**List of Publications:**

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| 1. ***Alzheimer's disease-like pathology triggered by Porphyromonas gingivalis in wild type rats is serotype dependent.*** Díaz-Zúñiga J, More J, Melgar-Rodríguez S, M Jiménez-Unión M, Villalobos-Ochard F., Frontiers iers in Immunology 11, 2897 |

1. ***Nicotinamide, a Poly [ADP-ribose] Polymerase 1 (PARP-1) Inhibitor, as an Adjunctive Therapy for the Treatment of Alzheimer's Disease.*** Salech F, Ponce D, Paula-Lima A, SanMartin CD and Behrens MI. (2020)Frontiers in Aging Neuroscience, in press.
2. ***Astaxanthin Counteracts Excitotoxicity and Reduces the Ensuing Increases in Calcium Levels and Mitochondrial Reactive Oxygen Species Generation.*** (2020) García F, Lobos P, Ponce A, Cataldo K, Meza D, Farías P, Estay C, Oyarzun-Ampuero F, Herrera-Molina R,Paula-Lima A, Ardiles ÁO, Hidalgo C, Adasme T, Muñoz P. Marine Drugs. 18(6):335. doi:10.3390/md18060335
3. ***Redox modifications in synaptic components as biomarkers of cognitive status, in brain aging and disease.*** (2020) Muñoz P, Ardiles ÁO, Pérez-Espinosa B, Núñez-Espinosa C,Paula-Lima A, González-Billault C, Espinosa-Parrilla Y. Mechanisms of Ageing and Development. 189:111250. doi:10.1016/j.mad.2020.111250
4. ***Differential navigational strategies during spatial learning in a new modified version of the Oasis maze.*** (2020) Concha-Miranda M, More J, Grinspun N, Sanchez C, Paula-Lima A, Valdés JL. Behavioural Brain Research. 385:112555. doi:10.1016/j.bbr.2020.112555
5. ***Latin America: Reduced S & T Investment Puts Sustainable Development at Risk.*** Bolaños-Villegas P, Cabrerizo F, Brown F , Zancan P, Barrera JF, González-Muñoz PA, Grecco H, Kalergis A, Paula-Lima A, Vargas-Balda R, Gittens R, López Vergés S, Wilson C. (2020) ScienceOpen Preprints. Doi: 10.14293/S2199-1006.1.SOR-.PPBPKUJ.v3
6. ***Serotype b of Aggregatibacter actinomycetemcomitans triggers pro inflammatory responses and amyloid beta secretion in hippocampal cells: a novel link between periodontitis and Alzheimer's disease?*** (2019)Díaz-Zúñiga J, Muñoz Y, Melgar-Rodríguez S, More J, Bruna B, Lobos P, Monasterio G, Vernal R, Paula-Lima A**.** Journal of Oral Microbiology. doi: 10.1080/20002297.2019.1586423
7. ***N-Acetylcysteine prevents the spatial memory deficits and the redox-dependent RyR2 decrease displayed by an Alzheimer's disease rat model.*** (2018)More J, Galusso, N. Veloso, P., Montecinos L, Filkenstein, JP, Sanchez G, Bull, R., Valdes JL, Hidalgo C & Paula-Lima A. Frontiers in Aging Neurosciences. https://doi.org/10.3389/fnagi.2018.00399
8. ***The Signaling Pathways Underlying BDNF-Induced Nrf2 Hippocampal Nuclear Translocation Involve R.O.S., RyR-Mediated Ca2+ Signals, ERK and PI3K.*** (2018)Bruna, B., Lobos, P, Herrera-Molina, R; Hidalgo, C; Paula-Lima, A; Adasme, T. Biochemical and Biophysical Research Communications. 505(1):201-207. doi: 10.1016/j.bbrc.2018.09.080
9. ***Calcium release mediated by redox-sensitive RyR2 channels has a central role in hippocampal structural plasticity and spatial memory.*** (2018)More J, Bruna B, Lobos P, Galaz JL, Figueroa P, Namias S, Sánchez G, Barrientos GC, Valdés JL1, Paula-Lima AC, Hidalgo C, Adasme T. Antioxidants & Redox Signaling. 29(12):1125-1146. doi: 10.1089/ars.2017.7277
10. ***Reactive oxygen species released from astrocytes treated with amyloid beta oligomers elicit neuronal calcium signals that decrease phospho-Ser727-STAT3 nuclear content.*** (2018)Muñoz Y, Paula-Lima AC\* and Núñez MT\*. Free Radical Biology & Medicine. 117:132-144 \*corresponding authors. doi: 10.1016/j.freeradbiomed.2018.01.006
11. ***RyR2-mediated calcium release and mitochondrial R.O.S. generation partake in the synaptic dysfunction caused by amyloid beta peptide oligomers.*** (2017) San Martin C, Veloso P, Adasme T, Bruna B. Lobos P, Galaz G., García A, Hartel S, Hidalgo C and Paula-Lima A. Frontiers in Molecular Neurosciences. 25;10:115. doi: 10.3389/fnmol.2017.00115
12. ***Astaxanthin Protects Primary Hippocampal Neurons against Noxious Effects of Aβ-Oligomers.*** (2016)Lobos P., Bruna B., Cordova A., Barattini P., J Galáz JL, Adasme T, Hidalgo C, Muñoz P, Paula-Lima A.Neural Plasticity. 2016:3456783. doi: 10.1155/2016/3456783
13. ***H2O2 activates Matrix Metalloproteinases through Nuclear Factor Kappa B Pathway and Ca2+ signals in human Periodontal Fibroblasts.*** *(2015)*Osorio C., Cavalla F., Paula-Lima A.C., Díaz-Araya G., Vernal R., Ahumada P., Gamonal J., Hernández M. Journal of Periodontal Research; 50(6):798-806. doi: 10.1111/jre.12267.
14. ***Inhibitory ryanodine prevents ryanodine receptor-mediated Ca(2+) release without affecting endoplasmic reticulum Ca(2+) content in primary hippocampal neurons.*** (2015)Adasme T,Paula-Lima A, Hidalgo C. Biochemical and Biophysical Research Communications. 458(1):57-62. doi: 10.1016/j.bbrc.2015.01.065
15. ***Ryanodine receptor-mediated Ca2+ release underlies iron-induced mitochondrial fission and stimulates mitochondrial Ca(2+) uptake in primary hippocampal neurons.*** (2014) SanMartín CD\*, Paula-Lima A\*, García A, Barattini P, Hartel S, Núñez MT, Hidalgo C.Frontiers in Molecular Neuroscience. 11:7-13. \*These authors contributed equally to this work. doi: 10.3389/fnmol.2014.0001
16. ***Contribution of Ca2+ release channels to hippocampal synaptic plasticity and spatial memory.*** Potential redox modulation. (2014) Paula-Lima A, Adasme T, Hidalgo C. Antioxidants & Redox Signaling. 21(6):892-914. doi: 10.1089/ars.2013.5796
17. ***Amyloid β-peptide oligomers, ryanodine receptor-mediated Ca2+ release, and Wnt-5a/Ca2+ signaling: opposing roles in neuronal mitochondrial dynamics?*** (2013) Paula-Lima A\*, Hidalgo C.Frontiers in Cellular Neuroscience. 7:120. \*Corresponding author. doi: 10.3389/fncel.2013.00120.
18. ***Deregulation of excitatory neurotransmission underlying synapse failure in Alzheimer's disease.*** Review. (2013) Paula-Lima A\*, Brito-Moreira J, Ferreira ST. The Journal of Neurochemistry. 126:191–202. \*Corresponding author. doi: 10.1111/jnc.12304
19. ***Sub-lethal levels of amyloid β-peptide oligomers decrease non-transferrin-bound iron uptake and do not potentiate iron toxicity in primary hippocampal neurons.*** (2012) San Martin CD, Paula-Lima AC, Hidalgo C, Nuñez T. BioMetals. 25(4)805-13. doi: 10.1007/s10534-012-9545-7.
20. ***The antioxidant N-Acetyl-Cysteine prevents the mitochondrial fragmentation induced by soluble Amyloid-β peptide oligomers.*** (2012) San Martin C.D., Adasme T., Hidalgo C., Paula-Lima A. Neurodegenerative Diseases. 10(1-4):34-7. doi: 10.1159/000334901
21. ***Amyloid-β oligomers induce differential gene expression in adult human brain slices.*** (2012) Sebollela A., Freitas-Correa L., Oliveira F.F., Paula-Lima A, Cardoso L, Torres C, Leon S, Marcondes J, Carraro DM, Brentani H, De Felice FG, Ferreira ST. Journal of Biological Chemistry. 287(10):7436-45. doi: 10.1074/jbc.M111.298471
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24. ***Aβ Oligomers Induce Glutamate Release from Hippocampal Neurons.*** (2011) Brito-Moreira J.\*, Paula-Lima A.C\*., Bomfim T.R., Oliveira F.F., Sepúlveda F.J., De Mello FG, Aguayo LG, Panizzutti RA, Ferreira ST.#. Current Alzheimer Research. 8(5):552-62. \*These authors contributed equally to this work. doi: 10.2174/156720511796391917
25. ***Human apolipoprotein A-I binds amyloid-β and prevents Aβ-induced neurotoxicity.*** (2009) Paula-Lima AC, Tricerri MA, Brito-Moreira J, Bomfim TR, Oliveira FF, Magdesian MH, Grinberg LT, Panizzutti RA, Ferreira ST. International Journal of Biochemistry and Cell Biology. 41(6):1361-70. doi: 10.1016/j.biocel.2008.12.003
26. ***Small-molecule aggregation inhibitors reduce excess amyloid in a trisomy 16 mouse cortical cell line.*** (2008) Paula-Lima A., Arriagada C, Cardenas AM, Toro R, Caviedes R, Ferreira ST, Caviedes P. Biological Research. 41: 129-136. 2008;41(2):129-36
27. ***Activation of GABAA receptors by taurine and muscimol blocks the neurotoxicity of beta-amyloid in hippocampal and cortical neurons.*** (2005) Paula-Lima A, DeFelice FG, Brito-Moreira J, Ferreira ST. Neuropharmacolgy. 49: 1140-1148. doi: 10.1016/j.neuropharm.2005.06.015
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