



## **Dra Floria Pancetti**

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Profesora Titular,  
Depto. Ciencias Biomédicas, FAMED-UCN  
Profesora del Claustro,  
Doctorado Ciencias Biomédicas, FAMED-UCN.



- Bioquímica, Universidad Católica de Valparaíso, 1992.
- Doctora en Ciencias Biológicas, Universidad Autónoma de Barcelona, 1999.
- Post-doctorado, Laboratorio Dr. Jorge E. Allende, Facultad de Medicina Universidad de Chile, Laboratorio Dra. Ursula Wyneken, Facultad de Medicina, Universidad de Los Andes.

### ***Líneas de investigación:***

Efectos de los metales pesados y plaguicidas en la salud humana. Epidemiología ambiental.  
Mecanismos de neurotoxicidad y toxicidad reproductiva en modelos animales.

Publicaciones (últimos 10 años):

1. Sandoval R, González A, Caviedes A, Pancetti F , Smalla KH, Kaehne T, Michea L, Gundelfinger ED, Wyneken U. (2011) “Homeostatic NMDA receptor down-regulation via brain derived neurotrophic factor and nitric oxide-dependent signalling in cortical but not in hippocampal neurons”. *Journal of Neurochemistry*, 118(5):760-772.
2. Rozas C, Loyola S, Ugarte G, Zeise ML, Reyes-Parada M, Pancetti F , Rojas P, Morales B. (2012) “Acutely applied MDMA enhances long-term potentiation in rat hippocampus involving D1/D5 and 5-HT2 receptors through a polysynaptic mechanism”. *European Neuropsychopharmacology*. 22(8):584-95. doi: 10.1016/j.euroneuro.2011.11.010.
3. Sandoval, R.; Navarro, S.; García-Rojo, G.; Calderón, R.; Pedrero, A.; Sandoval, S.; Wyneken, U. and Pancetti, F. (2012) “Synaptic localization of acylpeptide hydrolase in adult rat telencephalon” 27;520(1):98-103. doi: 10.1016/j.neulet.2012.05.041.
4. Corral S, Saez D, Lam G, Lillo P, Sandoval R, Lancellotti D, Radon K, Zuñiga L, Moraga D, Pancetti F. (2013) “Neurological and neuropsychological deterioration in artisanal gold miners from the town of Andacollo, Chile”. *Toxicol Env. Chem*. 95:344-358.



5. Cardona D, López-Granero C, Cañadas F, Llorens J, Flores P, Pancetti F , Sánchez-Santed F. (2013) “Dose-dependent regional brain acetylcholinesterase and acylpeptide hydrolase inhibition without cell death after chlorpyrifos administration”. *Journal of Toxicological Sciences*, 38: 193-203
6. Rubio FJ, Ampuero E, Sandoval R, Toledo J, Pancetti F , Wyneken U. (2013) “Long-term fluoxetine treatment induces input-specific LTP and LTD impairment and structural plasticity in the CA1 hippocampal subfield”. *Frontiers in Cellular Neurosciences*. 7:66, doi: 10.3389/fncel.2013.00066.
7. Espinoza JA, Bohmwald K, Céspedes PF, Gómez RS, Riquelme SA, Cortés CM, Valenzuela JA, Sandoval RA, Pancetti FC , Bueno SM, Riedel CA, Kalergis AM. (2013) “Impaired learning resulting from respiratory syncytial virus infection”. *Proceedings of the National Academy of Sciences of USA*. 110(22):9112-9117, doi: 10.1073/pnas.1217508110.
8. Ramírez-Santana M., Zúñiga L., Corral S., Sandoval R., Scheepers TJ P., Van der Velden K., Roeleveld N. and Pancetti F. (2015). “Assessing biomarkers and neuropsychological outcomes in rural populations exposed to organophosphate pesticides in Chile—study design and protocol”. *BMC Public Health*, 15:116, doi: 10.1186/s12889-015-1463-5.
9. Zúñiga-Venegas L., Aquea G., Taborda M., Bernal .and Pancetti, F. (2015) “Determination of the genotype and phenotype of serum paraoxonase 1 (PON1) status in a group of agricultural and nonagricultural workers in the Coquimbo Region, Chile”. *Journal of Toxicology and Environmental Health Part A*, 78: 357-368, doi: 10.1080/15287394.2014.982843.
10. Corral SA, de Angel V, Salas N, Zúñiga-Venegas L, Gaspar PA, Pancetti F. (2017) “Cognitive impairment in agricultural workers and nearby residents exposed to pesticides in the Coquimbo Region of Chile”. *Neurotoxicology and Teratology* 62:13-19, doi: 10.1016/j.ntt.2017.05.003.
11. García-Rojo G, Gámiz F, Ampuero E, Rojas-Espina D, Sandoval R, Rozas C, Morales B, Wyneken U, Pancetti F. (2017) “In vivo sub-chronic treatment with dichlorvos in young rats promotes synaptic plasticity and learning by a mechanism that involves acylpeptide hydrolase instead of acetylcholinesterase inhibition. Correlation with endogenous  $\beta$  -amyloid levels”. *Frontiers in Pharmacology* 8:483, doi: 10.3389/fphar.2017.00483.



12. Ramírez-Santana M., Farías-Gómez C., Zúñiga-Venegas L., Sandoval R., Roeleveld N., Van der Velden K., Scheepers PTJ, Pancetti F. (2018) “Biomonitoring of blood cholinesterases and acylpeptide hydrolase activities in rural inhabitants exposed to pesticides in the Coquimbo Region of Chile”. *PloS One* 13(5): e0196084, doi: 10.1371/journal.pone.0196084.
13. Carvallo C, Contreras D, Ugarte G, Delgado R, Pancetti F , Rozas C, Piña R, Constandil L, Zeise ML, Morales B. (2018) “Single and Repeated Administration of Methylphenidate Modulates Synaptic Plasticity in Opposite Directions via Insertion of AMPA Receptors in Rat Hippocampal Neurons”. *Frontiers in Pharmacology* 9:1485, doi: 10.3389/fphar.2018.01485.
14. Ramírez-Santana M, Zúñiga-Venegas L, Corral S, Roeleveld N, Groenewoud H, van der Velden K, Scheepers PTJ, Pancetti F. (2020) “Association between cholinesterase's inhibition and cognitive impairment: A basis for prevention policies of environmental pollution by organophosphate and carbamate pesticides in Chile”. *Environmental Research* 186:109539, doi: 10.1016/j.envres.2020.109539.
15. Zúñiga-Venegas L, Saracini C, Pancetti F , Muñoz-Quezada MT, Lucero B, Foerster C, Cortés S. (2020) [Pesticide exposure in Chile and population health: urgency for decision making]. *Gaceta Sanitaria* 16:S0213-9111(20)30129-1, doi: 10.1016/j.gaceta.2020.04.020.
16. Ramírez-Santana M, Zúñiga-Venegas L, Corral S, Roeleveld N, Groenewoud H, Van der Velden K, Scheepers PTJ, Pancetti F. (2020) “Reduced neurobehavioral functioning in agricultural workers and rural inhabitants exposed to pesticides in northern Chile and its association with blood biomarkers inhibition”. *Environmental Health* 19(1):84, doi: 10.1186/s12940-020-00634-6.
17. Cortés S, Zúñiga-Venegas L, Pancetti F, Covarrubias A, Ramírez-Santana M, Adaros H, Muñoz L. (2021) “A positive relationship between exposure to heavy metals and development of chronic diseases: A case study from Chile”. *Int J Environ Res Public Health*. 18(4):1419. doi: 10.3390/ijerph18041419.
18. Foerster C, Zúñiga-Venegas L, Enríquez P, Rojas J, Zamora C, Muñoz X, Pancetti F, Muñoz-Quezada MT, Lucero B, Saracini C, Salas C, Cortés S. (2021) “Levels of polychlorinated dibenzo- p-dioxins/furans (PCDD/Fs) and dioxin-like polychlorinated biphenyls (DL-PCBs) in human breast milk in Chile: A pilot study”. *Int J Environ Res Public Health*. 18(9):4825. doi: 10.3390/ijerph18094825.
19. Zúñiga-Venegas L, Pancetti FC. (2022) “DNA damage in a Chilean population exposed to pesticides and its association with PON1 (Q192R and L55M) susceptibility biomarker”. *Environ Mol Mutagen*. 63(4):215-226. doi: 10.1002/em.22485. PMID: 35522182.



20. Covarrubias AA, De la Fuente-Ortega E, Rossi G, Cocca E, Rossi M, Palmieri G, Pancetti FC. (2022) “Differential Distribution and Activity Profile of Acylpeptide Hydrolase in the Rat Seminiferous Epithelium”. *Biomedicines*. 10(7):1591. doi: 10.3390/biomedicines10071591.

**Proyectos (últimos 10 años):**

Investigadora responsable : “Development of a high-sensitivity erythrocyte biomarker for the diagnosis of cognitive impairment associated with longterm exposure to organophosphate pesticides”. Fondef D09I1057-ANID 2011-2014.

Patrocinante: “Relationship between the status paraoxonase-1 and oxidative damage to DNA induced by organophosphates pesticides in agricultural workers in Coquimbo Region”. Fondecyt 3120231-ANID for postdoctoral training, Dr. Liliana Zúñiga, 2011-2013

Co-Investigadora: “Autoantibodies isolated from the serum of autistic children impair in vitro models of synaptic plasticity: role of the voltage dependent anion channel (VDAC), hexoquinase-I and myelin basic protein autoantibodies in this mechanism”. Fondecyt 1130451-ANID, 2013-2017.

Investigadora responsable: “Role of acylpeptide hydrolase in synaptic function during the ontogeny of Sprague-Dawley rats. Involvement of endogenous beta-amyloid peptide levels and alpha 7 nicotinic receptors in this mechanism”. Fondecyt 1140856-ANID, 2014-2018.

Patrocinante: “Re-evaluation of dichlorvos as a drug for cognitive enhancement: behavioral studies during the ontogeny of Sprague-Dawley rats”. Fondecyt 3140437-ANID for postdoctoral training, Dr. Fernando Gámiz, 2013-2016.

Patrocinante: “Role of acylpeptide hydrolase in the spermatotoxicity induced by dichlorvos”. Fondecyt 3170325-ANID for postdoctoral training, Dr. Alejandra Covarrubias, 2017-2019 (extended).

Investigadora: “Collaboration network for the study of chronic diseases in agricultural workers”. REDES 180078. PCI-ANID. 2019-2020.

Directora: “Uso consciente de agroquímicos en Pan de Azúcar”. FIC BIP 40014501 Región de Coquimbo. 2020-2022.

Co-Investigadora: “Validation of instruments for assessing exposure to organophosphate pesticides associated with the Chilean epidemiological surveillance system”. Fonis SA19I0148-ANID, 2021-2023.



**Links páginas web de productividad:**

<https://www.researchgate.net/profile/Floria-Pancetti>

<https://scholar.google.cl/citations?user=zhfLxpoAAAAJ&hl=en>

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