



**Gerardo García-Rivas, PhD**

Research Areas:

- Mitochondrial ionic channels
- Metabolism regulation
- Heart Failure
- Cardiovascular Nanotechnology

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Gerardo García-Rivas obtained his BSc and Doctoral degree with Honors in the National University of Mexico (UNAM) at Instituto Nacional de Cardiología “Ignacio Chávez”. In 2006, obtained the prize for the Best Doctoral Dissertation at Medical School. He was a Research Associate at Department of Physiology/University of Wisconsin-Madison studying the cell excitability of cardiac cells. After working as a Postdoctoral Fellow, he returned to Mexico as Full Research Professor of Cardiovascular Research Group at Tecnológico de Monterrey. He currently leads the Cardiovascular Medicine Research Group at Medical School and the Biomedical Research Center at Hospital Zambrano-Hellion.

His research interests lie in the field of cardiac metabolism and electrophysiology. The long-term goal of his laboratory is to contribute to elucidate the molecular and cellular mechanisms that control the mitochondrial metabolism in normal and pathological settings, to prove a novel experimental therapeutics for treatment of cardiac dysfunction and arrhythmias. Furthermore, his research group is pioneer in Mexico and Latin American in development of nanovectors with potential application in cardiovascular medicine, to increase the efficacy of drugs, therapeutic gens and proteins.

Dr. García-Rivas has published more than 40 scientific peer- review articles with around 600 cites, and has been granted 3 patents. He contributes with teaching activities in medical school and graduate programs in topics like Advance Biochemistry and Biophysics. He is editorial member of Oxidative Medicine and Cellularfoto gerardo.png Longevity and Mexican Council of the European Congress of Bioenergetics. Dr. García-Rivas is member of multiple organizations, including the, the Mexican Academy of Sciences, the National Researchers Council (Level 2), the American Physiology Society, the Mexican Society of Biochemistry and the Mexican Society of Cardiology. He has conducted 7 doctoral theses, 12 MSc projects and 4 medical specialists clinical trials.

He has participated in a dozen of national and international conferences. As entrepreneur, Dr. García-Rivas is co-founder of the biotechnology company Nano4Heart in association with the Canadian company Cardiol Therapeutics.

**Most recent publications:**

1. Vazquez-Rodriguez A, Vasto-Anzaldo XG, Barboza Perez D, Vázquez-Garza E, Chapoy-Villanueva H, **García-Rivas G**, Garza-Cervantes JA, Gómez-Lugo JJ, Gomez-Loredo AE, Garza Gonzalez MT, Zarate X, Morones-Ramirez JR. Microbial Competition of *Rhodotorula mucilaginosa* UANL-001L and *E. coli* increase biosynthesis of Non-Toxic Exopolysaccharide with Applications as a Wide-Spectrum Antimicrobial. *Sci Rep*. 2018 Jan 15;8(1):798.
2. Lozano O, Torres-Quintanilla A, **García-Rivas G**. Nanomedicine for the cardiac myocyte: Where are we? *J Control Release*. 2018 Feb 10;271:149-165.
3. Treviño-Saldaña N, **García-Rivas G**. Regulation of Sirtuin-Mediated Protein Deacetylation by Cardioprotective Phytochemicals. *Oxid Med Cell Longev*. 2017;2017:1750306.
4. Fernández-Sada E, Torres-Quintanilla A, Silva-Platas C, García N, Willis BC, Rodríguez-Rodríguez C, De la Peña E, Bernal-Ramírez J, Treviño-Saldaña N, Oropeza-Almazán Y, Castillo EC, Elizondo-Montemayor L, Carvajal K, **García-Rivas G**. Proinflammatory Cytokines Are Soluble Mediators Linked with Ventricular Arrhythmias and Contractile Dysfunction in a Rat Model of Metabolic Syndrome. *Oxid Med Cell Longev*. 2017;2017:7682569.
5. Elizondo-Montemayor L, Castillo EC, Rodríguez-López C, Villarreal-Calderón JR, Gómez-Carmona M, Tenorio-Martínez S, Nieblas B, **García-Rivas G**. Seasonal Variation in Vitamin D in Association with Age, Inflammatory Cytokines, Anthropometric Parameters, and Lifestyle Factors in Older Adults. *Mediators Inflamm*. 2017;2017:5719461.

Webpage : [https://www.researchgate.net/profile/Gerardo\\_Garcia-Rivas](https://www.researchgate.net/profile/Gerardo_Garcia-Rivas)