Fabiola Castorena Torres, PhD.

Full professor

Research Areas:
-Biomarkers and oxidative stress.
-Pharmacogenetics and exposure to xenobiotics.
-Pharmacology and toxicology of molecules with therapeutic potential (peptides).

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Dr. Castorena Torres is Chemist-Pharmacobiologist graduated from the Autonomous Metropolitan University, and she obtained her Master and PhD degrees in Science in Toxicology from the Center for Research and Advanced Studies of the National Polytechnic Institute (CINVESTAV-IPN), unit Zacatenco in Mexico City. Dr. Castorena conducted a research stay in the area of Molecular Biomedicine of CINVESTAV-IPN, Monterrey unit. In addition, she was a post-doctoral researcher in the Biotechnology Department of Tecnológico de Monterrey (ITESM) with the Cardiovascular Medicine group.

Currently, Dr. Castorena Torres is a full-time Professor-researcher at the School of Medicine and Health Sciences and Coordinator of the Graduate Program in Biomedical Sciences of the ITESM. Dr. Castorena is a member of the National System of Researchers (Level 1) from the National Council on Science and Technology, Mexico.

Dr. Castorena has published 19 articles in international scientific journals indexed with impact factor, 3 book chapters and has participated in 26 national and international conferences in the biomedical area. Her work as a researcher is focused in the evaluation of peptides with antioxidant and anticancer activity using cellular models, and the use of animal models for the search of therapeutic targets to evaluate new molecules in the treatment of different diseases, including therapeutic alternatives for premature newborns affected by exposure to supplemental oxygen. Finally, he carries out studies with genetic factors associated with metabolism.

Most recent publications:

1. Becerril-Esquivel C, Peñuelas-Urquides K, Blancas-Sánchez E, Zapata-Benavides P, Silva-Ramírez B, Chávez-Reyes A, Castorena-Torres F, Cisneros B, Bermúdez de León M. The polyaromatic hydrocarbon β-naphthoflavone alters binding of YY1, Sp1, and Sp3 transcription factors to the Dp71 promoter in hepatic cells. Mol Med Rep. 2018 Apr;17(4):6150-6155.

2. Díaz-Gómez JL, Ortíz-Martínez M, Aguilar O, García-Lara S, Castorena-Torres F. Antioxidant Activity of Zein Hydrolysates from Zea Species and Their Cytotoxic Effects in a Hepatic Cell Culture. Molecules. 2018 Feb 2;23(2).

3. Aguirre-Vázquez A, Sampayo-Reyes A, González-Escalante L, Hernández A, Marcos R, Castorena-Torres F, Lozano-Garza G, Taméz-Guerra R, de León MB. Selenite restores Pax6 expression in neuronal cells of chronically arsenic-exposed Golden Syrian hamsters. Acta Biochim Pol. 2017;64(4):635-639.

4. Díaz-Gómez JL, Castorena-Torres F, Preciado-Ortiz RE, García-Lara S. Anti-Cancer Activity of Maize Bioactive Peptides. Front Chem. 2017 Jun 21;5:44.

5. Martínez LM, Videa M, López Silva T, Castro S, Caballero A, Lara-Díaz VJ, Castorena-Torres F.

Two-phase amorphous-amorphous solid drug dispersion with enhanced stability, solubility and bioavailability resulting from ultrasonic dispersion of an immiscible system. Eur J Pharm Biopharm. 2017 Oct;119:243-252.

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