

BIOGRAPHICAL SKETCH

NAME	POSITION TITLE		
Kallikourdis, Marinos	Associate Professor of Immunology and General Pathology (tenured), Humanitas University; Head of Lab, Adaptive Immunity Laboratory, Humanitas Research		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Trinity College, University of Cambridge, Cambridge, UK	BA (MA Cantab)	1997-2000	Biochemistry
Trinity College and MRC-Lab of Molecular Biology (LMB) (PI: A.G. Betz), Cambridge, UK	Ph.D.	2000-2006	Immunology (Treg cells)
Humanitas, Adaptive Immunity Lab (PI: A. Viola), Milan, Italy	(postdoc)	2007-2009	Immunology (T cells)

A. POSITIONS AND HONORS**POSITIONS**

2009- PI (Junior then Senior(2024)), Adaptive Immunity Lab, Humanitas Research Hospital, Milan, Italy
 2012-15. Assistant Professor of Immunology, University of Milan, Italy
 2014- Head of Lab, Adaptive Immunity Lab, Humanitas Research Hospital, Italy
 2015-2024. Assistant Professor of Immunology, Humanitas University, Milan, Italy
 2024- Associate Professor of Immunology, Humanitas University, Milan, Italy

HONORS AND AWARDS:

2004-2006 ARC and MRC Fellowship; 2007-2010 FEBS Long Term Fellowship; 2012-2016 FIRB Programme Coordinator.

Panel Member and Reviewer activities:

Grant reviewer: ERC AdG and StG, FWO (Belgium), Dutch Heart Foundation, Swiss National Science Foundation, Swiss Heart Foundation, Fondation pour la Recherche Médicale, Reumafonds (Netherlands), Belgian Foundation against Cancer, Czech Science Foundation.

Peer-review activity for journals including: Science, Circulation, J Am Col Cardiol, JAHA, Circulation Research, Cardiovascular Research, European Journal of Heart Failure, Nature Cardiovasc Res, Procl Natl Acad Sci USA, Atherosclerosis, J Autoimmunity, J Leuk Biology, Molecular Immunology, Human Immunology, Frontiers in Immunology, Frontiers in Pharmacology, Scientific Reports, Annals of Hematology, Journal of Immunology Research.

B. Publications:

48 publications, 3426/4944 citations, h-index: 22/24 (Scopus/Google);

ORCID ID: 0000-0001-9318-3368. Web of Science ResearcherID: AAA-5593-2019. Scopus Author ID: 8515955200

5 MOST IMPORTANT PUBLICATIONS

1. Elisa Martini*, Marco Cremonesi*, Arianna Felicetta *, Simone Serio, Simone Puccio, et al., Paola Magistrini, Silvia Deaglio, Antonio Amoroso, Enrico Lugli, Gianluigi Condorelli, **Marinos Kallikourdis (2025)** Autoimmune-Like Mechanism in Heart Failure Enables Preventive Vaccine Therapy **Circulation Research (in press)**
<https://doi.org/10.1161/CIRCRESAHA.124.32499>
2. Cremonesi M, Felicetta A, ..., Lugli E, **Kallikourdis M*** and Condorelli G* , (2023) Long COVID-19 cardiac complications are associated with autoimmunity to cardiac self-antigens sufficient to cause cardiac dysfunction **Circulation** 148(6), 504-507 (*:co-senior, co-corresponding authors) doi: 10.1161/CIRCULATIONAHA.122.062672
3. Martini E, Cremonesi M,..., Colombo MP, Gianluigi Condorelli G* and **Kallikourdis M*** (2020) **Circulation Res** T Cell Costimulation Blockade Blunts Age-Related Heart Failure (vol. 127, p. 1115-1117)
doi: [10.1161/CIRCRESAHA.119.316530](https://doi.org/10.1161/CIRCRESAHA.119.316530)
4. Martini E,...Condorelli G*, **Kallikourdis M***. Single-Cell Sequencing of Mouse Heart Immune Infiltrate in Pressure Overload-Driven Heart Failure Reveals Extent of Immune Activation (2019) **Circulation**. 140(25):2089-2107
<https://www.ahajournals.org/doi/full/10.1161/CIRCULATIONAHA.119.041694>
5. Aluvihare V, **Kallikourdis M** and Betz A (2004) Regulatory T Cells Mediate Maternal Tolerance to the Fetus. **Nat Immunol** 5, 266-271. <https://www.nature.com/articles/ni1037>

10 PUBLICATIONS MOST RELATED TO THE PROJECT

1. Elisa Martini*, Marco Cremonesi*, Arianna Felicetta, * Simone Serio, Simone Puccio, Erica Pelamatti, Jasper J.P. van Beek, Vasiliki Papadopoulou, Chiara Catalano, Francesca Fanuele, Desirée Giuliano, Gianluca Basso, Cecilia Assunta Bonfiglio, Cristina Panico, Marco Vacchiano Pierluigi Carullo, Laura Papa, Carla D'Andrea, Naz Tuzger, Sergio Marchini, Paola Magistroni, Silvia Deaglio, Antonio Amoroso, Enrico Lugli, Gianluigi Condorelli, **Marinos Kallikourdis (2025)** Autoimmune-Like Mechanism in Heart Failure Enables Preventive Vaccine Therapy **Circulation Research (in press)** <https://doi.org/10.1161/CIRCRESAHA.124.32499>
2. Zoltan Varga, Tamás Gergely, Zsófia Drobni, **Marinos Kallikourdis**, Han Zhu, Wouter Meijers, Tomas Neilan, Tienush Rassaf, and Peter Ferdinandy. Immune checkpoints in cardiac physiology and pathology: mediators of cardiotoxicity and therapeutic targets for heart failure (2024) **Nature Reviews Cardiology** 21, 443-462 <https://www.nature.com/articles/s41569-023-00986-9>
3. Martini E, Cremonesi M, Panico C, Carullo P, Bonfiglio CA, Serio S, Jachetti E, Colombo MP, Gianluigi Condorelli G* and **Kallikourdis M*** (2020) **Circulation Res** T Cell Costimulation Blockade Blunts Age-Related Heart Failure (vol. 127, p. 1115-1117) doi: [10.1161/CIRCRESAHA.119.316530](https://doi.org/10.1161/CIRCRESAHA.119.316530)
4. **Kallikourdis M***, Martini E, Carullo P, Sardi C, Roselli G, Greco C, Vignali D, Riva F, Ormbostad Berre AM, Stølen TO, Fumero A, Faggian G, Di Pasquale E, Elia L, Rumio C, Catalucci D, Papait R, Condorelli G* (2017) T cell costimulation blockade blunts pressure overload-induced heart failure. **Nat. Commun.** 8, 14680 (*:corresponding and co-supervising authors) <https://www.nature.com/articles/ncomms14680>
5. C Panico, AFelicetta, P Kunderfranco, M Cremonesi, N Salvarani, P Carullo, F Colombo, A Idini, M Passaretti, R Doro, M Rubino, A Villaschi, G Da Rin, C Peano, **M Kallikourdis**, CM Greco, G Condorelli. Single-Cell RNA Sequencing Reveals Metabolic Stress-Dependent Activation of Cardiac Macrophages in a Model of Dyslipidemia-Induced Diastolic Dysfunction. **Circulation** (in press). <https://www.ahajournals.org/doi/abs/10.1161/CIRCULATIONAHA.122.062984>
6. P Alcaide, **M Kallikourdis**, R Emig, SD Prabhu. Myocardial inflammation in heart failure with reduced and preserved ejection fraction **Circulation Res** 134 (12), 1752-1766 <https://www.ahajournals.org/doi/abs/10.1161/CIRCRESAHA.124.323659>
7. Gabriele G Schiattarella, Pilar Alcaide, Gianluigi Condorelli, Thomas G Gillette, Stephane Heymans, Elizabeth AV Jones, **Marinos Kallikourdis**, Andrew Lichtman, Federica Marelli-Berg, Sanjiv J Shah, Edward B Thorp, Joseph A Hill (2022) Immunometabolic mechanisms of heart failure with preserved ejection fraction. **Nat Cardiovasc Res** 1, 211-222 DOI: [10.1038/s44161-022-00032-w](https://doi.org/10.1038/s44161-022-00032-w)
8. Martini E, ..., Condorelli G*, **Kallikourdis M***. Single-Cell Sequencing of Mouse Heart Immune Infiltrate in Pressure Overload-Driven Heart Failure Reveals Extent of Immune Activation **Circulation**. 2019 Dec 17;140(25):2089-2107 <https://www.ahajournals.org/doi/full/10.1161/CIRCULATIONAHA.119.041694>
9. Cremonesi M, Felicetta A, ..., Lugli E, **Kallikourdis M*** and Condorelli G* , Long COVID-19 cardiac complications are associated with autoimmunity to cardiac self-antigens sufficient to cause cardiac dysfunction (2023) **Circulation** 148(6), 504-507 (*:co-senior, co-corresponding authors) doi: [10.1161/CIRCULATIONAHA.122.062672](https://doi.org/10.1161/CIRCULATIONAHA.122.062672)
10. Aluvihare V, **Kallikourdis M** and Betz A (2004) Regulatory T Cells Mediate Maternal Tolerance to the Fetus. **Nat Immunol** 5, 266-271. <https://www.nature.com/articles/ni1037>

C. Current Support:

- EXTEND Feasibility grant to develop immunomodulation for Heart Failure towards an industrially applicable solution (1.5M euro; 2024-2026)
- PI of Ministry of Universities PRIN grant: Immunophenotyping in infertility (100K; 2023-2026)
- PI of Ministry of Universities PRIN grant: Immunophenotyping in models of hypertension (100K; 2022-2025)
- PI of AIRC IG Grant: Immune Checkpoint Inhibitor-induced cardiotoxicity: deep phenotypic analysis (0.7M; 2021-2025)
- PI (partner unit) of AIRC 5x1000 programme Grant: Disease-specific universal vaccines as new combinatorial immunotherapy for metastatic melanoma, sarcoma and osteosarcoma (0.85M; 2019-2027)

D. Previous experience in collaborative research

I am or have been active as a **coordinator** of networks on national project grants. These include grants from CARIPLO Foundation (2009-2013; 2015-2019), the Italian Ministry of Universities and Research (2012-2016), the Fondazione Veronesi (2014-2015); the Italian Ministry of Health (2015-2020). I also am or have been active as a **partner** in networks on national project or programme grants, including from the Italian Ministry of Health (2011-2014), Lombardy Region Biomedical Research (2020-2023), AIRC (2019-2027). **On all these projects the tasks under my management have been related to examining immunological aspects** of different pathologies, mostly on **HF**, in close collaboration with teams specialized in the pathology, as well as to apply **immune checkpoint blockade in models of HFrEF and age-driven HF**.
