Identity:

Title: Associate Professor, PhD, FHFA Family Name(s): González Miqueo First Name(s): Arantxa Age: 46

Application for the following position in the HFA Board or Nominating Committee:

Coordinator of the Basic Science Section

Photo:



Place of work

If you work in multiple places, please provide the one where you spend the most time or that you consider to be your main place of practice.

Institute/organisation:	CIMA Universidad de Navarra
Department:	Program of Cardiovascular Disease
Address:	Avda/ Pío XII 55
Post code / Zip:	31008
Country:	Spain

General Curriculum Vitae (500 words max)

Please also include your H index and top 5 to 10 publications in the last 5 years

I graduated in Biochemistry in 1999 (1st National Award for Academic Excellence) and completed my PhD in 2003 (PhD Extraordinary Award) at the University of Navarra (Spain). In 2005 I was granted the Norman R. Alpert Award from the ESC and the AHA. In 2010 I obtained a prestigious Ramón y Cajal fellowship (Ministry of Science) and a i3 certification for stabilization of young researchers (Ministry of Science). Currently, I am the director of the Program of Cardiovascular Disease at CIMA Universidad de Navarra, a principal investigator of the Heart Failure Group at IdiSNA "Navarra Health Research Institute" and a group leader at the Spanish Network for Cardiovascular Research CIBERCV (Instituto de Salud Carlos III; CB16/11/00483). In October 2023 I was appointed "Académica Correspondiente" (Fellow) of the Spanish Royal Academy of Sciences.

I have participated in over 175 publications (mostly in Q1), with over 15,900 citations. My H-index is 68 and my i10 index is 147 (Google Scholar). I have published in the most relevant journals in the cardiovascular field including EHJ, EJHF, Circulation, JACC, JACC Heart Failure, Science Translational Medicine, or Hypertension among others. I have participated in 5 highly cited papers since 2017 (WoS 99th percentile in clinical medicine).

I am/have been the principal investigator of over 20 projects funded by National public and private organizations and well as by the European Commission framework programmes (FP7, H2020 and Horizon Europe). In addition, I am the co-inventor in 2 patents. I have established fruitful and stable scientific collaborations with renowned groups across Europe reflected in joint publications.

I participate in expert panels (Ministries of Health and Science, Spain) for the assessement of cardiovascular projects.

I lead a multidisciplinary group of translational researchers focused on the study of chronic heart failure (HF). My research is centered on two interrelated aspects: 1) Analysing the histomolecular mechanisms involved in myocardial remodelling, with a special focus on myocardial fibrosis, to

identify novel therapeutic targets; 2) Identification and validation of non-invasive circulating and imaging biomarkers to establish biomolecular profiles reflecting different features of myocardial remodelling, which can be useful to improve risk stratification and personalized management of HF patients. Overall, our aim is to develop tools for the implementation of precision medicine approaches.

I am also an Associate Professor and member of the Board of the Department of Pathology, Anatomy and Physiology at Universidad de Navarra.

Selected publications since 2019:

1- Martínez-Martínez,..., <u>González</u> (corresponding autor [CA]), López-Andrés (CA). Hypertension 2019;73:602-611. Decile (D)1.

2- Schimmel,..., González, Thum. Circulation. 2020;141:751-767. D1.

3- Cleland,.., <u>González</u>,..., Zannad. Eur Heart J. 2021;42:684-696. D1.

4- López,..., González (CA), Díez (CA). Nat Rev Cardiol. 2021;8:479-498. D1 (99th percentile citations).

5- Ravassa,..., <u>González</u> (CA). Eur J Heart Fail. 2022:24:321-331. D1.

6- <u>González</u> (CA),..., Bayes-Genis (CA). Eur J Heart Fail. 2022;24:927-943. D1.

7- Ravassa,..., González (CA). JACC Heart Fail. 2023;11(1):58-72. D1.

8- Ravassa, ..., <u>González</u> (CA). Mol Asp Med. 2023;93:101194. D1.

9- Aghagolzadeh, ..., <u>González</u>, Pedrazzini. Circulation. 2023;48(9):778-797. D1.

10- <u>González</u>,..., Díez. Hypertension. 2024;81(2):218-228. D1 (included in the AHA centennial collection).

Extended information on the selected publications:

1- Martínez-Martínez E, ..., <u>González A</u>*, López-Andrés N* (*joint corresponding authors). Cardiotrophin-1-galectin-3 axis in cardiac fibrosis and inflammation. Mechanistic insights and clinical implications. *Hypertension* 2019;73(3):602-611.

IF (2019): 7.713; 4/65 Peripheral vascular disease; D1.

2- Schimmel K, ..., <u>González A</u>, Thum T. Natural compound library screening identifies new molecules for the treatment of cardiac fibrosis and diastolic dysfunction. *Circulation*. 2020;141:751-767.

IF (2020): 29.69; 3/142 Cardiac and cardiovascular systems; D1.

3- Cleland JGF, .., <u>González A</u>, ..., Zannad F. The effect of spironolactone on cardiovascular function and markers of fibrosis in people at increased risk of developing heart failure: The Heart "OMics" in AGEing (HOMAGE) randomised clinical trial. *Eur Heart J* 2021;42(6):684-696.

IF (2021): 35.855; 3/142 Cardiac and cardiovascular systems; D1.

4- López B, ..., <u>González A</u>*, Díez J* (*joint corresponding authors). Diffuse myocardial fibrosis: mechanisms, diagnosis and therapeutic approaches. *Nat Rev Cardiol* 2021;8(7):479-498.

IF (2021): 49.421; 1/143 Cardiac and cardiovascular systems; D1.

5- Ravassa S, ..., <u>González A</u>. Biomarker-based assessment of collagen cross-linking identifies patients at risk of heart failure more likely to benefit from spironolactone effects on left atrial remodelling. Insights from the HOMAGE clinical trial. *Eur J Heart Fail*. 2022:24:321-331.

IF (2022): 18.2; 7/142 Cardiac and cardiovascular systems; D1.

6<u>- González A*</u>, ..., Bayes-Genis A* (*joint corresponding authors). Cardiac Remodelling Part 1: From cells and tissues to circulating biomarkers. A review from the Biomarkers Working Group of the Heart Failure Association of the ESC. *Eur J Heart Fail*. 2022;24: 927-943.

IF (2022): 18.2; 7/142 Cardiac and cardiovascular systems; D1.

7- Ravassa S, ..., <u>González A</u>. Prediction of left ventricular reverse remodeling and outcomes by circulating collagen-derived peptides. *JACC Heart Fail*. 2023;11(1):58-72.

IF (2022): 13; 9/142 Cardiac and cardiovascular systems; D1.

8- Ravassa S, ..., <u>González A.</u> Cardiac fibrosis in heart failure: Focus on non-invasive diagnosis and emerging therapeutic strategies. *Mol Asp Med* 2023;93:101194.

IF (2022): 10.6; Lugar: 26/285 Biochemistry and molecular biology; D1.

9- Aghagolzadeh P, ..., <u>González A</u>, Pedrazzini T. Assessment of the cardiac noncoding transcriptome by single-cell RNA-Sequencing identifies FIXER, a conserved profibrogenic long noncoding RNA. *Circulation*. 2023; 48(9):778-797.

IF (2022): 37.8; 3/142 Cardiac and cardiovascular systems; D1.

10- <u>González A</u>, ... Díez J. Myocardial interstitial fibrosis in hypertensive heart disease: From mechanisms to clinical management. *Hypertension*. 2024;81(2):218-228.

IF (2022): 8.3; 8/93 Peripheral vascular disease; D1.

Describe previous experience within the HFA, ESC and/or your National Cardiac/ HF Society *150 words maximum*

In 2020 I joined the Basic Science section of the HFA Board, first as sui generis member (2020-2022) and currently as ordinary member (2022-2024). I am/have been involved in different HFA Committees: Biomarkers (2020-2022), Basic and Translational Research (2022-2024) and Imaging and Diagnosis (2022-2024), contributing to workshops and publications. I also belong to the HFA Women in Heart Failure Task Force.

I am a member of the ESC Council on Cardiovascular Genomics (2022-2024), and I belong to the Working Group on Myocardial Function.

Currently, I am actively involved in the development of the "HFA BOOSTer" project, focused on enhancing translational research and reciprocal basic-clinical interaction within the HFA community.

I have been involved in the HFA Winter Research Meeting organization as member of the organizing or advisory committees, as abstractar reviewer and as poster judge.

I have been a reviewer for abstracts submited to the Heart Failure and ESC congresses.

Why are you motivated to join the HFA Board or Nominating Committee?

150 words maximum

I strongly believe that translational multidisciplinary research, keeping the focus on the patient and performing clinically-oriented basic research, is the way to advance our understanding of the mechanisms involved in the development of HF. This is the approach that I would like to promote within the Basic Science section.

I consider that I can contribute to enhance and further integrate basic science within the HFA and to bridge the gap between fundamental and clinical science. Therefore, I put at the service of the

HFA community my previous experience within the HFA, my scientific background, expertise in translational research, intellectual creativity and enthusiasm for research.

On a more personal note, being a member of the HFA Board will undoubtedly benefit my professional development, by continuing to interact and learn from renowned leaders in HF and to be involved in the development of the HFA strategies for translational research and education.

How will you combine your HFA position with your daily clinical/research workload? *80 words maximum*

I have a full-time researcher position combined with some teaching duties at the University. Therefore, I have flexibility to arrange and adapt my schedule and working hours, and I can easily include Board or Committee meetings within regular working hours.

My institution encourages and supports my involvement in the HFA Board and facilitates my participation in HFA-related activities. In addition, I have energy, enthusiasm and availability to work on HFA projects and activities beyond my current workload and commitments.