



## Dr. Gerardo García Rivas

Leader of the Experimental Medicine and Advanced Therapies Unit  
National System of Researchers Level III

### Contact:

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🌐 <https://tec.mx/en/research/institute-obesity-research/experimental-medicine-advanced-therapies-unit>

### Degrees:

- Postdoctoral Fellowship: University of Wisconsin-Madison
- Doctorate Biomedicine— National Institute of Cardiology and National University of México (2006)
- BSc – National University of México (2002)

### Research areas:

- Metabolism and mitochondria
- Cardiovascular physiology
- Translational Research

### Selected publications:

1. Méndez-Fernández A, Fernández-Mora Á, Bernal-Ramírez J, Alves-Figueiredo H, Nieblas B, Salazar-Ramírez F, Maldonado-Ruiz R, Zazueta C, García N, Lozano O, Treviño V, Torre-Amione G, García-Rivas G. Distinguishing pathophysiological features of heart failure with reduced and preserved ejection fraction: A comparative analysis of two mouse models. *J Physiol.* 2024.
2. Alves-Figueiredo H, Silva-Platas C, Estrada M, Oropeza-Almazán Y, Ramos-González M, Bernal-Ramírez J, Vázquez-Garza E, Tellez A, Salazar-Ramírez F, Méndez-Fernández A, Galaz JL, Lobos P, Youker K, Lozano O, Torre-Amione G, García-Rivas G. Mitochondrial Ca<sup>2+</sup> Uniporter-Dependent Energetic Dysfunction Drives Hypertrophy in Heart Failure. *JACC Basic Transl Sci.* 2024 .
3. Rubio-Infante N, Ramírez-Flores YA, Castillo EC, Lozano O, García-Rivas G, Torre-Amione G. Cardiotoxicity associated with immune checkpoint inhibitor therapy: a meta-analysis. *Eur J Heart Fail.* 2021
4. Fernández-Sada E, Silva-Platas C, Villegas CA, Rivero SL, Willis BC, García N, Garza JR, Oropeza-Almazán Y, Valverde CA, Mazzocchi G, Zazueta C, Torre-Amione G, García-Rivas G. Cardiac responses to β-adrenoceptor stimulation is partly dependent on mitochondrial calcium uniporter activity. *Br J Pharmacol.* 2014.

### Awards and recognitions:

- Member of the Mexican National Academy of Science
- Member of National Academy of Medicine (México)
- Best doctoral dissertation, Medical School. UNAM

### Current projects:

- Mitochondrial calcium transport as a determinant in heart failure
- The role of cardiac mitochondria in arrhythmias and sudden death
- Mitochondrial posttranslational modification as a target in Heart Failure with Preserved Ejection Fraction (HFpEF)