Dr. Omar Lozano García
Leader of the Bioengineering and Medical Devices Unit
National System of Researchers Level II

Contact:

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Degrees:

- MBA – University of Namur (2015)
- Ph.D. in Physics – University of Houston (2009)
- M.Sc. in Physics – University of Houston (2006)
- B.Sc. in Physics engineering – Tecnológico de Monterrey (2004)

Research areas:

- Nanomedicine / Nanotoxicology / nanosafety.
- Cell-matter interaction (i.e. nano-bio-interactions).
- Cellular bioenergetics (cardiac, adipose tissue, hepatic).

Selected publications:

1. Cardiotoxicity associated with immune checkpoint inhibitor therapy: a meta‐analysis - European Journal of Heart Failure, 2021. DOI: 10.1002/ejhf.2289.
2. Nanoencapsulated Quercetin Improves Cardioprotection during Hypoxia-Reoxygenation … - Oxidative Medicine and Cellular Longevity, 2019. DOI: 10.1155/2019/7683051.
3. Amorphous SiO2 nanoparticles promote cardiac dysfunction via the opening of … - Particle and Fibre Toxicology 2020. DOI: 10.1186/s12989-020-00346-2.

Awards and recognitions:

- Scientific entrepreneurship: Health Pioneers (2023-2023; 2023), TecSalud for creation of enterprises of scientific-technological basis (2020), Healthathon (2016).
- Best oral presentation at XX Congreso de Biomembranas y Bioenergética (2017).

Current projects:

- Design of nanosystems for the drug delivery on cardiometabolic diseases.
- Development of novel biosensors for assessing metabolic diseases.
- Study of the modulation of adipose tissue and liver on (cardio)metabolic diseases by anti-inflammatory and antioxidant molecules.