

Mahmoud Abdellatif

Key Researcher

Division of Cardiology, Department of Internal Medicine
Medical University of Graz

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SCIENTIFIC & ACADEMIC CAREER

- 2023 – present Assistant (Tenure Track) Professor, Division of Cardiology, Medical University of Graz.
- 2021 – 2023 MSc in Clinical Trials; University of Oxford, Oxford, UK.
- 2020 – 2022 Post-doctoral/Marie-Curie research fellow; Guido Kroemer's lab, Centre de Recherche des Cordeliers, Sorbonne Université/INSERM U1138, Paris, France.
- 2019 – 2020 Post-doctoral fellow; Division of Cardiology; Medical University of Graz.
- 2015 – 2019 PhD in Molecular Medicine; Medical University of Graz, Graz, Austria.
- 2013 – 2015 Master's in Cardiovascular Pathophysiology; Faculty of Medicine, University of Porto, Portugal.
- 2007 – 2013 Bachelor of Medicine and Surgery (MD); Faculty of Medicine, University of Sohag, Egypt.; Faculty of Medicine, University of Granada, Spain (Erasmus Exchange).

MAIN AREA OF RESEARCH

Mahmoud Abdellatif studies the mechanisms of cardiovascular ageing with the aim of developing novel interventions for the treatment of prevalent age-related cardiovascular disorders, such as heart failure with preserved ejection fraction, which is a leading cause of morbidity and mortality in the elderly with limited therapies. His contributions thereof have included developing diagnostic tools and novel experimental therapies, some of which are currently undergoing human testing in randomized trials. Mahmoud's knowledge and experience will feed into the design, conduct and analysis of the clinical trials conducted under the MetAGE Clinical Trials Program. At the bench, He will investigate age-related decline in mitochondrial metabolism and autophagy as potential targets for the treatment of heart failure with preserved ejection fraction. As such, he will also contribute to the MetAGE CoE preclinical program with extensive expertise in small animal cardiac catheterization and speckle tracking echocardiography for state-of-the-art cardiac and vascular phenotyping of the animal models used.

ADDITIONAL RESEARCH ACTIVITIES (10 most important)

- 2024 Coordinator of a Transnational European Research Area (ERA4Health) Network (€ 1.16 Mio)
- 2023 BioTechMed-Graz Independent Young Researcher Group Funding (€ 659 000)
- 2022 Austrian Science Fund (FWF) standalone project (€ 281 000)
- 2021 Marie Skłodowska-Curie Individual Fellowship, European Commission (197 000 €)
- 2023 Oskar Lapp Research Prize, German Society of Cardiology
- 2022 R. Pacher Heart Failure Award, German-Austrian-Swiss Cardiology Societies Joint Meeting
- 2021 Research Prize of the Heart and Diabetes Working Group, German Society of Cardiology
- 2020 Guido Tarone Award, Heart Failure Association of the European Society of Cardiology
- 2019- Elected leading memberships in the European Society of Cardiology: "Working Group on Myocardial Function Nucleus 2022-2024", "Research and Grants Committee 2020-2022", "Congress Programme Committee 2020-2022", "Board Committee for Young Cardiovascular Professionals 2019-2022" and "Scientists of Tomorrow Nucleus 2019-2022"

10 MOST IMPORTANT PUBLICATIONS

1. [Abdellatif M](#)[✉], Rainer PP, Sedej S and Kroemer G. Hallmarks of Cardiovascular Ageing. **Nature Reviews Cardiology**. 2023 May 16. DOI: 10.1038/s41569-023-00881-3. ✉Correspondence
2. [Abdellatif M](#)[✉], Montegut L, Kroemer G. Actionable autophagy checkpoints in cardiovascular ageing. **Eur Heart J**. 2023 Dec 7. DOI: 10.1093/eurheartj/ehad661. ✉Correspondence
3. [Abdellatif M](#)[✉], Trummer-Herbst V, Heberle AM, Humnig A, Pendl T, Durand S, Cerrato G, Hofer SJ, Islam M, Voglhuber J, Ramos Pittol JM, Kepp O, Hoefler G, Schmidt A, Rainer PP, Scherr D, von Lewinski D, Bisping E, McMullen JR, Diwan A, Eisenberg T, Madeo F, Thedieck K, Kroemer G, Sedej S. Fine-tuning cardiac IGF1 receptor signaling to promote health and longevity. **Circulation**. 2022; May 26: 101161CIRCULATIONAHA122059863. ✉Correspondence
4. [Abdellatif M](#), Trummer-Herbst V, Koser F, Durand S, Adão R, Vasques-Nóvoa F, Freundt JK, Voglhuber J, Pricolo MR, Kasa M, Türk C, Aprahamian F, Herrero-Galán E, Hofer SJ, Pendl T, Rech L, Kargl J, Anto-Michel N, Ljubojevic-Holzer S, Schipke J, Brandenberger C, Auer M, Schreiber R, Koyani CN, Heinemann A, Zirlik A, Schmidt A, von Lewinski D, Scherr D, Rainer PP, von Maltzahn J, Mühlfeld C, Krüger M, Frank S, Madeo F, Eisenberg T, Prokesch A, Leite-Moreira AF, Lourenço AP, Alegre-Cebollada J, Kiechl S, Linke WA, Kroemer G, Sedej S. Nicotinamide for the treatment of heart failure with preserved ejection fraction. **Science Translational Medicine**. 2021. DOI: 10.1126/scitranslmed.abd7064
5. Eisenberg T*, Abdellatif M*, Schroeder S, Primessnig U, Stekovic S, Pendl T, Harger A, Schipke J, Zimmermann A, Schmidt A, Tong M, Ruckstuhl C, Dammbroeck C, Gross AS, Herbst V, Magnes C, Trausinger G, Narath S, Meinitzer A, Hu Z, Kirsch A, Eller K, Carmona-Gutierrez D, Büttner S, Pietrocola F, Knittelfelder O, Schrepfer E, Rockenfeller P, Simonini C, Rahn A, Horsch M, Moreth K, Beckers J, Fuchs H, Gailus-Durner V, Neff F, Janik D, Rathkolb B, Rozman J, de Angelis MH, Moustafa T, Haemmerle G, Mayr M, Willeit P, von Frieling-Salewsky M, Pieske B, Scorrano L, Pieber T, Pechlaner R, Willeit J, Sigrist SJ, Linke WA, Mühlfeld C, Sadoshima J, Dengjel J, Kiechl S, Kroemer G, Sedej S, Madeo F. Cardioprotection and lifespan extension by the natural polyamine spermidine. **Nature Medicine**. 2017. DOI: 10.1038/nm.4222 *equally contributing first authors
6. [Abdellatif M](#), Sedej S, Kroemer G. NAD⁺ metabolism in cardiac health, aging and disease. **Circulation**. 2021 Nov 30;144(22):1795-1817. DOI: 10.1161/CIRCULATIONAHA.121.056589
7. [Abdellatif M](#), Sedej S, Carmona-Gutierrez D, Madeo F, Kroemer G. Autophagy in cardiovascular aging. **Circulation Research**. 2018; 123(7): 803-824. DOI: 10.1161/CIRCRESAHA.118.312208
8. Schreiber R, Diwoky C, Schoiswohl G, Feiler U, Wongsiriroj N, [Abdellatif M](#), Kolb D, Hoeks J, Kershaw EE, Sedej S, Schrauwen P, Haemmerle G, Zechner R. Cold-Induced Thermogenesis Depends on ATGL-Mediated Lipolysis in Cardiac Muscle, but Not Brown Adipose Tissue. **Cell Metabolism**. 2017; 26(5): 753-763. DOI: 10.1016/j.cmet.2017.09.004
9. Carmona-Gutierrez D, Zimmermann A, Kainz K, Pietrocola F, Chen G, Maglioni S, Schiavi A, Nah J, Mertel S, Beuschel CB, Castoldi F, Sica V, Trausinger G, Raml R, Sommer C, Schroeder S, Hofer SJ, Bauer MA, Pendl T, Tadic J, Dammbroeck C, Hu Z, Ruckstuhl C, Eisenberg T, Durand S, Bossut N, Aprahamian F, [Abdellatif M](#), Sedej S, Enot DP, Wolinski H, Dengjel J, Kepp O, Magnes C, Sinner F, Pieber TR, Sadoshima J, Ventura N, Sigrist SJ, Kroemer G, Madeo F. The flavonoid 4,4'-dimethoxychalcone promotes autophagy-dependent longevity across species. **Nature Communications**. 2019; Feb 19;10(1):651. DOI: 10.1038/s41467-019-08555-w

10. Zimmermann A, Madeo F, Diwan A, Sadoshima J, Sedej S, Kroemer G and [Abdellatif M](#)[✉]. Metabolic control of mitophagy. **Eur J Clin Invest.** 2024; DOI: 10.1111/eci.14138.
✉Corresponding author