





**Dr. Rocío Isabel Díaz de la Garza**  
Leader of the Integrative Biology Unit  
National System of Researchers Level II

**Contact:**

 <https://www.linkedin.com/in/roc%C3%ADo-isabel-d%C3%ADaz-de-la-garza-b18725255/>

 [ior-contact@servicios.tec.mx](mailto:ior-contact@servicios.tec.mx)

 <https://tec.mx/en/research/institute-obesity-research/integrative-biology-unit>

**Degrees:**

- PhD Plant Molecular and Cellular Biology – University of Florida (2006)
- MSc. Biotechnology – Universidad Autónoma de Chihuahua (2001)
- Chemical Engineer - Instituto Tecnológico de Ciudad Madero (1998)

**Research areas:**

- Interkingdom Folate and 1C metabolism
- Vitamin plant biofortification
- Obesity impact on vitamin B and 1 C metabolism

**Selected publications:**

1. White adipose tissue: Distribution, molecular insights of impaired expandability, and its implication in fatty liver disease. *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease*, (2023)
2. The enigmatic aliphatic acetogenins and their correlations with lipids during seed germination and leaf development of Avocado (*Persea americana* Mill.). *Frontiers in Plant Sciences* (2022).  
[doi.org/10.3389/fpls.2022.839326](https://doi.org/10.3389/fpls.2022.839326)
3. Interkingdom Comparison of Threonine Metabolism for Stem Cell Maintenance in Plants and Animals. *Frontiers in Cell and Developmental Biology*. (2021) DOI=10.3389/fcell.2021.672545
4. High hydrostatic pressure treatments trigger de novo carotenoid biosynthesis in papaya fruit (*Carica papaya* cv. Maradol). *Food Chemistry* (2019)
5. MTHFD1 controls DNA methylation in Arabidopsis. *Nature Communications* (2016)
6. Metabolic engineering of folate and its precursors in Mexican common bean (*Phaseolus vulgaris* L.) *Plant Biotechnology Journal* (2016)

**Awards and recognitions:**

- 2019-National Prize in Food Technology by the Coca-Cola Company and the Mexican Academy of Sciences
- Tec-Woman Award in the Science and Technology category as recognition of the global research in March 2018

**Current projects:**

- Biomarkers, Subtyping, and Targets for Mexican Metabolic Health: Phase I – Experimental Characterization & Data analyses
- Obesity impact on vitamin B & 1C metabolism: GTEx analyses