

---

## BIOGRAPHICAL SKETCH

NAME <b>Anna R Carta, PhD</b> e-mail: <a href="mailto:acarta@unica.it">acarta@unica.it</a>		POSITION TITLE  Associate Professor	
BIRTHDATE: January 16, 1969			
Nationality: Italian			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Cagliari	Higher education degree	1992	Pharmacy
University of Cagliari	PhD	1996	Toxicology
National Institute of Health, Bethesda (MD)	Post doctorate	1998	Neurophysiology

### A. Positions and Honors.

#### Positions and Employment

2000-2003      Research Associate, University of Cagliari  
2003-2015      Assistant Professor, University of Cagliari  
From October 2016      Associate Professor of Toxicology, University of Cagliari

#### Other Experience and Professional Memberships

2001-present      Member of the Center of Excellence for the Neurobiology of Drug Abuse  
1995-present      Member of the Society for Neuroscience (SFN)  
2001-present      Member of the International Basal Ganglia Society  
2000-present      Member of the European Neuroscience Society (Fens)  
2000-present      Member of the Italian Society for Neuroscience (SINS)  
2004              Member of the Italian Association for Parkinson's disease (LIMPE)  
2008              Member of the Italian Institute for Neuroscience  
2013-present      Member of Neurotoxicity Research Journal Editorial Board

#### Funded grants

2000              Project Grant for Young Researches from Italian Ministry of University and Research, Prot 1214, 27-11-2002. PI.  
2002              Project Grant from Regione Sardegna, Prot. 001382. PI.  
2004              Project Grant from Italian Ministry of University and Research, PRIN 2004: 2004052391\_002. PI of Research Unit.  
2008              Project Grant from Enterprise Ireland. PC-2008-318. in collaboration with the Trinity College of Dublin, PI of Research Unit.

2010 Project grant from MJFF. Target Validation 2010, N. 112-010/2310. Co-PI.  
2013 Perry & Stevens Charitable Foundation, 2013. Grant No. 10006298.  
2013 Fondazione Banco di Sardegna 2013, Prot. U629.2013/AI.553.MGB.  
2015 Intramural research support University of Cagliari, “Premialità for international grants”.  
2016 Research Project founded by Regione Sardegna, “Finanziamenti per la ricerca di base  
2018 annualità 2017”.

## B. Selected peer-reviewed publications (in chronological order).

1. Janda E, Boi L, Carta AR. (2018) Microglial Phagocytosis and Its Regulation: A Therapeutic Target in Parkinson's Disease? *Front Mol Neurosci.* 11:144. doi: 10.3389/fnmol.2018.00144. eCollection 2018.
2. Lecca D, Janda E, Mulas G, Diana A, Martino C, Angius F, Spolitu S, Casu MA, Simbula G, Boi L, Batetta B, Spiga S, Carta AR. (2018) Boosting phagocytosis and anti-inflammatory phenotype in microglia mediates neuroprotection by PPAR $\gamma$  agonist MDG548 in Parkinson's disease models. *Br J Pharmacol.* Mar 23. doi: 10.1111/bph.14214. [Epub ahead of print].
3. Pisanu A, Boi L, Mulas G, Spiga S, Fenu S, Carta AR. 2018. Neuroinflammation in L-DOPA-induced dyskinesia: beyond the immune function. *J Neural Transm (Vienna).* 125:1287-1297. doi: 10.1007/s00702-018-1874-4.
4. Carta AR, Mulas G, Bortolanza M, Duarte T, Pillai E, Fisone G, Vozari Raisman R, Del Bel E. L-DOPA-induced dyskinesia and neuroinflammation: do microglia and astrocytes play a role? *Eur J Neurosci.* 2016. doi: 10.1111/ejn.13482. [Epub ahead of print].
5. Mulas G, Espa E, Fenu S, Spiga S, Cossu G, Pillai E, Carboni E, Simbula G, Jadžić D, Angius F, Spolitu S, Batetta B, Lecca D, Giuffrida A, Carta AR. Differential induction of dyskinesia and neuroinflammation by pulsatile versus continuous L-DOPA delivery in the 6-OHDA model of Parkinson's disease. *Exp Neurol.* 2016;286:83-92.
6. Joers V, Tansey MG, Mulas G, Carta AR. Microglial phenotypes in Parkinson's disease and animal models of the disease. *Prog Neurobiol.* 2016 Apr 20. pii: S0301-0082(15)30053-8.
7. Lecca D, Nevin DK, Mulas G, Casu MA, Diana A, Rossi D, Sacchetti G, Carta AR. Neuroprotective and anti-inflammatory properties of a novel non-thiazolidinedione PPAR $\gamma$  agonist in vitro and in MPTP-treated mice. *Neuroscience.* 2015 Apr 20. pii: S0306-4522(15)00367-X. doi: 10.1016/j.neuroscience.2015.04.026.
8. Carta AR, Simuni T. Thiazolidinediones under preclinical and early clinical development for the treatment of Parkinson's disease. *Expert Opin Investig Drugs.* 2015; 24:219-27.
9. Pisanu A, Lecca D, Mulas G, Wardas J, Simbula G, Spiga S, Carta AR. Dynamic changes in pro- and anti-inflammatory cytokines in microglia after PPAR- $\gamma$  agonist neuroprotective treatment in the MPTP mouse model of progressive Parkinson's disease. *Neurobiol Dis.* 2014; 71:280-91.
10. Carta AR. PPAR- $\gamma$ : Therapeutic Prospects in Parkinson's Disease. *Current Drug Targets* 2013 14:743-51.
11. Carta Anna R., Frau Lucia, Pisanu Augusta, Wardas Jadwiga, Spiga Saturnino, Carboni Ezio. Rosiglitazone decreases peroxisome proliferator receptor-gamma levels in microglia and inhibits TNF-alpha production: new evidences on neuroprotection in a progressive Parkinson's disease model. *Neuroscience,* 2011; 194:250-261.
12. Carta AR, Kachroo A, Schintu N, Xu K, Schwarzschild MA, Wardas J, Morelli M. Inactivation of neuronal forebrain A receptors protects dopaminergic neurons in a mouse model of Parkinson's disease. *J Neurochem.* 2009; 111:1478-89.
13. Schintu N, Frau L, Ibba M, Caboni P, Garau A, Carboni E and Carta AR. PPAR-gamma mediated neuroprotection in a chronic mouse model of Parkinson's disease, *Eur. J. Neurosci.* 2009; 29:954-63.
14. Carta AR, Moreno CC, Cadoni C, Tronci E, Di Chiara G. Long-term increase in GAD67 mRNA expression in the central amygdala of rats sensitized by drugs and stress. *Eur J Neurosci.* 2008; 27:1220-30.
15. R. Carta, E. Tronci, A. Pinna, M. Morelli. Different responsiveness of striatonigral and striatopallidal neurons to L-DOPA after a subchronic intermittent L-DOPA treatment. *Eur. J. Neurosci.,* 2005; 21:1196-1204.