
Dr. Claudia Perez-Cruz

PROFESIONAL EXPERIENCE

National Researches System (SNI) level 2

- Since October 2012* **Full Time Professor (3C)**
Department of Pharmacology, CINVESTAV, Mexico, City.
- April - October 2011* **Project Manager**
Antwerp, University, Belgium.
- Feb 2008 - Dec 2010* **Post-doc Associated Researcher**
Abbvie Laboratories GmbH & Co. KG, Neuroscience Discovery
Group, Ludwigshafen, Germany.
- Oct - Dec 2007* **Short Researcher Fellowship (DAAD-CONACYT)**
Collaborative group between Max-Planck Institute of Experimental
Medicine, Göttingen (Dr. Frank Kirchoff) and Abbott Laboratories
GmbH & Co., Ludwigshafen (Prof. Dr. Ulrich Ebert), Germany.
- Abril - Oct 2007* **Post-doc Associated Researcher**
German Primate Center (DPZ), Clinical Neurobiology Laboratories (Dr.
Eberhard Fuchs), Göttingen, Germany.

EDUCATION

2004 - 2007	Ph.D in Systems Neuroscience - Göttingen University, Germany.
2001 - 2003	M.Sc. Pharmacology - University of Toronto, Canada.
1996 - 2001	Bachelor in Biological Sciences - UNAM, México.

GRANTS, AWARDS AND SCHOLARSHIPS

- ALZHEIMER'S ASSOCIATION Research Grant (USA) 2022.
- BIOCDEX Foundation Annual Prize (France) 2020.
- SEP- CONACYT Funding for Basic Science (Mexico) 2019-2021.
- SEP-CINVESTAV Funding Research Project (México) 2019-2020.
- First place at the National Prize of *Science and Technology of Food* (México) 2017
- Honorary Mention at the National Prize of *Science and Technology of Food* (México) 2016
- National Award by the Consejo de Investigación sobre la Salud y Cerveza (Mexico) 2016.
- Research Prize at the "Fundación Miguel Aleman" (Mexico) 2015.
- Abbott Laboratories Silver Award (Germany) 2011.
- IBRO-CEERC Summer School First Prize Presentation (Hungary) 2005.
- University of Toronto, Outstanding academic Award, (Canada) 2002.
- University of Toronto, Third Prize Poster Presentation, (Canada) 2002.
- Short researcher fellowship, DAAD - CONACyT, Max Planck Institute, Germany 2007.
- Scholarship CONACYT, Ph.D. studies. February 2004 - April 2007.
- Scholarship CONACYT, M. Sc. studies. Sept 2001 - November 2003.
- Scholarship CONACYT, Bachelor thesis. January 2001 - July 2001

MEMBERSHIPS

- American Journal of Primatology, since 2019
- International Life Science Institute, member since 2015
- Mexican Society of Physiological Sciences, since 2012
- Society of Neuroscience, member since 2007

REPRESENTATIVE PUBLICATIONS

1. Syeda, T.; Sánchez-Tapia, M.; Orta, I.; Granados-Portillo, O.; Pérez-Jimenez, L.; Rodríguez-Callejas, J.-d.-D.; Toribio, S.; Silva-Lucero, M.-d.-C.; Rivera, A.-L.; Tovar, A.R.; Torres, N.; **Perez-Cruz, C***. Bioactive Foods Decrease Liver and Brain Alterations Induced by a High-Fat-Sucrose Diet through Restoration of Gut Microbiota and Antioxidant Enzymes. *Nutrients* 2022, 14, 22.
2. García-Mena J, Corona-Cervantes K, Cuervo-Zanatta D, Benitez-Guerrero T, Vélez-Ixta JM, Zavala-Torres NG, Villalobos-Flores LE, Hernández-Quiroz F, **Perez-Cruz C**, Murugesan S, Bastida-González FG. Gut microbiota in a population highly affected by obesity and type 2 diabetes and susceptibility to COVID-19. *World Journal of Gastroenterology*. 2021 Nov 7;27(41):7065-79
3. Posadas Y, López-Guerrero VE, Segovia J, **Perez-Cruz C**, Quintanar L. Dissecting the copper bioinorganic chemistry of the functional and pathological roles of the prion protein: Relevance in Alzheimer's disease and cancer. *Curr Opin Chem Biol*. 2021 Nov 9;66:102098.
4. Posadas Y, Parra-Ojeda L, **Perez-Cruz C**, Quintanar L. Amyloid β Perturbs Cu(II) Binding to the Prion Protein in a Site-Specific Manner: Insights into Its Potential Neurotoxic Mechanisms. *Inorg Chem*. 2021 Jun 21;60(12):8958-8972. doi: 10.1021/acs.inorgchem.1c00846. Epub 2021 May 27.
5. Daniel Cuervo-Zanatta, Jaime García-Mena, **Claudia Perez-Cruz**. Gut microbiota alterations and cognitive impairment are sexually dissociated in a transgenic mice model of Alzheimer's disease. *J Alzheimers Dis*. 2021;82(s1):S195-S214. doi: 10.3233/JAD-201367.
6. Rodriguez-Callejas JD, Fuchs E, **Perez-Cruz C***. Increased oxidative stress, hyperphosphorylation of tau, and dystrophic microglia in the hippocampus of aged Tupaia belangeri. *Glia*. 2020 Sep;68(9):1775-1793. doi: 10.1002/glia.23804. Epub 2020 Feb 25.
7. Rodríguez-Callejas JD, Cuervo-Zanatta D, Rosas-Arellano A, Fonta C, Fuchs E, **Perez-Cruz C***. Loss of ferritin-positive microglia relates to increased iron, RNA oxidation, and dystrophic microglia in the brains of aged male marmosets. *Am J Primatol*. 2019 Feb;81(2):e22956. doi: 10.1002/ajp.22956. (*Feature Article*).
8. Syeda, Tauqeerunnisa, Sanchez-Tapia, Mónica, Pinedo-Vargas, Laura, Granados, Omar, Cuervo-Zanatta, Daniel, Rojas-Santiago, Eleazar, Díaz-Cintra, Sofía, Torres, Nimbe, **Perez-Cruz, Claudia***. Bioactive food abates metabolic and synaptic alterations by modulation of gut microbiota in a mouse model of Alzheimer's disease. *Journal of Alzheimer's Disease*. 2018, 66 (4).
9. Lopez, P., Sanchez, M., **Perez-Cruz, C.**, Velazquez-Villegas, L., Syeda T., Aguilar-Lopez, M., Rocha-Viggiano, A., Silva-Lucero, M., Torre-Villalvazo, I., Noriega, L., Torres, N., Tovar, A. Genistein modifies gut microbiota, improving glucose metabolism, metabolic endotoxaemia and cognitive function in mice fed a high-fat diet. *Molecular Nutrition and Food Research* 2018, 62(16):e1800313. doi: 10.1002/mnfr.201800313
10. Sanchez-Tapia, M., Aguilar-López, M., **Perez-Cruz, C.**, Pichardo-Ontiveros, E., Wang, M., Donovan, S. Tovar, A., and N. Torres. Nopal (*Opuntia ficus indica*) protects from metabolic endotoxemia by modifying gut microbiota in obese rats fed high fat/sucrose diet. *Scientific Reports*, 2017. 7, 1-16
11. Rodriguez-Callejas, J., Fuchs, E., **Perez-Cruz, C***. Evidence of tau hyperphosphorylation and dystrophic microglia in common marmoset. *Frontiers Aging Neuroscience*. 2016. doi: 10.3389/fnagi.2016.00315
12. Avila-Nava, A., Noriega, L., Tovar, A., Granados, O., **Perez-Cruz, C.**, Pedraza-Chaveri, J., Torres, N. Consumption of a pre-hispanic Mexican diet decreases metabolic and cognitive abnormalities and gut microbiota dysbiosis caused by a sucrose-enriched high fat diet in rats. *Mol. Nutr. Food Res*. 2016. 00, 1-13.
13. **Claudia Perez-Cruz*** and Sofía Díaz-Miranda, Editorial: Nutrition and Prevention of Alzheimer's disease. *Frontiers in Aging Neuroscience*. *Front Aging Neurosci*. 2015; 7: 170. doi: 10.3389/fnagi.201501023

14. **Perez-Cruz C***, Nolte MW, van Gaalen MM, Rustay NR, Termont A, Tanghe A, Kirchhoff F, Ebert U. Reduced spine density in specific regions of CA1 pyramidal neurons in two transgenic mouse models of Alzheimer's Disease. *Journal of Neuroscience*. 2011. 31(10):3926-34.
15. Heinz Hillen, Stefan Barghorn, Andreas Striebinger, Boris Labkovsky, Reinhold Müller, Volker Nimmrich, Marc W. Nolte, **Claudia Perez-Cruz**, Ingrid van der Auwera, Fred van Leuven, Marcel van Gaalen, Anton Y. Beshpalov, Hans Schoemaker, James P. Sullivan, Ulrich Ebert. Generation and therapeutic efficacy of highly oligomer-specific A β antibodies. *Journal of Neurosciences*. 2010. (31):10369-79

BOOKS AND BOOK CHAPTERS

1. Morales-Alvarado, M., Cuervo-Zanatta, D., Chacón, M., Sánchez Valle, V., **Perez-Cruz, C.** The Gut Microbiota and Alzheimer's Disease. (2022). In: "Diet and Nutrition in Neurological Disorders" edited by Prof. V. Patel, published by Elsevier Science Publishers, The Netherlands (in press).
2. Cuervo-Zanatta D, Perez-Grijalva B, González-Magaña E, Hernandez-Acosta J, Murugesan S, García-Mena J, **Perez-Cruz C.** Modulation of the microbiota-gut-brain axis by bioactive food, prebiotics, and probiotics decelerates the course of Alzheimer's disease. (2021), In: "Studies in Natural Products Chemistry" (Bioactive Natural Products), Vol. 70, p.p 51-86, edited by Prof. Atta-ur-Rahman, FRS, published by Elsevier Science Publishers, The Netherlands.
3. **Claudia Perez-Cruz*** and Sofía Díaz-Miranda, Eds. "Nutrición y prevención de la enfermedad de Alzheimer" (2015). E-book Frontiers Media SA. ISBN: 978-2-88919-719-4
4. Burnham, W.M., Lonsdale, D., Shahzamani A., **Perez-Cruz, C.**, Edwards, H.E. (2005) "Development of new anticonvulsants using the kindling model". In: Corcoran, M.E., Moshe, S.L. (Eds.), *Kindling 6*, Plenum Press, New York, USA. pp. 325-332. ISBN: 0-387-24380-1

TEACHING

-Full Time Professor at the Graduate Program CONACyT- Pharmacological Science.

MENTORING THESIS DISERTATION

Ph.D: 4 graduate, 2 in process. Master in Science: 12 graduated, 2 in process.