokyo): “Medical treatment of right heart dysfunction”
62. American Thoracic Society 2011: “Mechanisms of right heart failure”
63. John Vayne Symposium (London) 2011: “The microvascular pathology of pulmonary hypertension associated right ventricular failure”
64. Fishman symposium 2010 (Philadelphia): “Novel interventions to improve or worsen right ventricular function”
65. American Thoracic Society 2010: “Medical therapeutic targets for the right ventricle”
66. Pulmonary Vascular Research Institute International Webcast (2009): “Right ventricular failure in pulmonary arterial hypertension”

Oral abstract presentations at international meetings (last 5 years)

1. Bogaard HJ, Natarajan R, Alhussaini AA, Kraskauskas D, Voelkel NF. Death In Experimental Pulmonary Hypertension Induced By Monocrotaline: It's Not From Pressure Overload. American Heart Association Meeting 2010

2. Bogaard HJ, Natarajan R, Mizuno S, Kraskauskas D, Voelkel NF. Anti-angiogenic treatment reverses pulmonary vascular remodeling in experimental pulmonary hypertension but worsens failure of the pressure-overloaded right ventricle. American Thoracic Society Meeting 2010

3. Bogaard HJ, Natarajan R, Mizuno S, Kraskauskas D, Voelkel NF. Dietary copper restriction Is Associated With Accelerated Failure of the Pressure-overloaded Right Ventricle. American Heart Association Meeting 2009

4. Bogaard HJ, Natarajan R, Mizuno S, Kraskauskas D, Voelkel NF. Copper restriction prevents and reverses angioproliferation in experimentally induced pulmonary arterial hypertension. European Respiratory Society Meeting 2009.

5. Bogaard HJ, Natarajan R, Kraskauskas D, Kraskauskienne V, Voelkel NF. β1-adrenergic blockade with carvedilol mitigates maladaptive right ventricular remodeling in rats with experimentally-induced pulmonary hypertension. American Thoracic Society Meeting 2009.

6. Bogaard HJ, Natarajan R, Kraskauskas D, Abe K, McCord JM, Voelkel NF. It is not (just) the afterload that causes the right heart to fail in pulmonary hypertension. American Heart Association Meeting 2008

**Membership PhD committees**

**2018**

* Annelieke van Riel (Amsterdam Medical Center)
* Manon Pronk (VU University Medical Center)

**2017**

* Daphne Mous (Erasmus Medical Center)
* Winifred Broekman (Leiden University Medical Center)

**2015**

* Mark Begieneman (VU University Medical Center, Amsterdam)
* Pleuni Hooijman (VU University Medical Center, Amsterdam)

**2014**

* Reinout Borgdorff (University Medical Center Groningen, Groningen)

**2013**

* Michael Dickenson (University Medical Center Groningen, Groningen)
* Celine Dewachter (Erasmus University, Brussels, Belgium)

**2012**

* Yeun Ying Wong (VU University Medical Center, Amsterdam)
* Frank Helderman (VU University Medical Center, Amsterdam)

1. **Publications**

Thesis

18/11/1998

VU University Medical Center, Amsterdam

Supervisor (‘promotor’): Prof. Dr. PE Postmus

Title of thesis: The haemodynamic response to exercise in health and pulmonary disease

International (refereed) journals

**2019**

1. **Bogaard HJ**, Voelkel NF. Is Myocardial Fibrosis Impairing Right Heart Function? Am J Respir Crit Care Med. 2019 (in press).

**2018**

1. Rhodes CJ, Batai K, Bleda M, Haimel M, Southgate L, Germain M, Pauciulo MW, Hadinnapola C, Aman J, Girerd B, Arora A, Knight J, Hanscombe KB, Karnes JH, Kaakinen M, Gall H, Ulrich A, Harbaum L, Cebola I, Ferrer J, Lutz K, Swietlik EM, Ahmad F, Amouyel P, Archer SL, Argula R, Austin ED, Badesch D, Bakshi S, Barnett C, Benza R, Bhatt N, **Bogaard HJ**, Burger CD, Chakinala M, Church C, Coghlan JG, Condliffe R, Corris PA, Danesino C, Debette S, Elliott CG, Elwing J, Eyries M, Fortin T, Franke A, Frantz RP, Frost A, Garcia JGN, Ghio S, Ghofrani HA, Gibbs JSR, Harley J, He H, Hill NS, Hirsch R, Houweling AC, Howard LS, Ivy D, Kiely DG, Klinger J, Kovacs G, Lahm T, Laudes M, Machado RD, Ross RVM, Marsolo K, Martin LJ, Moledina S, Montani D, Nathan SD, Newnham M, Olschewski A, Olschewski H, Oudiz RJ, Ouwehand WH, Peacock AJ, Pepke-Zaba J, Rehman Z, Robbins I, Roden DM, Rosenzweig EB, Saydain G, Scelsi L, Schilz R, Seeger W, Shaffer CM, Simms RW, Simon M, Sitbon O, Suntharalingam J, Tang H, Tchourbanov AY, Thenappan T, Torres F, Toshner MR, Treacy CM, Noordegraaf AV, Waisfisz Q, Walsworth AK, Walter RE, Wharton J, White RJ, Wilt J, Wort SJ, Yung D, Lawrie A, Humbert M, Soubrier F, Trégouët DA, Prokopenko I, Kittles R, Gräf S, Nichols WC, Trembath RC, Desai AA, Morrell NW, Wilkins MR; UK NIHR BioResource Rare Diseases Consortium; UK PAH Cohort Study Consortium; US PAH Biobank Consortium. Genetic determinants of risk in pulmonary arterial hypertension: international genome-wide association studies and meta-analysis. Lancet Respir Med. 2018 (in press).
2. Smits J, Tasev D, Andersen S, Szulcek R, Botros L, Ringgaard S, Andersen A, Vonk-Noordegraaf A, Koolwijk P, **Bogaard HJ**. Blood Outgrowth and Proliferation of Endothelial Colony Forming Cells are Related to Markers of Disease Severity in Patients with Pulmonary Arterial Hypertension. Int J Mol Sci. 2018 (in press).
3. Ashek A, Spruijt OA, Harms HJ, Lammertsma AA, Cupitt J, Dubois O, Wharton J, Dabral S, Pullamsetti SS, Huisman MC, Frings V, Boellaard R, de Man FS, Botros L, Jansen S, Vonk Noordegraaf A, Wilkins MR, Zhao L, **Bogaard HJ**. 3'-Deoxy-3'-[18F]Fluorothymidine Positron Emission Tomography Depicts Heterogeneous Proliferation Pathology in Idiopathic Pulmonary Arterial
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