



Noemí García Ramírez, M.Sc.

Research areas:

1. Study of the energetic alterations in cardiovascular diseases.
2. Study of the mitochondrial genome and its repair systems in metabolic disorders.
3. Changes in mitochondrial dynamics induced by physical activity and exercise in the metabolic syndrome.
4. Develop new strategies for improvement and rescue of cardiovascular and metabolic diseases.

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MSc Noemí García, is Chemist-Pharmacobiologist, graduated from the Universidad Michoacana de San Nicolás de Hidalgo (UMSNH). She completed his master's studies at the Universidad Nacional Autónoma de México (UNAM). She worked as a researcher in medical sciences at the Instituto Nacional de Cardiología, Ignacio Chávez. Subsequently, she became a professor-researcher at the Medical School of the Tecnológico de Monterrey. Currently, she has 55 scientific articles published in journals with an impact factor greater than two, and multiple presentations at national and international conferences. She is a member of the Mexican National System of Researchers, level 2. She has more than 650 citations to her works. She has participated as a reviewer in several prestigious journals in the area of Biochemistry. Also, she has participated as a Guest Editor in the journal "Oxidative Medicine and Cellular Longevity" with the special issue entitled "Oxidative Stress and Inflammation in Cardiovascular Disease." Her research projects have been supported by CONACyT, on three occasions.

Her research is focused on the study of the oxidative damage of the mitochondrial genome, its repair mechanisms and the relationship that these alterations have with the development of cardiovascular diseases. Also, to study the impact of changes in the mitochondrial genome in the establishment of insulin resistance and diabetes mellitus. The investigations are focused on the development of new strategies to improve and rescue these diseases. Most recent publications:

1. Pérez-Treviño P., Hernández-De la Cerda H., Pérez-Treviño J., Fajardo-Ramírez OR., **García N.**, Altamirano J (2018). 3D Imaging detection of HER2 based in the use of novel affibody-quantum dots probes and ratiometric analysis. *Translational Oncology*, 11(3): 672-685.
2. Montalvo D., Pérez-Treviño P., Madrazo-Aguirre K., González-Mondellini FA., Miranda-Roblero H.O., Ramonfaur-Gracia D., Jacobo-Antonio M., Mayorga-Luna M., Gómez-Viquez

N.L., **García N.**, Altamirano J., (2018). Underlying mechanism of the contractile dysfunction in atrophied ventricular myocytes from a murine model of hypothyroidism. *Cell Calcium*, 72:26-38.

3. Vela-Guajardo J.E., Pérez-Treviño P., Rivera-Álvarez I., González-Mondellini F.A., Altamirano J., and **García N.** (2017). The 8-oxo-deoxyguanosine glycosylase increases its migration to mitochondria in compensated cardiac hypertrophy. *Journal of the American Society of Hypertension*, 11(10):660-2672.

4. **García N.**, Zazueta C. and Aguilera-Aguirre L. Oxidative Stress and Inflammation in Cardiovascular Disease. *Oxidative Medicine and Cellular Longevity*, 2017.

5. Fernández-Sada E., Torres-Quintanilla A., Silva-Platas C., Garcia N., Willis C., Rodríguez C., De la Peña E., Bernal-Ramírez J., Treviño-Saldaña J., Oropeza-Almazán Y., Castillo E.C., ElizondoMontemayor L., Carvajal K., and García-Rivas G. (2017). Proinflammatory cytokines are soluble mediators linked with ventricular arrhythmias and contractile dysfunction in a rat model of metabolic syndrome. *Oxidative Medicine and Cellular Longevity*, 2017: 7682569.

Webpage: https://www.researchgate.net/profile/Noemi_Garcia3