

PERSONAL INFORMATION

Antonio Leo



Affiliation

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Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input checked="" type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

From 16/03/2021 Researcher in Pharmacology at School of Medicine, University of Catanzaro

EDUCATION AND TRAINING

July 2022 School of Specialization in Pharmacology at the University of Catanzaro

March 2015 Doctor of Philosophy in Pharmaceutical Sciences, at the School of Pharmacy, University of Catanzaro

November 2011 Degree, summa cum laude, in Pharmacy at the University of Catanzaro

WORK ACTIVITIES

Awards Ippocrate Awards, 2020 "Fondazione Caduceo"
Research Fellowship POR Calabria FSE 2007/2013

Editorial activity Book chapter: mTOR signalling in epilepsy and epileptogenesis: preclinical and clinical studies. In Molecules to Medicine with mTOR: Translating Critical Pathways into Novel Therapeutic Strategies. Elsevier. doi: 10.1016/B978-0-12-802733-2.00006-2.
co-Guest Editor for Current Neuropharmacology, co-Guest Editor Frontiers in Pharmacology, Review editor Frontiers in Clinical Diabetes and Healthcare

Invited presentations

2022 Chairman at the 15th World Congress on Inflammation (WCI2022), June 5th-8th, Roma. Session: New therapeutic approaches to control inflammation

2021 Speaker at the 40th National Congress of the Italian Society of Pharmacology (SIF), "Cannabidiol and other phytocannabinoids: the long road of the others"

2021 Speaker at the 5th World Conference on Pcdh19-Scientific Research Status and Therapeutic Perspectives held in Roma: "Targeting the Gut Microbiota to Treat Epilepsy".

2019 Speaker at the 39th National Congress of the Italian Society of Pharmacology (SIF), held in Florence: "Cannabinoids, cannabidiol and experimental models of epilepsy".

2019	Speaker at the national conference of Italian Society of Drug Addiction: "The use of cannabidiol in the treatment of epilepsy".
2018	Speaker at the 2nd Workshop Internazionale Epiumg: "Antiepileptic drugs: how to study predictive biomarkers of response".
2016	Speaker at the 12th European Congress On Epileptology, Prague, Czech Republic: " <i>Protective effects of fingolimod on epileptogenesis and neuropsychiatric comorbidities in WAG/Rij rats, a genetic animal model of absence epilepsy and depressive-like behaviour</i> ".
2013	Speaker at the 36 th National Congress of the Italian Society of Pharmacology (SIF), held in Turin, "Huperzine A reduces neuronal loss and enhances brain expression of nerve growth factor and high-affinity receptor TrkA, and reverses memory and cognitive deficits, in rats with excitotoxic lesion of nucleus basalis magnocellularis".
2012	Speaker at the National Congress of the Italian Society of Pharmacognosy (Siphar): "Hypericin modifies brain Theta activity and produces antidepressant-like effects: study using qEEG in an experimental model of depression".
Grants	Principal Investigator (Bando Ricerca Finalizzata 2016: GR-2016-02364748): "Study of active pharmacovigilance to evaluate safety, prescribing appropriateness, and adherence to therapy associated with biologics used in Dermatology, Rheumatology and Gastroenterology Reference centers of Calabria Region". Co-Principal Investigator for the research project supported by GW Pharmaceuticals Cambridge-UK "Evaluation of phytocannabinoid effects on absence seizures and psychiatric/neurological comorbidity in the genetic WAG/Rij rat model" Co-Principal Investigator for the research project supported by EISAI " Role of AMPA receptors and their modulators in a validated model of Epilepsy and Alzheimer's disease"

ADDITIONAL INFORMATION

Publications 55 publications in peer-review journals
 Total impact factor (IF): 255; average IF: 4,9
 total number of citations: 1417
 H index: 21

1. De Sarro, C., Tallarico, M., Pisano, M., Gallelli, L., Citraro, R., De Sarro, G., **Leo, A.** Liraglutide chronic treatment prevents development of tolerance to antiseizure effects of diazepam in genetically epilepsy prone rats. (2022) European Journal of Pharmacology.
2. Tallarico, M.; **Leo, A.**; Guarnieri, L.; Zito, M.C.; De Caro, C.; Nicoletti, F.; Russo, E.; Constanti, A.; De Sarro, G.; Citraro, R., N-acetylcysteine aggravates seizures while improving depressive-like and cognitive impairment comorbidities in the WAG/Rij rat model of absence epilepsy. Mol. Neurobiol., **2022**,. <https://doi.org/10.1007/S12035-021-02720-3>.
3. Dastoli, S.; Nisticò, S.P.; Morrone, P.; Patruno, C.; **Leo, A.**; Citraro, R.; Gallelli, L.; Russo, E.; De Sarro, G.; Bennardo, L., Colchicine in Managing Skin Conditions: A Systematic Review. Pharmaceutics., **2022**, (14). <https://doi.org/10.3390/pharmaceutics14020294>
4. Zaccara, G.; Lattanzi, S.; **Leo, A.**; Russo, E., Critical appraisal of cenobamate as adjunctive treatment of focal seizures in adults. Neuropsychiatr. Dis. Treat., **2021**, (17) 3447–3457. <https://doi.org/10.2147/NDT.S281490>.

5. Pisano, A.; Iannone, L.F.; **Leo, A.**; Russo, E.; Coppolino, G.; Bolignano, D., Renal denervation for resistant hypertension. *Cochrane Database Syst. Rev.*, **2021**, (2021). <https://doi.org/10.1002/14651858.CD011499.pub3>.
6. **Leo A.**, De Caro C., Mainardi P., Tallarico M., Nesci V., Marascio N., Striano P., Russo E., Constanti A., De Sarro G., Citraro R. Increased efficacy of combining prebiotic and postbiotic in mouse models relevant to autism and depression. *Neuropharmacology*. 2021. Volume 198, doi: 10.1016/j.neuropharm.2021.108782
7. Citraro R, Lembo F, De Caro C, Tallarico M, Coretti L, Iannone LF, **Leo A**, Palumbo D, Cuomo M, Buommino E, Nesci V, Marascio N, Iannone M, Quirino A, Russo R, Calignano A, Constanti A, Russo E, De Sarro G. First evidence of altered microbiota and intestinal damage and their link to absence epilepsy in a genetic animal model, the WAG/Rij rat. *Epilepsia*. 2021 Jan 11. doi: 10.1111/epi.16813. PMID: 33428780.
8. Mancuso E, Mannino G. C., Fuoco A, **Leo A**, Citraro R, Averta C, Spiga R, Russo E, De Sarro G, Andreozzi F, & Sesti G. (2020). HDL (High-Density Lipoprotein) and ApoA-1 (Apolipoprotein A-1) Potentially Modulate Pancreatic α -Cell Glucagon Secretion. *Arteriosclerosis, thrombosis, and vascular biology*, 2020 Dec;40(12):2941-2952. doi: 10.1161/ATVBAHA.120.314640.
9. Nesci V, Russo E, Arcidiacono B, Citraro R, Tallarico M, Constanti A, Brunetti A, De Sarro G, **Leo A**. Metabolic Alterations Predispose to Seizure Development in High-Fat Diet-Treated Mice: the Role of Metformin. *Molecular Neurobiology*. 2020 Nov;57(11):4778-4789. doi: 10.1007/s12035-020-02062-6. PMID: 32785826.
10. **Leo A**, Nesci V, Tallarico M, Amodio N, Gallo Cantafio EM, De Sarro G, Constanti A, Russo E, Citraro R. IL-6 Receptor Blockade by Tocilizumab Has Anti-absence and Anti-epileptogenic Effects in the WAG/Rij Rat Model of Absence Epilepsy. *Neurotherapeutics*. 2020 Jul 17. doi: 10.1007/s13311-020-00893-8. PMID: 32681356.
11. Calzetta L, Pistocchini E, **Leo A**, Roncada P, Ritondo BL, Palma E, di Cave D, Britti D. Anthelmintic medicinal plants in veterinary ethnopharmacology: A network meta-analysis following the PRISMA-P and PROSPERO recommendations. *Heliyon*. 2020 Feb 4;6(2):e03256. doi: 10.1016/j.heliyon.2020.e03256.
12. Gallelli G, Cione E, Serra R, **Leo A**, Citraro R, Matricardi P, Di Meo C, Bisceglia F, Caroleo MC, Basile S, Gallelli L. Nano-hydrogel embedded with quercetin and oleic acid as a new formulation in the treatment of diabetic foot ulcer: A pilot study. *Int Wound J*. 2020 Apr;17(2):485-490. doi:10.1111/iwj.13299.
13. Cassano V, **Leo A**, Tallarico M, Nesci V, Cimellaro A, Fiorentino TV, Citraro R, Hribal ML, De Sarro G, Perticone F, Sesti G, Russo E, Sciacqua A. Metabolic and Cognitive Effects of Ranolazine in Type 2 Diabetes Mellitus: Data from an in vivo Model. *Nutrients*. 2020 Jan 31;12(2). pii: E382. doi: 10.3390/nu12020382.
14. Citraro, R., Iannone, M., **Leo, A.**, De Caro, C., Nesci, V., Tallarico, M., Abdalla, K., Palma, E., Arturi, F., De Sarro, G., Constanti, A. And Russo, E., 2019. Evaluation of the effects of liraglutide on the development of epilepsy and behavioural alterations in two animal models of epileptogenesis. *Brain research bulletin*, 153, pp. 133-142.
15. De Caro, C., **Leo, A.**, Nesci, V., Ghelardini, C., Di Cesare Mannelli, L., Striano, P., Avagliano, C., Calignano, A., Mainardi, P., Constanti, A., Citraro, R., De Sarro, G. And Russo, E., 2019. Intestinal inflammation increases convulsant activity and reduces antiepileptic drug efficacy in a mouse model of epilepsy. *Scientific reports*, 9(1), pp. 13983
16. **Leo A.**, De Caro, C., Nesci, V., Tallarico, M., De Sarro, G., Russo, E. And Citraro, R., 2019. Modeling poststroke epilepsy and preclinical development of drugs for poststroke epilepsy. *Epilepsy and Behavior*.
17. Carullo G., Governa P., **Leo A.**, Gallelli L., Citraro R., Cione E., Caroleo M.C., Biagi, M., Aiello F. And Manetti F., 2019. Quercetin-3-Oleate Contributes to Skin Wound Healing Targeting FFA1/GPR40. *Chemistry Select*, 4(29), pp. 8429-8433.
18. Citraro R, **Leo A**, De Caro C, Nesci V, Gallo Cantafio ME, Amodio N, Mattace Raso G, Lama A, Russo R, Calignano A, Tallarico M, Russo E, De Sarro G. Effects of Histone Deacetylase Inhibitors on the Development of Epilepsy and Psychiatric Comorbidity in WAG/Rij Rats. *Mol Neurobiol*. 2019 Jul 31. doi: 10.1007/s12035-019-01712-8.

19. **Leo A**, Citraro R, Tallarico M, Iannone M, Fedosova E, Nesci V, De Sarro G, Sarkisova K, Russo E. Cognitive impairment in the WAG/Rij rat absence model is secondary to absence seizures and depressive-like behavior. *Prog Neuro-Psychopharmacology Biol Psychiatry* 2019;109652.
20. **Leo A**, De Caro C, Nesci V, Palma E, Tallarico M, Iannone M, Constanti A, De Sarro G, Russo E, Citraro R, 2019. Antiepileptogenic effects of Ethosuximide and Levetiracetam in WAG/Rij rats are only temporary. *Pharmacol. Reports.*
21. Citraro R, De Sarro C, **Leo A**, Donato di Paola E, Palma E, Russo E, De Sarro G. Perampanel chronic treatment does not induce tolerance and decreases tolerance to clobazam in genetically epilepsy prone rats. *Epilepsy Res.* 2018 Oct;146:94-102. doi: 10.1016/j.epilepsyres.2018.07.018. Epub 2018 Aug 1. PubMed PMID: 30092489.
22. Sueri C, Gasparini S, Balestrini S, Labate A, Gambardella A, Russo E, **Leo A**, Casarotto S, Pittau F, Trimboli M, Cianci V, Ascoli M, Cavalli SM, Ferrigno G, Aguglia U, Ferlazzo E. Diagnostic Biomarkers of Epilepsy. *Curr Pharm Biotechnol.* 2018;19(6):440-450. doi: 10.2174/138920101966180713095251. PubMed PMID:30003857."
23. **Leo A**, Giovannini G, Russo E, Meletti S. The role of AMPA receptors and their antagonists in status epilepticus. *Epilepsia.* 2018 Jun;59(6):1098-1108. doi: 10.1111/epi.14082. Epub 2018 Apr 17. PubMed PMID: 29663350."
24. Brigo F, **Leo A**, Russo E, Striano P, Belcastro V. Intravenous carbamazepine for the treatment of epilepsy. *Expert Opin Pharmacother.* 2018 May;19(7):743-747. doi:10.1080/14656566.2018.1462338. Epub 2018 Apr 12. PubMed PMID: 29648925."
25. **Leo, A.**, De Caro, C., Nesci, V., Tallarico, M., Mangano, G., Palma, E., Iannone, M., De Sarro, G., Citraro, R., Russo, E. "Special Issue on Epilepsy & Comorbidities" WAG/Rij rat model: A resource for the pharmacology of epileptogenesis and related neurological/psychiatric comorbidities (2018). *Neuroscience Research Notes*, 1 (3), pp. 18-34.
26. De Caro C, **Leo A**, Citraro R, De Sarro C, Russo R, et al. The potential role of cannabinoids in epilepsy treatment. *Expert Rev Neurother.* 2017 Nov;17(11):1069-1079. PubMed PMID: 28845714.
27. Citraro R, **Leo A**, Constanti A, Russo E. Role of histone deacetylases (HDACs) in epilepsy and epileptogenesis. *Curr Pharm Des.* 2017 Oct 24; PubMed PMID: 29076408.
28. **Leo A**, Citraro R, Amodio N, De Sarro C, Gallo Cantafio ME, et al. Fingolimod Exerts only Temporary Antiepileptogenic Effects but Longer-Lasting Positive Effects on Behavior in the WAG/Rij Rat Absence Epilepsy Model. *Neurotherapeutics.* 2017 Jun 26; PubMed PMID: 28653281.
29. Leporini C, Marrazzo G, Mumoli L, Esposito S, Gallelli L, et al. Adverse drug reactions reporting in Calabria (Southern Italy) in the four-year period 2011-2014: impact of a regional pharmacovigilance project in light of the new European Legislation. *Expert Opin Drug Saf.* 2017 May;16(5):515-522.
30. Russo E, **Leo A**, Scicchitano F, Donato A, Ferlazzo E, et al. Cerebral small vessel disease predisposes to temporal lobe epilepsy in spontaneously hypertensive rats. *Brain Res Bull.* 2017 Apr;130:245-250. PubMed PMID: 28214547.
31. Palleria C, **Leo A**, Andreozzi F, Citraro R, Iannone M, et al. Liraglutide prevents cognitive decline in a rat model of streptozotocin-induced diabetes independently from its peripheral metabolic effects. *Behav Brain Res.* 2017 Mar 15;321:157-169. PubMed PMID: 28062257.
32. Citraro R, **Leo A**, Franco V, Marchiselli R, Perucca E, et al. Perampanel effects in the WAG/Rij rat model of epileptogenesis, absence epilepsy, and comorbid depressive-like behavior. *Epilepsia.* 2017 Feb;58(2):231-238. PubMed PMID: 27988935.
33. **Leo A**, Citraro R, Marra R, Palma E, Paola EDD, et al. The Sphingosine 1-Phosphate Signaling Pathway in Epilepsy: A Possible Role for the Immunomodulator Drug Fingolimod in Epilepsy Treatment. *CNS Neurol Disord Drug Targets.* 2017;16(3):311-325. PubMed PMID: 27823573.
34. Russo E, Citraro R, Constanti A, **Leo A**, Lüttjohann A, et al. Upholding WAG/Rij rats as a model of absence epileptogenesis: Hidden mechanisms and a new theory on seizure development. *Neurosci Biobehav Rev.* 2016 Dec;71:388-408. PubMed PMID: 27687816.

35. Citraro R, Russo E, **Leo A**, Russo R, Avagliano C, et al. Pharmacokinetic-pharmacodynamic influence of N-palmitoylethanolamine, arachidonyl-2'-chloroethylamide and WIN 55,212-2 on the anticonvulsant activity of antiepileptic drugs against audiogenic seizures in DBA/2 mice. *Eur J Pharmacol.* 2016 Nov 15;791:523-534. PubMed PMID: 27663280.
36. Citraro R, Navarra M, **Leo A**, Donato Di Paola E, Santangelo E, et al. The Anticonvulsant Activity of a Flavonoid-Rich Extract from Orange Juice Involves both NMDA and GABA-Benzodiazepine Receptor Complexes. *Molecules.* 2016 Sep 21;21(9) PubMed PMID: 27657037.
37. Ferlazzo E, Gasparini S, Beghi E, Sueri C, Russo E, et al. Epilepsy in cerebrovascular diseases: Review of experimental and clinical data with meta-analysis of risk factors. *Epilepsia.* 2016 Aug;57(8):1205-14. PubMed PMID: 27381481.
38. Russo E, **Leo A**, Crupi R, Aiello R, Lippiello P, et al. Everolimus improves memory and learning while worsening depressive- and anxiety-like behavior in an animal model of depression. *J Psychiatr Res.* 2016 Jul;78:1-10. PubMed PMID: 27019134.
39. Citraro R, **Leo A**, Constanti A, Russo E, De Sarro G. mTOR pathway inhibition as a new therapeutic strategy in epilepsy and epileptogenesis. *Pharmacol Res.* 2016 May;107:333-343. PubMed PMID: 27049136.
40. **Leo A**, Russo E, Elia M. Cannabidiol and epilepsy: Rationale and therapeutic potential. *Pharmacol Res.* 2016 May;107:85-92. PubMed PMID: 26976797.
41. Italiano D, Striano P, Russo E, **Leo A**, Spina E, et al. Genetics of reflex seizures and epilepsies in humans and animals. *Epilepsy Res.* 2016 Mar;121:47-54. PubMed PMID: 26875109.
42. **Leo A**, Constanti A, Coppola A, Citraro R, De Sarro G, Russo E. mTOR Signaling in Epilepsy and Epileptogenesis: Preclinical and Clinical Studies (2016) Molecules to Medicine with mTOR: Translating Critical Pathways into Novel Therapeutic Strategies, pp. 123-142 <http://www.sciencedirect.com/science/book/9780128027332> ISBN: 978-012802733-2 doi: 10.1016/B978-0-12-802733-2.00006-2 (Book chapter).
43. Lippiello P, Balestrini S, **Leo A**, Coppola A, Citraro R, et al. From Cannabis to Cannabidiol to Treat Epilepsy, Where Are We?. *Curr Pharm Des.* 2016;22(42):6426-6433. PubMed PMID: 27587196.
44. Verrotti A, Mencaroni E, Cofini M, Castagnino M, **Leo A**, et al. Valproic Acid Metabolism and its Consequences on Sexual Functions. *Curr Drug Metab.* 2016;17(6):573-81. PubMed PMID: 27000076.
45. **Leo A**, Citraro R, Constanti A, De Sarro G, Russo E. Are big potassium-type Ca(2+)-activated potassium channels a viable target for the treatment of epilepsy?. *Expert Opin Ther Targets.* 2015 Jul;19(7):911-26. PubMed PMID: 25840593.
46. Citraro R, **Leo A**, De Fazio P, De Sarro G, Russo E. Antidepressants but not antipsychotics have antiepileptogenic effects with limited effects on comorbid depressive-like behaviour in the WAG/Rij rat model of absence epilepsy. *Br J Pharmacol.* 2015 Jun;172(12):3177-88. PubMed PMID: 25754610; PubMed Central PMCID: PMC4459032.
47. Citraro R, **Leo A**, Marra R, De Sarro G, Russo E. Antiepileptogenic effects of the selective COX-2 inhibitor etoricoxib, on the development of spontaneous absence seizures in WAG/Rij rats. *Brain Res Bull.* 2015 Apr;113:1-7. PubMed PMID: 25701797.
48. Aiello R, Crupi R, **Leo A**, Chimirri S, Rispoli V, et al. Long-term betamethasone 21-phosphate disodium treatment has distinct effects in CD1 and DBA/2 mice on animal behavior accompanied by opposite effects on neurogenesis. *Behav Brain Res.* 2015 Feb 1;278:155-66. PubMed PMID: 25289489.
49. Citraro R, Gallelli L, **Leo A**, De Fazio P, Gallelli P, et al. Effects of chronic sodium alendronate on depression and anxiety in a menopausal experimental model. *Pharmacol Biochem Behav.* 2015 Feb;129:65-71. PubMed PMID: 25542587.
50. Citraro R, **Leo A**, Aiello R, Pugliese M, Russo E, et al. Comparative analysis of the treatment of chronic antipsychotic drugs on epileptic susceptibility in genetically epilepsy-prone rats. *Neurotherapeutics.* 2015 Jan;12(1):250-62. PubMed PMID: 25404052; PubMed Central PMCID: PMC4322085.

51. Iannotti FA, Hill CL, **Leo A**, Alhusaini A, Soubrane C, et al. Nonpsychotropic plant cannabinoids, cannabidivarin (CBDV) and cannabidiol (CBD), activate and desensitize transient receptor potential vanilloid 1 (TRPV1) channels in vitro: potential for the treatment of neuronal hyperexcitability. *ACS Chem Neurosci.* 2014 Nov 19;5(11):1131-41. PubMed PMID: 25029033.
52. Cataldi M, Sblendorio V, **Leo A**, Piazza O. Biofilm-dependent airway infections: a role for ambroxol?. *Pulm Pharmacol Ther.* 2014 Aug;28(2):98-108. PubMed PMID: 24252805.
53. Russo E, Chimirri S, Aiello R, De Fazio S, **Leo A**, et al. Lamotrigine positively affects the development of psychiatric comorbidity in epileptic animals, while psychiatric comorbidity aggravates seizures. *Epilepsy Behav.* 2013 Aug;28(2):232-40. PubMed PMID: 23773980.
54. Rispoli V, Ragusa S, Nisticò R, Marra R, Russo E, **Leo A** et al. Huperzine a restores cortico-hippocampal functional connectivity after bilateral AMPA lesion of the nucleus basalis of meynert. *J Alzheimers Dis.* 2013;35(4):833-46. PubMed PMID: 23515019.
55. Cuomo O, Rispoli V, **Leo A**, Politi GB, Vinciguerra A, et al. The antiepileptic drug levetiracetam suppresses non-convulsive seizure activity and reduces ischemic brain damage in rats subjected to permanent middle cerebral artery occlusion. *PLoS One.* 2013;8(11):e80852. PubMed PMID: 24236205; PubMed Central PMCID: PMC3827478.

Catanzaro li, 13/09/2022

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