Curriculum Vitae



GIUSEPPE VERGARO, MD, PhD, FHFA

Personal Information

Date and place of birth: November 24th 1983, Mesagne (BR), Italy Gender: male Nationality: Italian

Married with Fiamma Benedetti, one son, Niccolò.

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SUMMARY

I am currently consultant cardiologist at the Fondazione Toscana Gabriele Monasterio and affiliate researcher at the Scuola Superiore Sant'Anna, Pisa. As a former undergraduate and PhD student at the Scuola Sant'Anna, as well as working at the Fondazione Monasterio, I have focused my research interests on the pathophysiology of heart failure, spanning from the role of neural control on cardiac (dys)function to the study of circulating biomarkers of profibrotic pathways. During my joint PhD (Université Sorbonne, Paris & Scuola Sant'Anna, Pisa), I have developed skills in basic research which I am currently performing in Pisa (with the facilities of the Centro di Biomedicina Sperimentale), so that my original research activity is now ranging from the molecular effects of sacubi-tril/valsartan in left ventricular systolic dysfunction to the investigation of the prognostic significance of cardiac biomarkers from large randomized clinical trials. During the last few years I have also contributed to the set up of several national and international scientific collaborations with some of the most renowed groups in the field of heart failure (e.g. Alan Cohen Solal and Alexandre Mebazaa, Paris; Antoni Bayes-Genis and Josep Lupon, Barcelona; James L Januzzi, Boston).

Since its birth, I have contributed to the initiatives of the *Heart Failure Specialists of Tomorrow (HoT)* group, working to its development and growth over the past years. My main efforts have pertained to HoT activities during annual Heart Failure Association congresses, including the arrangement of clinical case based sessions (with an ever increasing number of cases submitted), the organization of the HoT Walk, a non competitive event involving >120 health care providers and patients. Further, I have worked with committed attitude to the promotion of HoT group at a national (in close collaboration with the Italian National Representative), and international level.

I am also involved in educational activities at the University of Pisa (Dpt. of Physics) and at the Scuola Superiore Sant'Anna (undergraduate courses and 2nd Level Master in Clinical Pathophysiology and Management of Heart Failure), and I am serving as advisor for undergraduate and PhD students of both the University of Pisa and Scuola Sant'Anna.

I am author of >95 peer-reviewed articles published on national and international Journals (Scopus H index 18), and I am serving as editor and reviewer for several Journals in the field of cardiovascular medicine.

CURRENT POSITION

Fondazione Toscana Gabriele Monasterio, Pisa, Italy

Consultant Cardiologist, Division of Cardiology and Cardiovascular Medicine - since August 2016

Scuola Superiore Sant'Anna, Pisa, Italy

Affiliate Researcher, Institute of Life Sciences- since February 2018

EDUCATIONAL BACKGROUND

Université Sorbonne Paris, Paris, France (*partetariat international*) Doctorat de Biothérapies Thesis Title: Voies profibrotique de l'aldosterone et de la galectine-3 dans l'insuffisance cardiaque Advisors: Prof. Michele Emdin – Prof. Alain Cohen Solal February 2017

Sant'Anna School of Advanced Studies, Pisa, Italy (international partnership)

PhD in Translational Medicine – *cum laude* Thesis Title: Galectin-3 and aldosterone profibrotic pathways in the failing heart Advisors: Prof. Michele Emdin – Prof. Alain Cohen Solal February 2017

University of Florence, Florence, Italy

Specialization in Cardiovascular Diseases – 70/70 *cum laude* Thesis Title: Galectin-3 and myocardial fibrosis in non-ischemic dilated cardiomyopathy Advisors: Prof. Michele Emdin – Prof. Luigi Padeletti June 2014

Sant'Anna School of Advanced Studies, Pisa, Italy Diploma in Medical Sciences – 100/100 *cum laude* Thesis Title: Plasma renin activity in the prognosis of heart failure Advisors: Prof. Michele Emdin – Prof. Fabio A. Recchia October 2009

University of Pisa, Pisa, Italy Medicine Degree, 110/110 *summa cum laude* Thesis Title: Nerve Growth Factor and adrenergic modulation in heart failure Advisor: Prof. Michele Emdin July 2008

RESEARCH EXPERIENCE

Gabriele Monasterio Foundation, Division of Cardiovascular Medicine, Pisa, Italy Research activity in the field of neurohormonal activation, biomarkers, reflex systems and autonomic modulation in heart failure. Supervisor: Prof. Michele Emdin – March 2006 to present **Visiting Student** at Harvard Medical School, Cardiovascular Research Center, and at Cornell University Medical College, Div. of Cardiology. New York, NY and Boston, MA, USA Supervisors: Prof. Roger J. Hajjar and Prof. Stephen Scheidt – October 2006

National Council of Research, Laboratory of Cardiovascular Pathophysiology, Pisa, Italy Research activity in the field of gene therapy in porcine models of heart failure. Supervisor: Prof. Fabio A. Recchia – March 2005 to March 2006

GRANTS AND AWARDS

Senior PhD Student Presentation Award

PhD DAY Translational Medicine Scuola Superiore Sant'Anna, Pisa – July 2016

Senior PhD Student Presentation Award

PhD DAY Translational Medicine Scuola Superiore Sant'Anna, Pisa – July 2015

Junior PhD Student Presentation Award

PhD DAY Translational Medicine Scuola Superiore Sant'Anna, Pisa – July 2014

European Society of Cardiology Research Grant awardee

Project title: *Galectin-3 and aldosterone profibrotic pathways in the failing heart* Host: INSERM Unit 942 Paris-Diderot University Hopital Lariboisiere, Paris Supervisor: Prof. Alain Cohen-Solal – October 2013

European Society of Cardiology First Contact Initiative Grant awardee

Project title: *Effects of renin inhibition on aldosterone breakthrough in a rat model of heart failure* Host: INSERM Unit 942 Paris-Diderot University Hopital Lariboisiere, Paris Supervisor: Dr. Claude Delcayre – April 2012

Young Investigator Award first prize, European Society of Cardiology Heart Failure Congress, Goteborg

Abstract title: *Plasma renin activity and angiotensinogen M235T polymorphism are determinants of aldosterone escape in patients with systolic heart failure – May 2011*

Young Investigator Award finalist, European Society of Cardiology Heart Failure Congress, Berlin Abstract title: *PRA is an independent prognostic factor across the entire spectrum of heart failure clinical status* – May 2010

International Federation of Medical Students Associations Research Grant. Project title: *Application of molecular techniques to diagnostic pathology*. Supervisor: Prof. Ryohei Katoh, Yamanashi University, Japan – August 2005

CLINICAL TRAINING COURSES AND ACCREDITATION

Good Clinical Practice for Investigational Site Staff. TransCelerate BioPharma, Inc. December 2018

Course "Centro di Biomedicina Sperimentale: Aspetti normativi e procedure Operative" September 2014

Cardiovascular Imaging Association (EACVI, formerly EAE) of the ESC Adult Transthoracic Echocardiography Certification. December 2012

Centro Cardiologico Monzino, Milano Cardiopulmonary exercise testing: physiological basis, indications and interpretation. May 2011

Gabriele Monasterio Foundation, Pisa Basic training ACC/ASNC in nuclear cardiology. May 2010

AHA Basic Life Support course, Pisa. 2018

AHA Advanced Cardiovascular Life Support course, Pisa. May 2019

MEMBERSHIPS

Heart Failure Specialists of Tomorrow Committee of the ESC Heart Failure Association Member 2018-2020

Study Group on Heart Transplantation of the ESC Heart Failure Association Member 2018-2020

Fellow of the Heart Failure Association of the European Society of Cardiology 2019- now

Gold Member of the Heart Failure Association of the European Society of Cardiology 2017-2019

Professional Member of the European Society of Cardiology 2019 - now

Member of the Working Group on Myocardial Function of the European Society of Cardiology 2016- now

Socio Ordinario, Società Italiana di Cardiologia 2017- now

Member Società Italiana per l'Amiloidosi 2017- now

TEACHING

Teacher, Course "Introduzione alla ricerca clinica"

Scuola Superiore Sant'Anna, Academic Years 2015-2016, 2016-2017, 2017-2018

"Incarico di co-docenza", Course "Elementi di fisiologia, fisiopatologia e diagnostica", Department of Physics, Università di Pisa, Academic Year 2018-19

Coordinator and Teacher, "Master Universitario di II livello" in "Fisiopatologia clinica e management dello scompenso cardiaco", Scuola Superiore Sant'Anna, Pisa, Academic Year 2018-2019

EDITORIAL ACTIVITY

Associate Editor, *International Journal of cardiology* 2020 - now

Associate Editor, JACC Case Reports 2020 - now

Associate Editor, *BMC Cardiovascular Disorders* 2019 - now

Guest Associate Editor for Frontiers in Physiology 2018

Review Editor for Frontiers in Cardiovascular Medicine.

Reviewer for European Heart Journal; European Journal of Heart Failure; ESC Heart Failure; Circulation: Heart Failure; Circulation: Arrhythmia and Electrophysiology; Frontiers in Physiology; International Journal of Cardiology; PLoS One; Scientific Reports; Journal of Cardiovascular Medicine; BMC Cardiovascular Disorders; Cardiology Research and Practice; Journal of the Renin-Angiotensin-Aldosterone System; Journal of Molecular and Cellular Medicine; Anais da Academia Brasileira de Ciências.

Abstract Grader for the *Heart Failure Congress of the European Society of Cardiology* 2017-now

Abstract Grader for the *European Society of Cardiology Congress* 2019-now

PUBLICATIONS

Selected publications:

Aimo A, Januzzi JL Jr, **Vergaro G**, Richards AM, Lam CSP, Latini R, Anand IS, Cohn JN, Ueland T, Gullestad L, Aukrust P, Brunner-La Rocca HP, Bayes-Genis A, Lupón J, de Boer RA, Takeishi Y, Egstrup M, Gustafsson I, Gaggin HK, Eggers KM, Huber K, Gamble GD, Ling LH, Leong KTG, Yeo PSD, Ong HY, Jaufeerally F, Ng TP, Troughton R, Doughty RN, Passino C, Emdin M. Circulating levels and prognostic value of soluble ST2 in heart failure are less influenced by age than N- terminal pro-B-type natriuretic peptide and high-sensitivity troponin T. *Eur J Heart Fail*. 2020 Jan 9. doi: 10.1002/ejhf.1701. Epub ahead of print. PMID: 31919929.

Anker MS, Bouleti C, Christodoulides T, Durante A, Gara E, Hadzibegovic S, Keramida K, Lena A, Massouh A, Milinkovic I, Nägele MP, Nossikoff A, Plácido R, Radovits T, Tolppanen H, **Vergaro** G, Wallner M, Welch S, Lopatin Y, Lainscak M, Mebazaa A, Coats AJS, Seferović PM, Jankowska EA; Heart Failure Association Committee on Heart Failure Specialists of Tomorrow of the European Society of Cardiology. The heart failure specialists of tomorrow: a network for young cardio-vascular scientists and clinicians. *ESC Heart Fail*. 2020 Jun;7(3):873-877. doi: 10.1002/ehf2.12674. Epub 2020 Apr 30. PMID: 32352242; PMCID: PMC7261537.

Gentile F, Sciarrone P, Zamora E, De Antonio M, Santiago E, Domingo M, Aimo A, Giannoni A, Passino C, Codina P, Bayes-Genis A, Lupon J, Emdin M, **Vergaro G**. Body mass index and outcomes in ischaemic versus non-ischaemic heart failure across the spectrum of ejection fraction. *Eur J Prev Cardiol*. 2020 Jun 2:2047487320927610. doi: 10.1177/2047487320927610. Epub ahead of print. PMID: 32484044.

Emdin M, Aimo A, Rapezzi C, Fontana M, Perfetto F, Seferović PM, Barison A, Castiglione V, Vergaro G, Giannoni A, Passino C, Merlini G. Treatment of cardiac transthyretin amyloidosis: an update. *Eur Heart J*. 2019 Dec 1;40(45):3699-3706. doi: 10.1093/eurheartj/ehz298. PMID: 31111153.

Aimo A, Januzzi JL Jr, Bayes-Genis A, **Vergaro G**, Sciarrone P, Passino C, Emdin M. Clinical and Prognostic Significance of sST2 in Heart Failure: JACC Review Topic of the Week. *J Am Coll Cardiol*. 2019 Oct 29;74(17):2193-2203. doi: 10.1016/j.jacc.2019.08.1039. PMID: 31648713.

Vergaro G, Ghionzoli N, Innocenti L, Taddei C, Giannoni A, Valleggi A, Borrelli C, Senni M, Passino C, Emdin M. Noncardiac Versus Cardiac Mortality in Heart Failure With Preserved, Midrange, and Reduced Ejection Fraction. *J Am Heart Assoc.* 2019 Oct 15;8(20):e013441. doi: 10.1161/JAHA.119.013441. Epub 2019 Oct 5. PMID: 31587602; PMCID: PMC6818034.

Vergaro G, Aimo A, Prontera C, Ghionzoli N, Arzilli C, Zyw L, Taddei C, Gabutti A, Poletti R, Giannoni A, Mammini C, Spini V, Passino C, Emdin M. Sympathetic and renin-angiotensin-aldosterone system activation in heart failure with preserved, mid-range and reduced ejection fraction. *Int J Cardiol.* 2019 Dec 1;296:91-97. doi: 10.1016/j.ijcard.2019.08.040. Epub 2019 Aug 17. PMID: 31443984.

Emdin M, Aimo A, **Vergaro G**, Bayes-Genis A, Lupón J, Latini R, Meessen J, Anand IS, Cohn JN, Gravning J, Gullestad L, Broch K, Ueland T, Nymo SH, Brunner- La Rocca HP, de Boer RA, Gaggin HK, Ripoli A, Passino C, Januzzi JL Jr. sST2 Predicts Outcome in Chronic Heart Failure Beyond NT-proBNP and High-Sensitivity Troponin T. *J Am Coll Cardiol*. 2018 Nov 6;72(19):2309-2320. doi: 10.1016/j.jacc.2018.08.2165. PMID: 30384887.

Vergaro G, Januzzi JL Jr, Cohen Solal A, Aimo A, Arzilli C, Zyw L, Valleggi A, Giannoni A, Prontera C, Barison A, Poletti R, Gabutti A, Mammini C, Passino C, Emdin M. NT-proBNP prognostic value is maintained in elderly and very elderly patients with chronic systolic heart failure. *Int J Cardiol.* 2018 Nov 15;271:324-330. doi: 10.1016/j.ijcard.2018.04.006. PMID: 30223365.

Aimo A, Januzzi JL Jr, **Vergaro G**, Ripoli A, Latini R, Masson S, Magnoli M, Anand IS, Cohn JN, Tavazzi L, Tognoni G, Gravning J, Ueland T, Nymo SH, Brunner- La Rocca HP, Bayes-Genis A, Lupón J, de Boer RA, Yoshihisa A, Takeishi Y, Egstrup M, Gustafsson I, Gaggin HK, Eggers KM, Huber K, Tentzeris I, Tang WHW, Grodin J, Passino C, Emdin M. Prognostic Value of High-Sensi-

tivity Troponin T in Chronic Heart Failure: An Individual Patient Data Meta-Analysis. *Circulation*. 2018 Jan 16;137(3):286-297. doi: 10.1161/CIRCULATIONAHA.117.031560. PMID: 29335288.

Aimo A, **Vergaro G**, Passino C, Ripoli A, Ky B, Miller WL, Bayes-Genis A, Anand I, Januzzi JL, Emdin M. Prognostic Value of Soluble Suppression of Tumorigenicity-2 in Chronic Heart Failure: A Meta-Analysis. *JACC Heart Fail*. 2017 Apr;5(4):280-286. doi: 10.1016/j.jchf.2016.09.010. Epub 2016 Nov 2. PMID: 27816512.

Vergaro G, Prud'homme M, Fazal L, Merval R, Passino C, Emdin M, Samuel JL, Cohen Solal A, Delcayre C. Inhibition of Galectin-3 Pathway Prevents Isoproterenol-Induced Left Ventricular Dysfunction and Fibrosis in Mice. *Hypertension*. 2016 Mar;67(3):606-12. doi: 10.1161/HYPERTEN-SIONAHA.115.06161. Epub 2016 Jan 18. PMID: 26781273.

Vergaro G, Emdin M, Iervasi A, Zyw L, Gabutti A, Poletti R, Mammini C, Giannoni A, Fontana M, Passino C. Prognostic value of plasma renin activity in heart failure. *Am J Cardiol*. 2011 Jul 15;108(2):246-51. doi: 10.1016/j.amjcard.2011.03.034. Epub 2011 May 3. PMID: 21545993.

Pisa, September 27th 2020

Giuseppe Vergaro, MD, PhD