

To : *ESC Council Office & the ESC Council Nominating Committee*  
*European Society of Cardiology*

*Application of Prof Antoine Bondue as Chairperson-elect for the Council on Cardiovascular Genomics of the European Society of Cardiology*

Brussels, May 25<sup>th</sup> 2024,

Dear members of the ESC Council Nominating Committee,  
Dear colleagues,

With this letter, I wish to submit my application for the Chairperson-elect position of the European Society of Cardiology Council on Cardiovascular Genomics.

Cardiovascular medicine is fast evolving, and genetics is part of this transformation. Indeed, genetic determinants are now recognized as major players for many cardiovascular diseases, and the field of genetics in cardiology is rapidly expanding. Beside providing useful diagnostic tools, inherited disease traits are pushing cardiologists into the field of personalized medicine, including gene therapy. With a rapid growing knowledge, genetics is not anymore restricted to rare diseases, but rather applies to many disorders in the clinics, including common diseases. In line with this expanding role of genetics in cardiology, the ESC Council on Cardiovascular Genomics is called to play a key role at the intersection of ESC Working Groups and Associations, aiming at promoting and diffusing cardiogenomic science and knowledge. To achieve this, the Council on Cardiovascular Genomics organizes scientific activities, generates scientific documents, and spreads newsletters with the goal to develop every cardiologist's knowledge and skills on genetics. The Council on Cardiovascular Genomics should interact and play a role at the interface of many ESC bodies, increasing its visibility in many ESC activities. As a candidate for the Chairperson position, this will be my main objective.

Currently, I am a board member of the ESC Council on Cardiovascular Genomics since 2022, operating as Media Task Force coordinator. Previously, I was a member of this same Media Task Force (since August 2020; almost at the time of the launch of the council in 2019). Through this position, I had the opportunity to contribute to the first wave of council's growth together with Prof Perry Elliott (past-Chair), Prof Heribert Shunkert (Chair) and Prof Stefan Kaab (Chairperson-elect), as well as the board members. Together, we produced various documents promoting genomic science and medicine in cardiovascular practice. We generated newsletters highlighting the Council's activities and identified ten golden rules for the use of cardiogenomics in practice ([see website](#)). We also issued ten cardiovascular genomics insights ([see website](#)) discussing various areas of cardiogenetics in daily practice. All those documents were elaborated with the help of appointed experts emanating from various countries, promoting the work and members of ESC Working Groups and Associations. Through this, we also promoted interaction with ERNs, allowing to improve the Council's visibility beyond the ESC. For the Council, I also participated to the council's round table on gene therapy in cardiology in March 2023.

Knowing the importance of promoting education and awareness for inherited cardiac conditions, I participated in the elaboration of consensus documents for ESC journals. I am currently contributing with other board members to the elaboration a consensus document highlighting the role of genetic counseling in cardiology. I am also working on a consensus document describing the challenges to implement gene therapy in cardiology, with adequate clinical trials. In the past, I published a review on the complex roads from genotype to phenotype in dilated cardiomyopathy (*Cardiovascular Research*, 2018) and a consensus document on the role of genetic counselling in adult congenital heart

disease (*European Journal on Cardiovascular Prevention*, 2020). Those works were presented during the ESC congress in 2019 and at the EUROGUICH meeting in 2021. I also reviewed the 2020 ESC Guidelines for the management of adult congenital heart disease as a representative of the Belgian Society of Cardiology. As an ESC fellow and besides the Council on Cardiovascular Genomics, I am a member of the WG on Adult Congenital Heart Disease, of WG on Myocardial and pericardial diseases, as well as the WG on Myocardial Function. I am also a recent member of the Lancet Commission on sudden cardiac death.

Working for the ESC Council on Cardiovascular Genomics, I am also honored to be the local host (together with Professor Bart Loeys), for its first “in person” meeting, that will be held in Antwerp (Belgium) in December 2024. I am willing to further improve the scientific and educational content regarding cardiogenomics, including generating consensus documents, disseminating Guidelines, and building networking opportunities within the ESC community.

At the national level, I launched and still lead the BELCARGEN council, a Belgian Council for Cardiovascular Genomics (at the interface between the Belgian Society of Cardiology and the Belgian Society for Human Genetics). I am also the current president of the Belgian Heart League and the Past-President of the Belgian Working group on Adult Congenital Heart disease.

At the clinical level, I am Head of the department of the Department of Cardiology since 2015 and Rare Disease director of the HUB Erasme Hospital in Brussels (the academic hospital of the Université libre de Bruxelles, Brussels). After working on cardiovascular development, my research projects are nowadays focused on genetics, cardiomyopathy, pulmonary arterial hypertension and congenital heart disease.

Overall, it would be a privilege for me to work for the ESC as Chair-Elect person for the Council on Cardiovascular Genomics. Through a dynamic collaboration with the board members, I am convinced that we can build the future of the ESC Council on Cardiovascular Genomics in line with the ESC expectations.

Thank you for considering my application.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'A' followed by a horizontal stroke and a vertical stroke that loops back to the top.

Prof Antoine Bondue, MD, PhD, FESC  
ESC Council on Cardiovascular Genomics Board member - Media Task Force coordinator  
Head of the department of Cardiology and Rare Disease Director of the HUB Hôpital Erasme,  
Brussels  
President of the Belgian Heart Ligue  
Chairperson of the BELCARGEN Council

## Short CURRICULUM VITAE for Antoine BONDUE

May 2024

Born in Ixelles, Belgium, January 24th 1976

Nationality: Belgian

National Registry ID: 76.01.24-243.58

Marital status: married, 2 children

Medical License: 1-8916483-730

### Professional address:

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- Head of the Department of Cardiology (HUB Erasme Hospital, Université libre de Bruxelles). Clinical cardiogeneticist in the ULB Genetics Center (Brussels).
- Rare Disease Director of the Hôpital universitaire de Bruxelles (H.U.B.; Université libre de Bruxelles)
- Professor at the Faculty of Medicine of the Université libre de Bruxelles (chargé de cours)
- Board member and Media Task Force Coordinator of the ESC Council on Cardiovascular Genomics (board member; European Society of Cardiology); Fellow of the European Society of Cardiology
- Chairperson of the BELCARGEN council (Belgian Society of Cardiology); board member of the Belgian Society of Cardiology; Past-Chair of the Belgian working Group on Adult Congenital Heart Disease
- President of the Scientific Committee of the Belgian Heart Ligue

### I- EDUCATION:

- 3<sup>rd</sup> Cycle:
  - 2016: Interuniversity Certificate on Medical Management (CIMM)
  - 2015, 2018 & 2022: Good Clinical Practice certificate for Clinical Research
  - 2012: Certificate on animal health for experimental purpose (ULB)
  - 2010: National University Degree: board of Internal Medicine/Cardiology (Université Libre de Bruxelles - ULB, Belgium), with summa cum laude.
  - 2009-2012: Postdoctoral fellow in the laboratory of Pr. Cédric Blanpain, IRIBHM, Université Libre de Bruxelles, as a « Chargé de recherche » of the belgian FNRS.
  - 2005-2009: PhD degree in Medical Science, Université Libre de Bruxelles, Supervisor: Pr. Cédric Blanpain «Mesp1 functions in multipotent cardiovascular progenitor specification », as an « Aspirant » of the belgian FNRS.
  - 2003: Graduated in Acute Medicine, Université Libre de Bruxelles, with summa cum laude.

- 2<sup>nd</sup> Cycle:
- 2001: MD graduated from Medical School of the Université Libre de Bruxelles (ULB, Belgium), with summa cum laude.

## **II- PROFESSIONAL EXPERIENCE & POSITIONS**

- Since 2022: Rare Diseases Director of the Hôpital Universitaire de Bruxelles (H.U.B.; Université Libre de Bruxelles)
- Since 2020: “Chargé de cours” at the Université Libre de Bruxelles with a teaching activity in Semiology (MEDI-G3310 – 30h) and coordination of seminars in Erasme hospital (HOSP-G-177 - 15 h)
- Since July 2015: Operational Director of the Department of Cardiology – CUB Erasme Hospital - Brussels with a clinical and research activity on cardiovascular genetics within the ULB Genetics Center (Brussels).
- Since 2016: Professor in the department of Cardiology – Hôpital Erasme
- 2012-2013: FNRS fellow as “Postdoctorate Clinical Master Specialist” in the laboratory of Cédric Blanpain (IRIBHM – ULB) – transcriptional regulation of cardiovascular development.
- 2009-2012: Postdoctoral fellow in the laboratory of Pr. Cédric Blanpain, IRIBHM, ULB. « Characterization of molecular mechanisms involved in cardiovascular progenitor specification, migration and differentiation» - Transcriptional regulation of early cardiovascular development.
- 2005-2009: PhD training in the laboratory of Pr. Cédric Blanpain, IRIBHM, ULB. “Mesp1 functions in multipotent cardiovascular progenitor specification. Transcriptional regulation of early cardiovascular development.

### **Main Clinical skills:**

- Cardiovascular genetics and rare cardiovascular diseases
- Cardiac imaging
- Congenital heart disease, Cardiomyopathies, Valvular heart disease, Pulmonary Arterial Hypertension Aortopathies, Rhythmic disorders

## **III-TEACHING ACTIVITIES**

- Since 2020: Academic coordinator of the Belgian Interuniversity Course on Echocardiography
- Since 2020: Titular of the course “Semiology and propaedeutic in Medicine” – MEDI-G3310 – 30 hours/year
- Since 2020: President of the Scientific Committee of the Belgian Heart Ligue
- Since 2017: Master in translational Medicine – BIME - Coordinator of the cardiopulmonary module

- Since 2015: Seminars of cardiology in Erasme hospital (HOSP-G-177- 15h)
- Since 2015: Scientific board member for the annual congress of the Belgian Society of Cardiology
- Since 2015: Annual Symposium for general practitioner, department of cardiology, Erasme Hospital

#### **IV. PUBLICATIONS AND SCIENTIFIC ACTIVITIES**

##### **4-1 PUBLICATIONS IN PEER-REVIEWED JOURNALS**

Inflammation, infection, and cardiovascular risk.

Goldman M, **Bondue A**, Cogan E.

*Lancet*. 2024 Mar 16;403(10431):1023. doi: 10.1016/S0140-6736(23)02877-5.

PMID: 38492939

Serious unexpected vascular events in two patients with lymphocytic variant hypereosinophilic syndrome. Torcida N, Casalino G, **Bondue A**, Jodaitis L, Vanden Eynden F, Roufosse F.

*Front Cardiovasc Med*. 2023 Sep 27;10:1256862. doi: 10.3389/fcvm.2023.1256862. eCollection 2023.

PMID: 37829688

Pulmonary artery wedge pressure and left ventricular end-diastolic pressure during exercise in patients with dyspnoea.

Baratto C, Faini A, Gallone GP, Dewachter C, Perego GB, **Bondue A**, Muraru D, Senni M, Badano LP, Parati G, Vachiéry JL, Caravita S.

*ERJ Open Res*. 2023 Sep 4;9(4):00750-2022. doi: 10.1183/23120541.00750-2022. eCollection 2023 Jul.

PMID: 37670852

Pediatric pulmonary arterial hypertension due to a novel homozygous GDF2 missense variant affecting BMP9 processing and activity.

Chomette L, Hupkens E, Romitti M, Dewachter L, Vachiéry JL, Bailly S, Costagliola S, Smits G, Tillet E, **Bondue A**.

*Am J Med Genet A*. 2023 Aug;191(8):2064-2073. doi: 10.1002/ajmg.a.63236. Epub 2023 May 30.

PMID: 37249087

Right Heart Adaptation to Exercise in Pulmonary Hypertension: An Invasive Hemodynamic Study.

Baratto C, Caravita S, Dewachter C, Faini A, Perego GB, **Bondue A**, Senni M, Muraru D, Badano LP, Parati G, Vachiéry JL.

*J Card Fail*. 2023 May 5:S1071-9164(23)00151-3. doi: 10.1016/j.cardfail.2023.04.009. Online ahead of print. PMID: 37150503

Lung diffusion capacity correlates with pre-implant pulmonary hypertension and predicts outcome after LVAD implantation.

Macera F, Dewachter C, Stefanidis C, Vanden Eynden F, **Bondue A**, Vachiéry JL, Roussoulières A.

*ESC Heart Fail*. 2023 Apr;10(2):1043-1053. doi: 10.1002/ehf2.14256. Epub 2022 Dec 22. PMID:

36546904

Expectant Management or Early Ibuprofen for Patent Ductus Arteriosus.

Hundscheid T, Onland W, Kooi EMW, Vijlbrief DC, de Vries WB, Dijkman KP, van Kaam AH, Villamor E, Kroon AA, Visser R, Mulder-de Tollenaer SM, De Bisschop B, Dijk PH, Avino D, Hocq C, Zecic A, Meeus M, de Baat T, Derriks F, Henriksen TB, Kyng KJ, Donders R, Nuytemans DHGM, Van Overmeire B, Mulder AL, de Boode WP; BeNeDuctus Trial Investigators.

*Investigator; N Engl J Med.* 2023 Mar 16;388(11):980-990. doi: 10.1056/NEJMoa2207418. Epub 2022 Dec 6. PMID: 36477458

An updated meta-analysis of hemodynamics markers of prognosis in patients with pulmonary hypertension due to left heart disease.

Baratto C, Caravita S, Soranna D, Dewachter C, **Bondue A**, Zambon A, Badano LP, Parati G, Vachiéry JL.

*Pulm Circ.* 2022 Oct 1;12(4):e12145. doi: 10.1002/pul2.12145. eCollection 2022 Oct. PMID: 36568693

Impact of COVID-19 lockdown on exercise capacity in PAH patients.

Baratto C, Dewachter C, Caravita S, Zambon A, **Bondue A**, Parati G, Vachiéry JL.

*Pulm Circ.* 2022 Jul 1;12(3):e12089. doi: 10.1002/pul2.12089. eCollection 2022 Jul. PMID: 35795255

Exercise haemodynamics in heart failure with preserved ejection fraction: a systematic review and meta-analysis.

Baratto C, Caravita S, Soranna D, Dewachter C, **Bondue A**, Zambon A, Badano LP, Parati G, Vachiéry JL.

*ESC Heart Fail.* 2022 Jun 24. doi: 10.1002/ehf2.13979. PMID: 35748109

Early-onset and severe pulmonary arterial hypertension due to a novel compound heterozygous association of rare VHL mutations: A case report and review of existing data.

Chomette L, Migeotte I, Dewachter C, Vachiéry JL, Smits G, **Bondue A**.

*Pulm Circ.* 2022 Apr 1;12(2):e12052. doi: 10.1002/pul2.12052. eCollection 2022 Apr. PMID: 35734542

Contemporary Management of Severe Symptomatic Aortic Stenosis

Eugène M, Duchnowski P, Prendergast B, Wendler O, Laroche C, Monin JL, Jobic Y, Popescu BA, Bax JJ, Vahanian A, Iung B

*Investigator; J Am Coll Cardiol.* 2021 Nov 30;78(22):2131-2143. doi: 10.1016/j.jacc.2021.09.864. PMID: 34823655.

Summary of 2020 ESC guidelines on non-STE ACS, adult congenital heart disease, sports cardiology and atrial fibrillation.

Claeys MJ, **Bondue A**, Lancellotti P, De Pauw M.

*Acta Cardiol.* 2021 Nov 25:1-9. doi: 10.1080/00015385.2021.2003062. PMID: 34821204.

Pregnancy outcome in thoracic aortic disease data from the Registry Of Pregnancy And Cardiac disease.

Campens L, Baris L, Scott NS, Broberg CS, **Bondue A**, Jondeau G, Grewal J, Johnson MR, Hall R, De Backer J, Roos-Hesselink JW

*Heart.* 2021 Nov;107(21):1704-1709. doi: 10.1136/heartjnl-2020-318183. PMID: 33468574

Hypereosinophilic syndrome: considerations for the cardiologist.

**Bondue A**, Carpentier C, Roufosse F.

*Heart.* 2021 Jun 25:heartjnl-2020-317202. doi: 10.1136/heartjnl-2020-317202. PMID: 34172539.

Current Limitations of Invasive Exercise Hemodynamics for the Diagnosis of Heart Failure With Preserved Ejection Fraction.

Baratto C, Caravita S, Soranna D, Faini A, Dewachter C, Zambon A, Perego GB, **Bondue A**, Senni M, Badano LP, Parati G, Vachiéry JL.

*Circ Heart Fail.* 2021 May;14(5):e007555. doi: 10.1161/CIRCHEARTFAILURE.120.007555. PMID: 33951935.

Feasibility and cost of FH cascade screening in Belgium (BEL-CASCADE) including a novel rapid rule-out strategy.

Descamps OS, Rietzschel E, Laporte A, Buysschaert I, De Raedt H, Elegeert I, Chenot F, Lengele JP, Carlier S, Vanderheeren P, Lienart F, Friart A, Guillaume M, Vandekerckhove H, Maudens G, Mertens A, van de Borne P, **Bondue A**, De Sutter J.

*Acta Cardiol.* 2021 May;76(3):227-235. doi: 10.1080/00015385.2020.1820683. PMID: 32964780

Combined Post-capillary and Pre-capillary Pulmonary Hypertension in Left Heart Diseases: is there a genetic component?

Chomette L, Caravita S, Dewachter C, Abramowicz M, Vachiery JL, **Bondue A**.

*Pulm Circ.* 2021 Mar 2;11(1):2045894021996571. doi: 10.1177/2045894021996571. PMID: 33738094

Screening for Fabry disease in male patients with arrhythmia requiring pacemaker or ICD.

Dimitri Hemelsoet, Jan De Keyser, Frederic Van Heuverswyn, Rik Willems, Hans Vandekerckhove, **Antoine Bondue**, Carlo De Asmundis, Johan Saenen, Stefaan Van de Walle, Pascal Godart, Christoph Kampmann, Hedwig Stepman, Bruce Poppe, and Wim Terryn

*Circulation.* 2021 Feb 23;143(8):872-874. doi: 10.1161/CIRCULATIONAHA.120.051400. PMID: 33617311.

2020 ESC Guidelines for the management of adult congenital heart disease.

Baumgartner H, De Backer J, Babu-Narayan SV, Budts W, Chessa M, Diller GP, Lung B, Kluin J, Lang IM, Meijboom F, Moons P, Mulder BJM, Oechslin E, Roos-Hesselink JW, Schwerzmann M, Sondergaard L, Zeppenfeld K; ESC Scientific Document Group.

**National Reviewer;** *Eur Heart J.* 2020 Aug 29 ; doi: 10.1093/eurheartj/ehaa554.

Mavacamten for treatment of symptomatic obstructive hypertrophic cardiomyopathy (EXPLORER-HCM): a randomised, double-blind, placebo-controlled, phase 3 trial.

Olivetto I, Oreziak A, Barriales-Villa R, Abraham TP, Masri A, Garcia-Pavia P, Saberi S, Lakdawala NK, Wheeler MT, Owens A, Kubanek M, Wojakowski W, Jensen MK, Gimeno-Blanes J, Afshar K, Myers J, Hegde SM, Solomon SD, Sehnert AJ, Zhang D, Li W, Bhattacharya M, Edelberg JM, Waldman CB, Lester SJ, Wang A, Ho CY, Jacoby D; EXPLORER-HCM study investigators.

**Investigator;** *Lancet.* 2020 Sep 12;396(10253):759-769.

Genetic counselling and testing in adults with congenital heart disease: A consensus document of the ESC Working Group of Grown-Up Congenital Heart Disease, the ESC Working Group on Aorta and Peripheral Vascular Disease and the European Society of Human Genetics.

De Backer J, **Bondue A**, Budts W, Evangelista A, Gallego P, Jondeau G, Loeys B, Peña ML, Teixido-Tura G, van de Laar I, Verstraeten A, Roos Hesselink J.

*Eur J Prev Cardiol.* 2019 Jun 11:2047487319854552. doi: 10.1177/2047487319854552.

Non-invasive versus invasive pressure/flow relationship of the pulmonary circulation: bias and error.

Caravita S, Yerly P, Baratto C, Dewachter C, Faini A, Rimouche A, Branzi G, Perego GB, **Bondue A**, Parati G, Vachiéry JL.

*Eur Respir J.* 2019 Sep 26. doi: 10.1183/13993003.00881-2019.

A Belgian consensus strategy to identify familial hypercholesterolaemia in the coronary care unit and its subsequent cascade screening and treatment: BEL-FaHST (The BELgium Familial Hypercholesterolaemia STRategy).

Olivier S, Descamps, Olivier Van Caenegem, Jean-Luc Balligand, Christophe Beauloye, **Antoine Bondue**, Stéphane Carlier, Emilie Castermans, Fabien Chenot, Marc Claeys, Christophe De Block, Anne de Leener, Antoine De Meester, Fabian Demeure, Herbert De Raedt, Walter Desmet, Ivan Elegeert, Michel Guillaume, Michel P Hermans, Etienne Hoffer, Raymond Kacenenbogen, Patrizio Lancellotti,

Michel Langlois, Attilio Leone, Ann Mertens, Nicolas Paquot, Jean-Louis Vanoverschelde, Ann Verhaegen, Pieter Vermeersch, Caroline Wallemacq, Ernst Rietzschel.  
On Behalf of the Belgian Atherosclerosis Society/Belgian Lipid Club (BAS/BLC), the Belgian Society of Cardiology (BSC) and the Royal Belgian Society of Laboratory Medicine (RBSLM).  
*Atherosclerosis*; 2018 Oct;277:369-376. doi: 10.1016/j.atherosclerosis.2018.05.037

Complex roads from genotype to phenotype in dilated cardiomyopathy: scientific update from the Working Group of Myocardial Function of the European Society of Cardiology.  
**Antoine Bondue**, Eloisa Arbustini, Anna M. Bianco, Michele Ciccarelli, Dana Dawson, Matteo De Rosa, Naza Hamdani, Denise Hilfiker-Kleiner, Benjamin Meder, Adelino Leite Moreira, Thomas Thum, Carlo Gabriele Tocchetti, Gilda Varricchi, Jolanda Van der Velden, Roddy Walsh, Stephane Heymans  
*Cardiovasc Research* 2018 Aug 1;114(10):1287-1303. doi: 10.1093/cvr/cvy122.

Clinical phenotypes and outcomes of pulmonary hypertension due to left heart disease: role of the pre-capillary component  
Caravita S, Faini A, Carolino D'Araujo S, Dewachter C, **Bondue A**, Chomette L, Naeije R, Parati G, Vachiéry JL.  
*PLoS One*. 2018 Jun 19;13(6):e0199164. doi: 10.1371/journal.pone.0199164. eCollection 2018.

Haemodynamics to predict outcome in pulmonary hypertension due to left heart disease: a meta-analysis  
Caravita S, Dewachter C, Soranna D, Carolino D'Araujo S, Khaldi A, Zambon A, Parati G, **Bondue A**, Vachiéry JL.  
*Eur Respir J*. 2018 Apr 4;51(4). pii: 1702427. doi: 10.1183/13993003.02427-2017

Left ventricular hypertrophy: how to identify the cause ?  
**Bondue A**.  
*Rev Med Brux*. 2018;39(4):227-236.

Pulmonary hypertension and ventilation during exercise: Role of the pre-capillary component.  
Caravita S, Faini A, Deboeck G, **Bondue A**, Naeije R, Parati G, Vachiéry JL.  
*J Heart Lung Transplant*. 2017 Jul;36(7):754-762. doi: 10.1016/j.healun.2016.12.011.

Mesp1 controls the speed and orientation of cardiovascular progenitor migration.  
Chiapparo G, Lin X, Lescroart F, Chabab S, Paulissen C, Pitisci L, **Bondue A**, and Blanpain C.  
*J Cell Biol*. 2016 May 23;213(4):463-77. doi: 10.1083/jcb.201505082.

NKX2-5 mutations causative for congenital heart disease retain functionality and are directed to hundreds of targets.  
Bouveret R, Waardenberg AJ, Schonrock N, Ramialison M, Doan T, de Jong D, **Bondue A**, Kaur G, Mohamed S, Fonoudi H, Chen CM, Wouters M, Bhattacharya S, Plachta N, Dunwoodie SL, Chapman G, Blanpain C, Harvey RP.  
*Elife*. 2015 Jul 6;4. doi: 10.7554/eLife.06942.

Lescroart F\*, Chabab S\*, Lin X, Rulands S, Paulissen C, Rodolosse A, Auer H, Achouri Y, Dubois C, **Bondue A**, Simons BD, Blanpain C  
Early lineage restriction in temporally distinct populations of Mesp1 progenitors during mammalian heart development.  
*Nat Cell Biol*. 2014 Sep;16(9):829-40.

Clarke RL, Yzaguirre AD, Yashiro-Ohtani Y, **Bondue A**, Blanpain C, Pear WS, Speck NA, Keller G.  
The expression of Sox17 identifies and regulates haemogenic endothelium.  
*Nat Cell Biol*. 2013 May;15(5):502-10



van den Ameele J\*, Tiberi L\*, **Bondue A\***, Paulissen C, Herpoel A, Iacovino M, Kyba M, **Blanpain C**, and Vanderhaeghen P.

**\* JvA, LT and AB contributed equally to this work.**

Eomesodermin induces Mesp1 expression and cardiac differentiation from embryonic stem cells in the absence of Activin.

*EMBO Reports* 2012, 13(4):355-62.

**Bondue A**, Tännler S, Chiapparo G, Chabab S, Paulissen C, Beck B, Blanpain C

Defining the earliest step of cardiovascular progenitor specification during embryonic stem cell differentiation.

*Journal of Cell Biology* 2011, 192(5):751-65.

**Bondue A** and Blanpain C

Mesp1 : a key regulator of cardiovascular progenitor specification.

*Circulation Research* 2010,107(12):1414-27.

**Bondue A**, Lapouge G, Paulissen C, Semeraro C, Iacovino M, Kyba M & Blanpain C

Mesp1 acts as a master regulator of multipotent cardiovascular progenitor specification.

*Cell Stem Cell* 2008, 3(1):69-84.

Unger P, **Bondue A**, Loiseau J, Dessy H, Primo G, Le Clerc JL.

Right-to-left shunting with normal pulmonary pressure complicating atrial septal defect surgery.

*Int J Cardiol.* 2006, 113(2):252-3.

Blanpain C, Doranz BJ, **Bondue A**, Govaerts C, De Leener A, Vassart G, Doms RW, Proudfoot A, Parmentier M.

The core domain of chemokines binds CCR5 extracellular domains while their amino terminus interacts with the transmembrane helix bundle.

*J Biol Chem.* 2003, 278(7):5179-87.

**Bondue A**, Jao SC, Blanpain C, Parmentier M, LiWang PJ

Characterization of the role of the N-loop of MIP-1 beta in CCR5 binding.

*Biochemistry* 2002 41(46):13548-55.

Govaerts C\*, **Bondue A\***, Springael JY, Olivella M, Deupi X, Le Poul E, Wodak SJ, Parmentier M, Pardo L, Blanpain C.

**\* AB and CG contributed equally to this work.**

Activation of CCR5 by chemokines involves an aromatic cluster between transmembrane helices 2 and 3.

*J Biol Chem.* 2003 278(3):1892-903.

Van Rampelbergh J, Juarranz MG, Perret J, **Bondue A**, Solano RM, Delporte C, De Neef P, Robberecht P, Waelbroeck M.

Characterization of a novel VPAC(1) selective agonist and identification of the receptor domains implicated in the carboxyl-terminal peptide recognition.

*British Journal of Pharmacology* 2000,130(4):819-26.

#### **4-2 SCIENTIFIC SOCIETY MEMBER**

2022: Media task force coordinator and board member of the ESC Council on Cardiovascular Genomics (European Society of Cardiology)

2022: President of the Belgian Council on Cardiogenomics (BELCARGEN; Belgian Society of Cardiology)  
Since 2021: Member of the European Society of Cardiology Council on Cardiovascular Genomics  
Since 2020: President of the scientific committee of the Belgian Heart Ligue  
2017: Member of the scientific committee of the “Fonds Erasme”  
2017: Board member of the scientific committee of the Princess Lilian Foundation (and administrative board since 2021)  
2017: Board Member of the Belgian Foundation for “Medications and Society”  
2017-2021: President of the Belgian Working Group on Adult Congenital Heart Disease  
2016: Board Member of the Rijlant Foundation  
Since 2016: Fellow of the European Society of Cardiology  
2016: Board member of the scientific committee of the Fonds pour la Chirurgie Cardiaque  
Since 2015: Member of the ESC working group on Adult Congenital Heart Disease  
2015: Member of the College for Rare Diseases of the ULB  
In 2013: Member of the European Association for Cardiovascular Imaging (European Society of Cardiology)  
Since 2012: Board member of the “Grown-Up Congenital Heart Disease” working group of the Belgian Society of Cardiology (ordinary member since 2011)  
Since 2012: Member of the Working group on myocardial function of the European Society of Cardiology  
Since 2010: Member of the European Society of Cardiology  
Since 2004: Member of the Belgian Society of Cardiology

## **V-LOGISTICAL AND ORGANIZATIONAL ACTIVITIES (BESIDE SCIENTIFIC SOCIETIES)**

### **5.1. FACULTY**

- 2015-2024: ULB Faculty of Medicine: member of the Faculty Council
- 2017-2024: ULB Faculty of Medicine: member of the Research Commission & teaching committee
- 2017-2021: ULB Faculty of Medicine: board member

### **5.2 HOSPITALS**

- 2021-2023: member of the Common Medical Council for the CHORUS hospital network
- 2021-2023: Board member of the Medical Council of the Erasme Hospital (ULB)
- 2021-2022: Member of the “Conseil Hospitalier de la Recherche Clinique” – Erasme Hospital
- 2016-2023: Member of the board of Directors of the CHU Tivoli (ULB)