

# CURRÍCULUM VITAE



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## **Formación**

Doctorado: UAM-Xochimilco, 1997

Licenciatura: ENCB, 1964

Estancia(s) Pos-Doctoral(es):

## **Experiencia Laboral**

Laboratorios Roche, 1964

## **Experiencia Docente**

Cursos Asignados:

Química Orgánica de grupos funcionales  
Productos Naturales de interés en la industria alimentaria  
La nanociencia aplicada a los alimentos

## **Áreas de interés de investigación**

### **Publicaciones Seleccionadas (5 años a la fecha)**

□ Artículos en revistas

Rosa Martha Perez Gutierrez, Alethia Muñiz Ramírez, Jahel Valdes Saucedo (2015).  
Review: The potential of chalcones as a source of drugs. Afr J Pharm Pharmacol. 9(8):  
237-257.

Rosa Martha Perez Gutierrez (2015). Evaluation of anti-inflammatory activity of the  
bark of *Eysenhardtia polystachya* in experimental animal models. African Journal of  
Pharmacy and Pharmacology.9(8). 230-236.

Rosa Martha Perez-Gutierrez, Diana Madrigales-Ahuatzi, (2015). Investigating  
antioxidant properties of the diterpenes from seeds of *Phalaris canariensis*.  
Nutrition and Food Sciences 5(4):376-384.

Rosa Martha Perez-Gutierrez, Alethia Muñiz Ramírez (2015). Inhibitory Activities of Guaianolides from the Seeds of *Byrsonima Crassifolia* against Protein Glycation In Vitro. Medicinal chemistry. 2015, 5:5. <http://dx.doi.org/10.4172/2161-0444.1000267>.

D. Madrigales-Ahuatzi, RM Perez-Gutierrez. (2016). Evaluation of anti-inflammatory activity of seeds of *Phalaris canariensis*. Drug Research. 66:23-27. Doi: <http://dx.doi.org/10.1055/s-0035-1548764>

Rosa Martha Perez-Gutierrez Antidiabetic and antioxidant Properties, and  $\alpha$ -amylase and  $\alpha$ -glucosidase Inhibition Effects of Triterpene Saponins from *Piper auritum*. Food Sci. Biotechnol. 25(1): 229-239 (2016) DOI 10.1007/s10068-016-0034-6

Rosa Martha Perez-Gutierrez. Review of *Cucurbita pepo* (pumpkin) its phytochemistry and pharmacology. Medicinal Chemistry 6 (1):012-021, 2016, doi: 10.4172/2161-044.1000316

Perez Gutierrez RM, Jahel Valdes Saucedo, Jose Maria Mota Flores, Blanca Elizabeth Lopes Silva. Protective effects of oleanane an ursane type triterpenoids from *Origanum majorana* against the formation of advanced glycation endproducts. Medicinal Chemistry 6 (2):095-114, doi: [org/10.4172/2161-0444.1000333](http://dx.doi.org/10.4172/2161-0444.1000333).

Perez Gutierrez RM. Anti-inflammatory effect of birsonimadiol from seeds of *Byrsonima crassifolia*. Food Science and Biotechnology 2016, 25(2), 561-566.

Perez Gutierrez RM, Madrigales Ahuatzi D, Cruz Victoria T. Inhibition by seeds of *Phalaris canariensis* extracts of key enzymes linked to obesity. Altern Ther Health Med 2016; 22(1); 8-14.

Rosa Martha Perez-Gutierrez, Alethia Muñiz Ramírez (2016). Hypoglycemic effects of sesquiterpenes lactones from *Byrsonima crassifolia*. Food Sci Biotechnol 25(4): 1135-1145.

Rosa Martha Perez-Gutierrez, Abraham H. Garcia Campoy, Alethia Muñiz Ramírez (2016) Properties of Flavonoids Isolated from the Bark of *Eysenhardtia polystachya*, and their Effect on Oxidative Stress in Streptozotocin-Induced Diabetes Mellitus in mice. Oxidative Med Cellular Longevity. Volume 2016 (2016), Article ID 9156510, 13 pages <http://dx.doi.org/10.1155/2016/9156510>

Rosa Martha Perez-Gutierrez, Rita Valadez Romero (2016) Effects of bixin in high-fat diet-fed-induced fatty liver in c57bl/6j mice. Asian Pacific J Tropical Biomedicine. 6(12):1015-1021.

Rosa Martha Pérez Gutiérrez Hypolipidemic and hypoglycemic activities of a oleanolic acid derivative from *Malva parviflora* on streptozotocin-induced diabetic mice. Archives of Pharmacal Research. 40(5), 550–562. DOI: 10.1007/s12272-016-0873-

Rosa Martha Perez Gutierrez, Carlos Hoyo-Vadillo. Anti-inflammatory potential of *Petiveria alliacea* on activated RAW264.7 murine macrophages. Pharmacog Mag 13(50):S174-178

Karina Gutiérrez-García, Adriana Neira-González, Rosa Martha Pérez-Gutiérrez, Giovana Granados-Ramírez, Ramon Zarraga, Kazimierz Wrobel, Francisco Barona-Gómez, Luis B. Flores-Cotera. Phylogenomics and inhibitory activity upon the formation of Advanced Glycation End-Products of 2, 4-diacetylphloroglucinol-producing *Pseudomonas* endophytes from *Piper auritum*. *J Nat Prod.* 80(7): 1955-1963. Doi 10.1021/acs/natprod.6b00823.

Rosa Martha Perez Gutierrez, Abraham H. Garcia Campoy. Jose Maria Mota Flores. Dihydrochalcones from the bark of *Eysenhardtia polystachyai* inhibit formation of advanced glycation and products at multiple stages in vitro studies. *NESSA Journal of Pharmacy and Pharmacology.* 1(3): 3-23. 2017

Alethia Muniz . Abraham H. Garcia . Rosa M. Perez . Efren V. Garcia. Daphne E. Gonzalez. In Vitro Inhibitory Activity of the End Products of Advanced Glycation of *Acca sellowiana* Fruit. *Diabetes Ther.* <https://doi.org/10.1007/s13300-017.0335-7>

Maria J. Martínez-Ortiz, Miguel A. de la Rosa-Guzman, Jorge R. Vargas-Garcia, Jorge L. Flores-Moreno, Nancy Castillo, Ariel Guzman-Vargas, Sara Morandi and Rosa M. Pérez-Gutiérrez. Selective hydrogenation of cinnamaldehyde using Pd catalysts supported on Mg/Al mixed oxides: Influence of the Pd incorporation method. *The Canadian Journal of Chemical Engineering.* 96(1): 297-306 DOI: 10.1002/cjce.22946.

Rosa Martha Perez-Gutierrez; Alethia Muñoz-Ramirez; Abraham Heriberto Garcia Campoy; Jose Maria Mota Flores; Sergio Odin Flores. Polyphenols of leaves of *Apium graveolens* inhibit in vitro protein glycation and protect RINm5F cells against methylglyoxal-induced cytotoxicity. *Functional Foods in Health and Disease* 2018; 8(3): 193-211. ISSN: 2160-3855, USA

Abraham Heriberto Garcia campoy, Rosa Martha Perez Gutierrez, Gabriela Manriquez Alvirde, Alethia Muñoz Ramirez. Protection of silver nanoparticles using *Eysenhardtia polystachya* in peroxide-induced pancreatic  $\beta$ -cell damage and their antidiabetic properties in zebrafish. *International Journal of Nanomedicine.* 2018;13 2601–2612.

Gutierrez, R.M.P., Jeronimo, F.F.M., Campoy, A.H.G. Hoyo, C. V. Silver Nanoparticles Synthesized Using *Eysenhardtia polystachya* and Assessment of the Inhibition of Glycation in Multiple Stages In Vitro and in the Zebrafish Model. *J Clust Sci* (2018). <https://doi.org/10.1007/s10876-018-1448-5>

Perez Gutierrez, R.M. & Mota Flores, J.M. *Petiveria alliacea* Suppresses Airway Inflammation and Allergen-Specific Th2 Responses in Ovalbumin-Sensitized Murine Model of Asthma. *Chin. J. Integr. Med.* (2018). <https://doi.org/10.1007/s11655-018-2566-5> Print ISSN1672-0415, Online ISSN1993-0402

Rosa Martha Pérez Gutiérrez and Sergio Odin Flores Green Synthesis of Silver Nanoparticles Using Cilinaphthalide C from *Justicia spicigera* on HeLa and CaSki Cancer Cell Lines *J. Bionanosci.* 12, 528–537 (2018)

Abraham Heriberto Garcia Campoy, Fernando Felipe Martinez Jeronimo, Rosa Martha Perez-Gutierrez, Alethia Muñoz Ramirez Silver nanoparticles synthesized with a fraction from the bark of *Eysenhardtia polystachya* with high chalcone and dihydrochalcone content effectively inhibit oxidative stress in the zebrafish embryo

model. *Nanomedicine Journal* 5(3): 152-162, (2018).

Rosa Martha Perez Gutierrez, Jose Maria Mota Flores, Adriana Maria Neira Gonzalez. Anti-inflammatory effect of procumbenoside B from *Justicia spicigera* on lipopolysaccharide-stimulated RAW 264.7 macrophages and zebrafish model. *Pharmacognosy Research*. 2018; 10(2): 218-224.

Pérez-Gutiérrez Rosa Martha, Enriquez-Alvirde Susana Gabriela. Ursane derivatives isolated from leaves of *Hylocereus undatus* inhibit glycation at multiple stages. *Chinese Journal of Natural Medicines*. 2018;16(11) 856-865

Fátima Solís Suárez, Alethia Muñiz Ramirez, Rebeca López-Marure, Rosa Martha Pérez Gutiérrez. In Vitro Cytotoxic Potential and Apoptotic Activity of Bufadienolide-rich Fraction from Leaves of *Kalanchoe mortagei* against Human HeLa Cancer Cells. *International Journal of Ayurvedic Medicine*, 2018, 9(1), 25-33.

Rosa Martha Perez-Gutierrez, Maria Fernanda Estrella-Mendoza, Javier Flores Estrada, Rebeca Lopez Marure. (2019). *Cucurbita argyrosperma* Seed Extract Ameliorating Oxidative Stress in H9c2 Cardiomyocytes through Suppression of Intracellular Reactive Oxygen Species Production. 15 (61) 327-334.

Rosa Martha Pérez Gutierrez, Abraham Heriberto García Campoy, Silvia Patricia Paredes Carrera, Alethia Muñiz Ramirez, José Maria Mota Flores and Sergio Odin Flores Valle. 3-O-β-D-glucopyranosyl-α,4,2',4',6'-pentahydroxydihydrochalcone, from bark of *Eysenhardtia polystachya* prevents diabetic nephropathy via inhibiting protein glycation in stz-nicotinamide induced diabetic mice. *Molecules* 2019, 24, 1214; doi:10.3390/molecules24071214.

Estrella-Mendoza, M.F.; Jiménez-Gómez, F.; López-Ornelas, A.; Pérez-Gutiérrez, R.M.; Flores-Estrada, J. *Cucurbita argyrosperma* seed extracts attenuate angiogenesis in a corneal chemical burn model. 2019, 2019040193 (doi: 10.20944/preprints201904.0193.v1).

Rosa Martha Perez Gutierrez & Efen Garcia Baez (2019). Diterpenes from seeds of *Phalaris canariensis* and their PTP1B inhibitory activity and hypoglycemic effects in streptozotocin-induced diabetic mice. *Journal of Asian Natural Products Research*, DOI: 10.1080/10286020.2019.1636786

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#### □ **Libros**

□ Spices in the Treatment of Diabetes. (2018). Research Signpost. Trivandrum, Kerala, India. ISBN: 978-81-308-0572-6

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#### □ **Capítulos de libros**

□ Rosa Martha Perez Gutierrez, Juan Vicente Mendez Mendez, Israel Arzate Vazquez. Elsevier 2017. *Nanostructures for oral medicine* Edited By Ecaterina Andronescu and Alexandru Miltau Grumezescu. CHAPTER 2 A Novel Approach to the Oral Delivery of Bionanostructures for Systemic Disease pag 28-59. ISBN 9780-32347720

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- 11. Perez Gutierrez R.M., Neira González A. (2018) Antidiabetic and Antioxidant Activities of Bioactive Compounds from Endophytes. In: Jha S. (eds) Endophytes and Secondary Metabolites. Reference Series in Phytochemistry. Springer, Cham DOI[https://doi.org/10.1007/978-3-319-76900-4\\_30-1](https://doi.org/10.1007/978-3-319-76900-4_30-1). Online ISBN978-3-319-76900-4

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