

Curriculum Vitae

Personalia

Last name De Backer
 First name Julie
 Date of birth 14/10/1970
 Place of birth Ghent, Belgium
 ORCID 0000-0001-8878-1507
 Researcher ID B-2897-2014
 Citizenship Belgian
 Marital status married to Jan De Waele, 2 children
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Degrees

1993 ECFMG certification (Educational Commission for Foreign Medical Graduates)
 1995 Medical Doctor, Ghent University, Belgium, *summa cum laude*
 2001 Board certified as specialist in Cardiology, Ghent University Hospital, Belgium
 2007 PhD in Medical Science, Ghent University, Belgium
 2018 Board Certified Clinical Geneticist in Belgium

Education/Postgraduate Training/Professional Experience

Oct 1988 - July 1995 Medical training and internship, Ghent University Hospital, Belgium
 Oct 1995 - Sept 1998 Residency in Internal Medicine, Ghent University Hospital Ghent
 Oct 1998 - Sept 2001 Residency in Cardiology, Ghent University Hospital Ghent, Belgium and Canisius Wilhelmina Hospital Nijmegen (The Netherlands – 1999-2000)
 Oct 2001 – Sept 2005 PhD training – funded by the Special Funds for Research, Center for Medical Genetics, Ghent University Hospital (promotor: Anne De Paepe)
 Oct 2005 – Sept 2009 Associate Chief of Clinic, Dept of Cardiology and Center for Medical Genetics, Ghent University Hospital
 Oct 2009 – Present Chief of Clinic, Dept of Cardiology and Center for Medical Genetics, Ghent University Hospital
 Oct 2011 - Present 5% Senior Lecturer, University of Ghent, Belgium
 2011 - Present Director of the Medical Expertise Centre for Inherited and Congenital Cardiovascular Disease

Honors and awards

1995 Specia Prize (Pfizer – Excellent Medical Student)
 2001 Young Investigator's award – Young Cardiologist's Club Belgium
 2009 Award from the Belgian Academy for Clinical Scientific Research in Medicine – Period 2006-2009
 2014 Edelweiss Award from the Rare Disease Organisation Belgium
 2016 Host of the Princess Lilian Foundation Guest Professorship, awarded to Prof. Dianna Milewicz
 2018 Dr. Leon Dumont prize of the Belgian Society of Cardiology, Belgian Heart Foundation

Research activities

Oct 2001 – Sept 2005 Research fellowship of the Special Fund for Research of the Ghent University – Center for Medical Genetic Ghent (Dir: Anne De Paepe)
 Oct 2008 - present Senior Clinical Investigator, Research Foundation Flanders.
 “New approaches for the treatment of cardiovascular manifestations in the Marfan syndrome and related aortic aneurysm syndromes” (2008-2013)
 “Study of cardiovascular and genetic aspects of inherited aortic aneurysms in humans and in dedicated mouse models” (2013-2018)
 “Developing strategies for Precision Medicine in Heritable Thoracic Aortic Disease” (2018 – present)

Supervision of PhD-students and postdoctoral fellows

Past (Co)-promotor/supervisor PhD-thesis: Marjolijn Renard and Laurence Campens

Current Promotor/Co-Promotor of five ongoing PhDs: Laura Muiño Mosquera, Felke Steijns, Gerlinde Logghe, Ruben Willems, Anthony Demolder – Ghent University
Supervising two post-docs: Marjolijn Renard and Patrick Sips

Teaching activities

2014 – present Titular: Scientific studies in cardiology - Master in Specialized Medicine - Faculty of Medicine, Ghent University
2014 – Present Titular: Communication in cardiology - Master in Specialized Medicine - Faculty of Medicine, Ghent University
2017 – Present Master in Genetic counseling: cardiogenetics, Faculty of Medicine, Ghent University
Promotor of Bachelor Thesis and Master Thesis program, Faculty of Medicine, Ghent University

Organisation of international scientific meetings

- September 1-4 2012 7th European Elastin symposium – Ghent Belgium – Scientific & Organizing Committee
- September 8-12 2012 – 1st International Symposium on Ehlers Danlos Syndrome – Ghent Belgium – Organizing comité
- September 25-27 2014: 9th International Research Symposium on Marfan Syndrome and Related Disorders - Paris (Fr) – Program Committee
- March 8th 2016 –International Mini Symposium on Recent Progress in Heritable Thoracic Aortic Disease – Ghent – Organizing and Scientific Comite
- August 26 – 30 2017 European Society of Cardiology Annual symposium – Barcelona (Sp) – Congress Program Committee
- Oct 30-31 2017 – International Cardiovascular Genomics Conference – Cardiff, UK – Scientific Committee
- May 3-5 2018 10th International Research Symposium on Marfan Syndrome And Related Disorders – Amsterdam (NL) – Program Committee
- 2016 – present : member of the European Society for Cardiology Congress Program Committee

Commissions of trust

- Journal editorial board member – Acta Cardiologica, Genomic and Molecular Cardiology.
- Abstract reviewer for the European Society for Cardiology
- Grant reviewer for the Dutch and Polish research foundations.
- Reviewer for European Heart Journal, Journal of the American College of Cardiology, Circulation, Circulation Genomics and Precision Medicine, European Heart Journal – Cardiovascular Imaging, International Journal of Cardiology, Clinical Genetics, American Journal of Medical Genetics, Pediatric Cardiology, American Journal of Cardiology

Memberships of international societies

- European Society for Cardiology (Fellow)
- European Society of Cardiology Working Group on Adult Congenital Heart Disease (Nucleus member since Sep 2014)
- European Society of Cardiology Congress Program Committee (since 2016)
- European Society of Cardiology Working Group on Aortic and Peripheral Artery Disease
- European Reference Network for Rare Multisystemic Vascular Disorders (Chair of the HTAD disease working group since 2016)
- Montalcino Aortic Consortium (Scientific Chair since 2017)

International invited presentations

90 invited presentations at international conferences including the European Society for Cardiology symposium, American Heart Association meeting, Association for European Pediatric Cardiology meeting

Publications.

Total number of publications: 103 A1 papers and 8 book chapters - H-index: 37

Selection of 10 papers:

1. Marjolijn Renard, Catherine Francis, Rajarshi Ghosh, Alan F. Scott, P. Dane Witmer, Lesley C. Adès, Gregor U. Andelfinger, Pauline Arnaud, Catherine Boileau, Bert L. Callewaert, Dongchuan Guo, Nadine Hanna, Mark E. Lindsay, Hiroko Morisaki, Takayuki Morisaki, Nicholas Pachter, Leema Robert, Lut Van

- Laer, Harry C. Dietz, Bart L. Loeys MD, Dianna M. Milewicz, Julie De Backer
Evaluation of the Clinical Validity of Genes for Heritable Thoracic Aortic Aneurysm and Dissections: Application of the Clinical Genome Resource Framework. Accepted for publication May 2018. *Journal of the American College of Cardiology*.
2. Laura Muiño-Mosquera, Felke Steijns, Tjorven Audenaert, Ilse Meerschaut, Anne De Paepe, Wouter Steyaert, Sofie Symoens, Paul Coucke, Bert Callewaert, Marjolijn Renard, Julie De Backer. Tailoring the ACMG and AMP guidelines for the interpretation of sequenced variants in the FBN1 gene for Marfan syndrome: Proposal for a disease- and gene-specific guideline. Accepted for publication 2018. *Circulation: Genomic and Precision Medicine*
 3. Marjolijn Renard, Laura Muiño Mosquera, Elise C Manalo, Sara Tufa, Eric J Carlson, Douglas R Keene, Julie De Backer, and Lynn Y Sakai. 2017. "Sex, Pregnancy and Aortic Disease in Marfan Syndrome." *Plos One* 12 (7).
 4. Oller, Jorge, Nerea Méndez-Barbero, E Josue Ruiz, Silvia Villahoz, Marjolijn Renard, Lizet I Canelas, Ana M Briones, Rut Alberca, Noelia Lozano-Vidal, María A Hurlé, Dianna Milewicz, Arturo Evangelista, Mercedes Saldañas, J Francisco Nistal, Luis Jesús Jiménez-Borreguero, Julie De Backer, Miguel R Campanero, and Juan Miguel Redondo. 2017. "Nitric Oxide Mediates Aortic Disease in Mice Deficient in the Metalloprotease Adamts1 and in a Mouse Model of Marfan Syndrome." *Nature Medicine* 23 (2): 200–212.
 5. Jondeau, Guillaume, Jacques Ropers, Ellen Regalado, Alan Braverman, Arturo Evangelista, Guisela Teixedo, Julie De Backer, Laura Muiño Mosquera, Sophie Naudion, Cecile Zordan, Takayuki Morisaki, Hiroto Morisaki, Yskert Von Kodolitsch, Sophie Dupuis-Girod, Shaine A Morris, Richmond Jeremy, Sylvie Odent, Leslie C Adès, Madhura Bakshi, Katherine Holman, Scott LeMaire, Olivier Milleron, Maud Langeois, Myrtille Spentchian, Melodie Aubart, Catherine Boileau, Reed Pyeritz, and Dianna M. Milewicz. 2016. "International Registry of Patients Carrying TGFBR1 or TGFBR2 Mutations Results of the MAC (Montalcino Aortic Consortium)." *Circulation-cardiovascular Genetics* 9 (6): 548–558.
 6. Campens, Laurence, Marjolijn Renard, Bram Trachet, Patrick Segers, Laura Muiño Mosquera, Johan De Sutter, Lynn Sakai, Anne De Paepe, and Julie De Backer. 2015. "Intrinsic Cardiomyopathy in Marfan Syndrome: Results from in- and Ex-vivo Studies of the Fbn1C1039G/+ Model and Longitudinal Findings in Humans." *Pediatric Research* 78 (3): 256–263.
 7. Campens, Laurence, Bert Callewaert, Laura Muiño Mosquera, Marjolijn Renard, Sofie Symoens, Anne De Paepe, Paul Coucke, and Julie De Backer. 2015. "Gene Panel Sequencing in Heritable Thoracic Aortic Disorders and Related Entities: Results of Comprehensive Testing in a Cohort of 264 Patients." *Orphanet Journal of Rare Diseases* 10.
 8. Lacro, RV, HC Dietz, LA Sleeper, AT Yetman, TJ Bradley, SD Colan, GD Pearson, ES Selamet Tierney, JC Levine, AM Atz, DW Benson, AC Braverman, S Chen, Julie De Backer, BD Gelb, PD Grossfeld, GL Klein, WW Lai, A Liou, Bart Loeys, LW Markham, AK Olson, SM Paridon, VL Pemberton, ME Pierpont, RE Pyeritz, E Radojewski, MJ Roman, AM Sharkey, MP Stylianou, S Burns Wechsler, LT Young, and L Mahony. 2014. "Atenolol Versus Losartan in Children and Young Adults with Marfan's Syndrome." *New England Journal of Medicine* 371 (22): 2061–2071.
 9. Renard, Marjolijn, Bert Callewaert, Machteld Baetens, Laurence Campens, Kay MacDermot, Jean-Pierre Fryns, Marise Bonduelle, Harry C Dietz, Isabel Mendes Gaspar, Diogo Cavaco, Eva-Lena Stattin, Constance Schrandt-Stumpel, Paul Coucke, Bart Loeys, Anne De Paepe, and Julie De Backer. 2013. "Novel MYH11 and ACTA2 Mutations Reveal a Role for Enhanced TGFβ Signaling in FTAAD." *International Journal of Cardiology* 165 (2): 314–321.
 10. Renard, Marjolijn, Bert Callewaert, Fransiska Malfait, Laurence Campens, Saba Sharif, Miguel del Campo, Irene Valenzuela, Catherine McWilliam, Paul Coucke, Anne De Paepe, and Julie De Backer. 2013. "Thoracic Aortic-aneurysm and Dissection in Association with Significant Mitral Valve Disease Caused by Mutations in TGFB2." *International Journal of Cardiology* 165 (3): 584–587.