

CURRICULUM VITAE

Family Name: Picconi

Given Name: Barbara

Place and Date of Birth: Rome, 3 March 1970

Status: Married

Present Position: Full Professor, University San Raffaele, Rome, Italy

Mailing Address: Laboratorio Neurofisiologia Sperimentale – IRCCS San Raffaele Rome – Via di Val Cannuta 00166 Roma, Italia

Phone: +39-0652252258 **E-mail:** barbara.picconi@uniroma5.it

Degree:	University	Year Conferred
Biological Sciences	University "La Sapienza", Rome	1995
PhD in Neuroscience	Tor Vergata University of Rome	2005

Research Experiences:

1993 – 1995: works at the Laboratory of Ultrastruttura for the graduation thesis, National Institute of Health, Rome

1996 – 1997: apprenticeship in Pharmacology, Pharmacognosy and Toxicology, Inst. Pharmacology, University La Sapienza, Rome, tutor Prof. B. Silvestrini.

1998 – 2000: Telethon Foundation grant fellowship (Department of Neuroscience, University of Rome "Tor Vergata", directed by Prof. Paolo Calabresi) titled "Mechanisms underlying cell-type specific vulnerability of striatal neurons: implications for Huntington's disease".

2001 - 2004: PhD student at Department of Neuroscience, University of Rome "Tor Vergata" and Laboratory of Neurophysiology, Fondazione Santa Lucia Rome, tutor Professor Calabresi.

2002 - During PhD period spent a period of fellowship in the Laboratory of Neurobiology tutor by Prof. M. Angela Cenci, Wallenberg Centre, University of Lund, Sweden, aimed to the improving of behavioral tests in parkinsonian animal models.

2Feb2005: Obtain the PhD in Neuroscience at Department of Neuroscience, University of Rome "Tor Vergata".

From 2005 - 2018: Researcher - Laboratory of Neurophysiology, Santa Lucia Foundation, Rome, Italy.

16 Mar 2018: Associate Professor in Physiology, San Raffaele University, Rome, Italy.

From Jul 2018: Head of Laboratory of Experimental Neurophysiology, IRCCS San Raffaele Rome, Italy.

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all'art. 13 del D. Lgs. 196/2003 e all'art. 13 GDPR 679/16.

From 10 Jul 2020: National Scientific Qualification Full Professor in Physiology (Scientific Disciplinary Area 05 / D1, BIO09 Physiology).

15 Mar 2022: Full Professor in Physiology, San Raffaele University, Rome, Italy.

Honours and Prizes:

Jun2002 – Sep2002: Marie Curie fellowship in the Laboratory of Neurobiology tutor by Prof. M. Angela Cenci, Wallenberg Centre, University of Lund, Sweden, aimed to the improving of behavioral tests in parkinsonian animal models.

PhD Gino Galletti Foundation Fellowship, Clinica Neurologica - Università di Bologna, Bologna, 30 Gennaio 2007.

Editorial Activity:

Member of the Editorial Board of *Neurodegenerative Disease and Behavioural Neurology*.

Associate Editor Board of *Frontiers in Neuroscience*, *Frontiers in Neurology* and *Frontiers in Psychiatry* (Section of Neurodegeneration)

From Nov2020 – Jan2022: *Panel Member ERC 2021 Consolidator Grants*

From Mar2022: *Panel Member ERC 2022 Consolidator Grants*

Didactic Activity:

Member of the faculty board PhD Course in Neuroscience, University of Rome, Tor Vergata (Non-academic staff employed by other institutions)

Full Professor in Physiology, San Raffaele University, Rome, Italy

Didactic courses

Master Degree Scienze della Nutrizione Umana – curriculum Nutraceutica

Course: Nutraceutica Fisio-Biologia 4CFU

Master Degree Scienze della Nutrizione Umana – curriculum Nutrizione

Course: Nutrizione a Livello dell'Organismo 5CFU

Bachelor Degree Scienze della Alimentazione e Gastronomia

Course: Fondamenti di Fisiologia e Anatomia 8CFU

GRANTS:

1) PNRR Sanità - PNRR-MCNT2-2023-12377423

Title: Specific diagnostic biomarker profiles of different clinical clusters in DLB
IRCCS San Raffaele – **B Picconi** Principal collaborating researcher

2) NEXTGENERATIONEU (NGEU) and funded by the Ministry of University and Research (MUR), National Recovery and Resilience Plan (NRRP), project MNESYS (PE0000006) – A Multiscale integrated approach to the study of the nervous system in health and disease (DN. 1553 11.10.2022)

3) PNRR Sanità - PNRR-MAD-2022-12375960-ITA

Title: Implementing a national biobank of genetic, sporadic and prodromic Parkinson's disease with whole genome analysis and functional assessment of polygenic inheritance by iPSC technology.

IRCCS San Raffaele – **B Picconi** Unit
2023-2025 **170.000€**

4) Progetto "Nuovi biomarker diagnostici e terapeutici nelle malattie neurodegenerative." Consiglio Nazionale delle Ricerche (CNR) FOE2022

IRCCS San Raffaele – **B Picconi** Unit
2023

5) Progetto Finalizzato RF-2013-02357386

Title: Ruolo del sistema serotoninergico nella modulazione delle discinesie indotte da trattamento cronico con L-DOPA
Fondazione Santa Lucia – **B Picconi** Coordinator
2016-2019 **380.200€**

6) Progetto CARIPLO (UNIMI)

Title: Targeting NR2A-containing NMDA receptors in striatal postsynaptic membranes in early stages of Parkinson's Disease and in L-DOPA induced dyskinesia.
Fondazione Santa Lucia – **B Picconi** Unit
2011 – 2012 (24 mesi) **80.000€**

7) Progetto Giovani Ricercatori Ministero Sanità (GR-2008-1142336)

Title: NMDA receptor modulation in early Parkinsonism and in L-DOPA-induced dyskinesia: a new therapeutic strategy.
Fondazione Santa Lucia – **B Picconi** Coordinator
6-12-2010 – 2013 (36 mesi) **585.923€**

8) Progetto STRATEGICO Ministero della Sanità (RFPS-2007-1-643500)

Project 3 From L-DOPA to stereotaxic surgery: new therapeutic prospects for Parkinson's disease.

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all'art. 13 del D. Lgs. 196/2003 e all'art. 13 GDPR 679/16.

Fondazione Santa Lucia – **B Picconi** Unit

22/12/2008 – 22/12/2010 **133.000€**

9) Progetto Strategico ex art56 2005 Centro San Raffaele del Monte Tabor

Title: A multidisciplinary approach to test the therapeutic potential of neural stem cell transplantation in preclinical mouse models of Parkinson's disease.

Fondazione Santa Lucia – **B Picconi** Unit

21/05/2007 – 20/05/2009 **35.000€**

10) Progetto Finalizzato 2005

Title: Meccanismi di protezione e danno neuronale nella deprivazione energetica

Fondazione Santa Lucia – **B Picconi** Unit

03/05/2006 – 02/05/2008 **48.500€**

National and International Congress presentations

1. 30 Novembre - 1 Dicembre 2006, Perugia, Italia.
Parkinson's Disease: beyond motor dysfunction. A joint meeting of the SIN Groups on Neuroprotection and Plasticity and DISMOV.
Title: Cognitive and neuropsychiatric aspects of L-DOPA treatment.
2. 24 Maggio 2007, Palermo, Italia.
Gruppo di studio di Neuroscienze di base.
Title: Plasticità cortico-striatale e discinesie in un modello sperimentale di malattia di Parkinson.
3. 23-25 Settembre 2007, Alghero, Italia.
LIMPE Seminars 2007. Experimental Models in Parkinson's disease.
Title: Striatal synaptic plasticity alterations in experimental parkinsonism: from motor to behavioural aspects.
4. 30 Maggio - 2 Giugno 2007, Goteborg, Svezia.
DA 50 years meeting.
Title: Abnormal plasticity of corticostriatal synapses in L-DOPA-induced dyskinesia.
5. 30 Gennaio 2007, Bologna, Italia.
Premio Fondazione Gino Galletti 2006.
Title: Alterazioni cellulari, molecolari e comportamentali in un modello sperimentale di Morbo di Parkinson.
6. 5-6 Giugno 2008, Perugia, Italia.
Memory Dysfunctions: From Molecular Mechanisms to Treatment Options On behalf of the SIN Study Group on Neuroprotection and synaptic plasticity.
Title: Striatal synaptic plasticity in physiological and pathological memories.
7. 2-3 Ottobre 2009, Cortona, Italia.

Malattia di Parkinson: gestione farmacologica e clinica.

Title: Meccanismi molecolari delle discinesie da L-DOPA.

8. 28 Aprile - 1 Maggio 2010, Giardini di Naxos, Taormina, Italia.
1st, International Workshop on synaptic plasticity: from bench to bed side.
Title: Corticostriatal plasticity in animal models of Parkinson's disease.
9. 2 Marzo 2011, Roma, Italia.
Ministero dell'Istruzione, dell'Università e della Ricerca. Verso una programmazione di ricerca congiunta nel campo delle malattie neurodegenerative.
Tavola Rotonda: Interazioni macromolecolari e alterazioni delle funzioni sinaptiche. Alterata plasticità sinaptica e neurodegenerazione.
10. 19-22 Aprile 2012, Catania, Italia.
XIV Congress of the Italian Society for Neuroscience – SINS.
Title: Is striatal Dopamine-Dependent Long-Term Depression really segregated ? Implications for Parkinson's Disease and L-DOPA induced dyskinesia.
11. 7-9 Giugno 2012, Assisi, Italia.
2nd Workshop on Biomarkers in the early diagnosis of neurodegenerative disorders.
Title: Mechanisms of dyskinesia in Parkinson's disease: therapeutically implications.
12. 21-23 Maggio 2015, Assisi, Italia.
Third Assisi Workshop on Biomarkers in the early diagnosis of neurodegenerative disorders.
Title: Dyskinesia as model of synaptopathy.
13. 1-4 Ottobre 2013, Montreal, Canada.
WPC 2013 - World Parkinson Congress.
Title: Multiple dopamine-dependent synaptic mechanisms underlying dyskinesia in animal models.
14. 2-7 Febbraio 2014, Ventura, CA, US.
Basal Ganglia Cells and Circuits in Health and Disease.
Title: Dopamine-Dependent Striatal Synaptic Plasticity: The Black, the White, and the Gray.
15. 4-6 Giugno 2014, Milazzo, Italia.
3rd International Workshop on Synaptic Plasticity: International Workshop on Synaptic Plasticity: from bench to bedside.
Title: Dyskinesia animal models.
16. 8-11 Ottobre 2015, Cagliari, Italia.
XVI Congress of the Italian Society for Neuroscience – SINS.
Title: Recent advances in the understanding of L-DOPA-induced dyskinesia: focus on serotonin, glutamate and dopaminergic transmissions in animal models of Parkinson's disease.
17. 27 Maggio 2017, Perugia, Italia.
Scuola Interdipartimentale Università di Perugia, Facoltà di Medicina. Memoria: dai sistemi neuronali alle disfunzioni cliniche.
Title: Discinesie da Levodopa come forma aberrante di memoria.

18. 1-4 Ottobre 2017, Lacco Ameno, Ischia, Italia.
 XVII Congress of the Italian Society for Neuroscience – SINS.
 Title: Striatal synaptic plasticity alterations in early and late phases of parkinsonism in alpha-synuclein overexpressing mice.
19. 7-11 July 2018, Berlin, Germany.
 11th FENS Forum of Neuroscience.
 Title: Cell-type specific alterations of striatal synaptic plasticity in the initial and the late phases of Parkinson's disease.
20. 18th Sept 2018, Oxford, UK.
 Oxford Parkinson's Disease Center.
 Title: Behaviour and synaptic plasticity in a model of early PD: the role of alpha-synuclein
21. 28th of April to 2nd of May 2019, Biarritz, France,
 XIIIth IBAGS
 Title: Physiology and pathophysiology of dopamine dependent plasticity
22. 4-7th June 2019, Kyoto, Japan.
 5th World Parkinson Congress (WPC 2019)
 Title: New insights into L-Dopa induced dyskinesias
23. 23-27th June 2019, Marrakech, Marocco.
 MNS Marrakech 2019 – Mediterranean Neuroscience Society
24. 12nd June 2022, Fribourg, Switzerland.
 SSN Fribourg 2022
 Title: Novel molecular and synaptic approaches to study Levodopa-Induced Dyskinesia in an experimental model of PD

SCIENTIFIC PUBLICATIONS

Prof Barbara Picconi is the author of 146 papers published on leading International Journals.

Official H Index Scopus

Articoli	146
Citazioni	11139
H-index	54

Orcid 0000-0001-6020-1021

SCOPUS: 6701635731

RESEARCHERID IS: G-8299-2011

Peer-reviewed publications

1. Bossola M, **Picconi B** (2024) Uremic toxins and the brain in chronic kidney disease. *J Nephrol.* Apr 16. doi: 10.1007/s40620-024-01929-4. (**IF = 3.6**)
2. Tomagra G, Franchino C, Cesano F, Chiarion G, de Iure A, Carbone E, Calabresi P, Mesin L, **Picconi B**, Marcantoni A, Carabelli V (2023) Corrigendum: Alpha-synuclein oligomers alter the spontaneous firing discharge of cultured midbrain neurons. *Front Cell Neurosci* 17:1176036. (**IF = 6.14**)
3. Marino G, Campanelli F, Natale G, De Carluccio M, Servillo F, Ferrari E, Gardoni F, Caristo ME, **Picconi B**, Cardinale A, Loffredo V, Crupi F, De Leonibus E, Visconti MT, Ghiglieri V, Calabresi P (2023) Intensive exercise ameliorates motor and cognitive symptoms in experimental Parkinson's disease restoring striatal synaptic plasticity. *Sci Adv* 9:eadh1403. (**IF = 14.98**)
4. Iemolo A, De Risi M, Giordano N, Torromino G, Somma C, Cavezza D, Colucci M, Mancini M, de Iure A, Granata R, **Picconi B**, Calabresi P, De Leonibus E (2023) Synaptic mechanisms underlying onset and progression of memory deficits caused by hippocampal and midbrain synucleinopathy. *NPJ Parkinsons Dis* 9:92. (**IF = 8.7**)
5. Mancini A, de Iure A, **Picconi B** (2022) Basic mechanisms of plasticity and learning. *Handb Clin Neurol* 184:21-34.
6. Calabrese V*, **Picconi B***, Heck N, Campanelli F, Natale G, Marino G, Sciacca M, Ghiglieri V, Tozzi A, Anceame E, Cuoc E, Caboche J, Conquet F, Calabresi P, Charvin D (2022) A positive allosteric modulator of mGlu4 receptors restores striatal plasticity in an animal model of l-Dopa-induced dyskinesia. *Neuropharmacology* 218:109205. (**IF = 5.273**)
7. Tozzi A, Sciacca M, Loffredo V, Megaro A, Ledonne A, Cardinale A, Federici M, Bellingacci L, Paciotti S, Ferrari E, La Rocca A, Martini A, Mercuri NB, Gardoni F, **Picconi B**, Ghiglieri V, De Leonibus E, Calabresi P (2021) Dopamine-dependent early synaptic and motor dysfunctions induced by alpha-synuclein in the nigrostriatal circuit. *Brain* 144:3477-3491. (**IF = 13.5**)
8. Natale G, Pignataro A, Marino G, Campanelli F, Calabrese V, Cardinale A, Pelucchi S, Marcello E, Gardoni F, Visconti MT, **Picconi B**, Ammassari-Teule M, Calabresi P, Ghiglieri V (2021) Transcranial Magnetic Stimulation Exerts "Rejuvenation" Effects on Corticostriatal Synapses after Partial Dopamine Depletion. *Mov Disord* 36:2254-2263. (**IF = 10.34**)
9. Natale G, Calabrese V, Marino G, Campanelli F, Urciuolo F, de Iure A, Ghiglieri V, Calabresi P, Bossola M, **Picconi B** (2021) Effects of uremic toxins on hippocampal synaptic transmission: implication for neurodegeneration in chronic kidney disease. *Cell Death Discov* 7:295. (**IF = 5.24**)
10. Crittenden JR et al. (2021) CalDAG-GEFI mediates striatal cholinergic modulation of dendritic excitability, synaptic plasticity and psychomotor behaviors. *Neurobiol Dis* 158:105473. (**IF = 5.24**)
11. Campanelli F, Marino G, Barsotti N, Natale G, Calabrese V, Cardinale A, Ghiglieri V, Maddaloni G, Usiello A, Calabresi P, Pasqualetti M, **Picconi B** (2021) Serotonin drives striatal synaptic plasticity in a sex-related manner. *Neurobiol Dis* 158:105448. (**IF = 5.24**)
12. Cardinale A, Calabrese V, de Iure A, **Picconi B** (2021) Alpha-Synuclein as a Prominent Actor in the Inflammatory Synaptopathy of Parkinson's Disease. *Int J Mol Sci* 22. (**IF = 4.556**)
13. **Picconi B**, Galati S (2021) Progress of clinical neuroscience in movement disorders: Technical and methodological developments. *J Neurosci Methods* 349:109034. (**IF = 2.785**)
14. Campanelli F, Laricchia D, Natale G, Marino G, Calabrese V, **Picconi B**, Petrosini L, Calabresi P, Ghiglieri V (2021) Long-Term Shaping of Corticostriatal Synaptic Activity by Acute Fasting. *Int J Mol Sci* 22. (**IF = 4.556**)
15. Marrocco J, Verhaeghe R, Bucci D, Di Menna L, Traficante A, Bouwalerh H, Van Camp G, Ghiglieri V, **Picconi B**, Calabresi P, Ravasi L, Cisani F, Bagheri F, Pittaluga A, Bruno V, Battaglia G, Morley-Fletcher S, Nicoletti F, Maccari S (2020) Maternal stress programs

- accelerated aging of the basal ganglia motor system in offspring. *Neurobiol Stress* 13:100265. (**IF = 5.441**)
16. Calabrese V, Di Maio A, Marino G, Cardinale A, Natale G, De Rosa A, Campanelli F, Mancini M, Napolitano F, Avallone L, Calabresi P, Usiello A, Ghiglieri V, **Picconi B** (2020) Rapamycin, by Inhibiting mTORC1 Signaling, Prevents the Loss of Striatal Bidirectional Synaptic Plasticity in a Rat Model of L-DOPA-Induced Dyskinesia. *Front Aging Neurosci* 12:230. (**IF = 4.504**)
 17. Sciaccaluga M, Mazzocchetti P, Bastioli G, Ghiglieri V, Cardinale A, Mosci P, Caccia C, Keywood C, Melloni E, Padoani G, Vailati S, **Picconi B**, Calabresi P, Tozzi A (2020) Effects of safinamide on the glutamatergic striatal network in experimental Parkinson's disease. *Neuropharmacology* 170:108024. (**IF = 4.431**)
 18. Ferrari E, Cardinale A, **Picconi B**,* Gardoni F* (2020) From cell lines to pluripotent stem cells for modelling Parkinson's Disease. *J Neurosci Methods* 340:108741. (**IF = 2.214**)
 19. Krashia P, Cordella A, Nobili A, La Barbera L, Federici M, Leuti A, Campanelli F, Natale G, Marino G, Calabrese V, Vedele F, Ghiglieri V, **Picconi B**, Di Lazzaro G, Schirinzi T, Sancesario G, Casadei N, Riess O, Bernardini S, Pisani A, Calabresi P, Visconti MT, Serhan CN, Chiurchiu V, D'Amelio M, Mercuri NB (2019) Blunting neuroinflammation with resolvin D1 prevents early pathology in a rat model of Parkinson's disease. *Nat Commun* 10:3945. (**IF = 11.88**)
 20. Ghiglieri V, Campanelli F, Marino G, Natale G, **Picconi B**, Calabresi P (2019) Corticostriatal synaptic plasticity alterations in the R6/1 transgenic mouse model of Huntington's disease. *J Neurosci Res.* (**IF = 4.139**)
 21. Tomagra G, Picollo F, Battiato A, **Picconi B**, De Marchis S, Pasquarelli A, Olivero P, Marcantonio A, Calabresi P, Carbone E, Carabelli V. (2019) Quantal release of dopamine and action potential firing detected in midbrain neurons by multifunctional diamond-based microarrays. *Front Neurosci.* 13:288 (**IF = 3.882**)
 22. Iure A, Mazzocchetti P, Bastioli G, **Picconi B**, Costa C, Marchionni I, Casari G, Tozzi A, Pietrobon D, Calabresi P (2019) Differential effect of FHM2 mutation on synaptic plasticity in distinct hippocampal regions. *Cephalgia* 39:1333-1338. (**IF = 3.882**)
 23. Mineo D, Cacace F, Mancini M, Vannelli A, Campanelli F, Natale G, Marino G, Cardinale A, Calabresi P, **Picconi B**, Ghiglieri V (2019) Dopamine drives binge-like consumption of a palatable food in experimental Parkinsonism. *Mov Disord* 34:821-831. (**IF = 8.324**)
 24. Durante V, de Iure A, Loffredo V, Vaikath N, De Risi M, Paciotti S, Quiroga-Varela A, Chiasserini D, Mellone M, Mazzocchetti P, Calabrese V, Campanelli F, Mechelli A, Di Filippo M, Ghiglieri V, **Picconi B**, El-Agnaf OM, De Leonibus E, Gardoni F, Tozzi A, and Calabresi P. (2019) Alpha-synuclein targets GluN2A NMDA receptor subunit causing striatal synaptic dysfunction and visuospatial memory alteration. *Brain* 142:1365-1385. (**IF = 10.848**)
 25. de Iure A, Napolitano F, Beck G, Quiroga Varela A, Durante V, Sciaccaluga M, Mazzocchetti P, Megaro A, Tantucci M, Cardinale A, Punzo D, Mancini A, Costa C, Ghiglieri V, Tozzi A, **Picconi B**, Papa SM, Usiello A, Calabresi P (2019) Striatal spreading depolarization: Possible implication in levodopa-induced dyskinetic-like behavior. *Mov Disord* 34:832-844. (**IF = 8.324**)
 26. Mellone M, Zianni E, Stanic J, Campanelli F, Marino G, Ghiglieri V, Longhi A, Thiolat ML, Li Q, Calabresi P, Bezard E, **Picconi B**, Di Luca M, Gardoni F (2019) NMDA receptor GluN2D subunit participates to levodopa-induced dyskinesia pathophysiology. *Neurobiol Dis* 121:338-349. (**IF = 5.32**)
 27. **Picconi B**, Hernandez LF, Obeso JA, Calabresi P (2018) Motor complications in Parkinson's disease: Striatal molecular and electrophysiological mechanisms of dyskinesias. *Mov Disord* 33:867-876. (**IF = 7.07**)

28. Espay AJ, Morgante F, Merola A, Fasano A, Marsili L, Fox SH, Bezard E, **Picconi B**, Calabresi P, Lang AE (2018) Levodopa-induced dyskinesia in Parkinson disease: Current and evolving concepts. *Ann Neurol* 84:797-811. (**IF = 10.25**)
29. Giordano N, Iemolo A, Mancini M, Cacace F, De Risi M, Latagliata EC, Ghiglieri V, Bellonchi GC, Puglisi-Allegra S, Calabresi P, **Picconi B**, De Leonibus E (2018) Motor learning and metaplasticity in striatal neurons: relevance for Parkinson's disease. *Brain* 141:505-520. (**IF = 10.29**)
30. **Picconi B**, De Leonibus E, Calabresi P (2018) Synaptic plasticity and levodopa-induced dyskinesia: electrophysiological and structural abnormalities. *J Neural Transm (Vienna)* 125:1263-1271. (**IF = 2.39**)
31. Cacace F, Mineo D, Visconti MT, Latagliata EC, Mancini M, Sasso V, Vannelli A, Pascucci T, Pendolino V, Marcello E, Pelucchi S, Puglisi-Allegra S, Molinari M, **Picconi B**, Calabresi P, Ghiglieri V (2017) Intermittent theta-burst stimulation rescues dopamine-dependent corticostriatal synaptic plasticity and motor behavior in experimental parkinsonism: Possible role of glial activity. *Mov Disord* 32:1035-1046. (**IF = 7.07**)
32. Stanic J, Mellone M, Napolitano F, Racca C, Zianni E, Minocci D, Ghiglieri V, Thiolat ML, Li Q, Longhi A, De Rosa A, **Picconi B**, Bezard E, Calabresi P, Di Luca M, Usiello A, Gardoni F (2017) Rabphilin 3A: A novel target for the treatment of levodopa-induced dyskinesias. *Neurobiol Dis* 108:54-64. (**IF = 5.02**)
33. **Picconi B**, Calabresi P (2017) Switching on the lights of dyskinesia: Perspectives and limits of the optogenetic approaches. *Mov Disord* 32:485-486. (**IF = 7.07**).
34. Calabresi P, Pisani A, Rothwell J, Ghiglieri V, Obeso JA, **Picconi B** (2016) Hyperkinetic disorders and loss of synaptic downscaling. *Nat Neurosci* 19:868-875. (**IF = 16.72**).
35. Schirinzi T, Madeo G, Martella G, Maltese M, **Picconi B**, Calabresi P, Pisani A (2016) Early synaptic dysfunction in Parkinson's disease: Insights from animal models. *Mov Disord* 31:802-813. (**IF = 5.68**)
36. Calabresi P, **Picconi B**, Tozzi A, Ghiglieri V (2016) Interaction between basal ganglia and limbic circuits in learning and memory processes. *Parkinsonism Relat Disord* 22 Suppl 1:S65-68. (**IF = 3.97**)
37. Mancini M, Ghiglieri V, Bagetta V, Pendolino V, Vannelli A, Cacace F, Mineo D, Calabresi P, **Picconi B** (2016) Memantine alters striatal plasticity inducing a shift of synaptic responses toward long-term depression. *Neuropharmacology* 101:341-350. (**IF = 5.106**)
38. Tozzi A, de Iure A, Bagetta V, Tantucci M, Durante V, Quiroga-Varela A, Costa C, Di Filippo M, Ghiglieri V, Latagliata EC, Wegrzynowicz M, Decressac M, Giampà C, Dalley JW, Xia J, Gardoni F, Mellone M, El-Agnaf OM, Ardah MT, Puglisi-Allegra S, Björklund A, Spillantini MG, **Picconi B**, Calabresi P (2016) Alpha-Synuclein Produces Early Behavioral Alterations Via Striatal Cholinergic Synaptic Dysfunction by Interacting with GluN2D N-Methyl-D-Aspartate Receptor Subunit. *Biol Psychiatry* 79:402-414. (**IF = 10.255**)
39. Ghiglieri V, Mineo D, Vannelli A, Cacace F, Mancini M, Pendolino V, Napolitano F, di Maio A, Mellone M, Stanic J, Tronci E, Fidalgo C, Stancampiano R, Carta M, Calabresi P, Gardoni F, Usiello A, **Picconi B** (2016) Modulation of serotonergic transmission by eltoprazine in L-DOPA-induced dyskinesia: Behavioral, molecular, and synaptic mechanisms. *Neurobiol Dis* 86:140-153. (**IF = 5.078**)
40. Mellone M, Stanic J, Hernandez LF, Iglesias E, Zianni E, Longhi A, Prigent A, **Picconi B**, Calabresi P, Hirsch EC, Obeso JA, Di Luca M, Gardoni F (2015) NMDA receptor GluN2A/GluN2B subunit ratio as synaptic trait of levodopa-induced dyskinesias: from experimental models to patients. *Front Cell Neurosci* 9:245. (**IF = 4.28**)
41. Bastide MF, Meissner WG, **Picconi B**, Fasano S, Fernagut PO, Feyder M, Francardo V, Alcacer C, Ding Y, Brambilla R, Fisone G, Stoessl AJ, Bourdenx M, Engeln M, Navailles S, De Deurwaerdere P, Ko WK, Simola N, Morelli M, Groc L, Rodriguez MC, Gurevich EV,

- Quik M, Morari M, Mellone M, Gardoni F, Tronci E, Guehl D, Tison F, Crossman AR, Kang UJ, Steele-Collier K, Fox S, Carta M, Cenci MA, Bezard E (2015) Pathophysiology of L-dopa-induced motor and non-motor complications in Parkinson's disease. *Prog Neurobiol* 132:96-168. (**IF = 9.99**)
42. Ghiglieri V, Napolitano F, Pelosi B, Schepisi C, Migliarini S, Di Maio A, Pendolino V, Mancini M, Sciamanna G, Vitucci D, Maddaloni G, Giampa C, Errico F, Nistico R, Pasqualetti M, **Picconi B**, Usiello A (2015) Rhes influences striatal cAMP/PKA-dependent signaling and synaptic plasticity in a gender-sensitive fashion. *Sci Rep* 5:10933. (**IF = 5.57**)
43. Calabresi P, Ghiglieri V, Mazzocchetti P, Corbelli I, **Picconi B** (2015) Levodopa-induced plasticity: a double-edged sword in Parkinson's disease? *Philos Trans R Soc Lond B Biol Sci* 370. (**IF = 7.05**)
44. Calabresi P, **Picconi B**, Tozzi A, Ghiglieri V, Di Filippo M (2014) Direct and indirect pathways of basal ganglia: a critical reappraisal. *Nat Neurosci* 17:1022-1030. (**IF = 16.09**)
45. Cerovic M, Bagetta V, Pendolino V, Ghiglieri V, Fasano S, Morella I, Hardingham N, Heuer A, Papale A, Marchisella F, Giampa C, Calabresi P, **Picconi B**, Brambilla R (2015) Derangement of Ras-Guanine Nucleotide-Releasing Factor 1 (Ras-GRF1) and Extracellular Signal-Regulated Kinase (ERK) Dependent Striatal Plasticity in L-DOPA-Induced Dyskinesia. *Biol Psychiatry* 77:106-115. (**IF = 10.25**)
46. Morelli E, Ghiglieri V, Pendolino V, Bagetta V, Pignataro A, Fejtova A, Costa C, Ammassari-Teule M, Gundelfinger ED, **Picconi B**, Calabresi P (2014) Environmental enrichment restores CA1 hippocampal LTP and reduces severity of seizures in epileptic mice. *Exp Neurol* 261C:320-327. (**IF = 4.64**)
47. Pendolino V, Bagetta V, Ghiglieri V, Sgobio C, Morelli E, Poggini S, Branchi I, Latagliata EC, Pascucci T, Puglisi-Allegra S, Calabresi P, **Picconi B** (2014) L-DOPA reverses the impairment of Dentate Gyrus LTD in experimental parkinsonism via beta-adrenergic receptors. *Exp Neurol* 261:377-385. (**IF = 4.64**)
48. **Picconi B**, Calabresi P (2014) Targeting metabotropic glutamate receptors as a new strategy against levodopa-induced dyskinesia in Parkinson's disease? *Mov Disord* 29:715-719. (**IF = 4.505**)
49. Rylander D, Bagetta V, Pendolino V, Zianni E, Grelish S, Gardoni F, Di Luca M, Calabresi P, Cenci MA, **Picconi B** (2013) Region-specific restoration of striatal synaptic plasticity by dopamine grafts in experimental parkinsonism. *Proc Natl Acad Sci U S A* 110:E4375-4384. (**IF = 9.68**)
50. Besusso D, Geibel M, Kramer D, Schneider T, Pendolino V, **Picconi B**, Calabresi P, Bannerman DM, Minichiello L (2013) BDNF-TrkB signaling in striatopallidal neurons controls inhibition of locomotor behavior. *Nat Commun* 4:2031. (**IF = 7.396**)
51. Calabresi P, Castrioto A, Di Filippo M, **Picconi B** (2013) New experimental and clinical links between the hippocampus and the dopaminergic system in Parkinson's disease. *Lancet Neurol* 12(8):811-821. (**IF = 23.46**)
52. Arcangeli S, Tozzi A, Tantucci M, Spaccatini C, de Iure A, Costa C, Di Filippo M, **Picconi B**, Giampa C, Fusco FR, Amoroso S, Calabresi P (2013) Ischemic-LTP in striatal spiny neurons of both direct and indirect pathway requires the activation of D1-like receptors and NO/soluble guanylate cyclase/cGMP transmission. *J Cereb Blood Flow Metab* 33:278-286. (**IF = 5.00**)
53. Calabresi P, Di Filippo M, Gallina A, Wang Y, Stankowski JN, **Picconi B**, Dawson VL, Dawson TM (2013) New synaptic and molecular targets for neuroprotection in Parkinson's disease. *Mov Disord* 28:51-60. (**IF = 4.505**)
54. Tozzi A, de Iure A, Di Filippo M, Costa C, Caproni S, Pisani A, Bonsi P, **Picconi B**, Cupini LM, Materazzi S, Geppetti P, Sarchielli P, Calabresi P (2012) Critical role of calcitonin gene-related peptide receptors in cortical spreading depression. *Proc Natl Acad Sci U S A* 109:18985-18990. (**IF = 9.68**)

55. Bagetta V, Sgobio C, Pendolino V, Del Papa G, Tozzi A, Ghiglieri V, Giampà C, Zianni E, Gardoni F, Calabresi P, **Picconi B** (2012) Rebalance of striatal NMDA-AMPA receptor ratio underlies the reduced emergence of dyskinesia during D2-like dopamine agonist treatment in experimental Parkinson's disease. *J Neurosci* 32(49):17921-17931. (**IF = 7.12**)
56. Ghiglieri V, Bagetta V, Pendolino V, **Picconi B**, Calabresi P (2012) Corticostriatal Plastic Changes in Experimental L-DOPA-Induced Dyskinesia. *Parkinsons Dis* 2012:358176.
57. **Picconi B**, Calabresi P (2012) Rhes-mTORC1 interaction: a new possible therapeutic target in Parkinson's disease and L-dopa-induced dyskinesia? *Mov Disord* 27:815. (**IF = 4.505**)
58. Tozzi A, de Iure A, Marsili V, Romano R, Tantucci M, Di Filippo M, Costa C, Napolitano F, Mercuri NB, Borsini F, Giampa C, Fusco FR, **Picconi B**, Usiello A, Calabresi P (2012) A2A Adenosine Receptor Antagonism Enhances Synaptic and Motor Effects of Cocaine via CB1 Cannabinoid Receptor Activation. *PLoS One* 7:e38312. (**IF = 4.09**)
59. Costa C, Sgobio C, Siliquini S, Tozzi A, Tantucci M, Ghiglieri V, Di Filippo M, Pendolino V, de Iure A, Marti M, Morari M, Spillantini MG, Latagliata EC, Pascucci T, Puglisi-Allegra S, Gardoni F, Di Luca M, **Picconi B**, Calabresi P (2012) Mechanisms underlying the impairment of hippocampal long-term potentiation and memory in experimental Parkinson's disease. *Brain* 135(Pt 6):1884-99. (**IF = 9.23**)
60. Ghiglieri V, Pendolino V, Sgobio C, Bagetta V, **Picconi B**, Calabresi P (2012) Theta-burst stimulation and striatal plasticity in experimental parkinsonism. *Exp Neurol* 236:395-398. (**IF = 4.43**)
61. Ghiglieri V, Picconi B, Calabresi P (2012) Prenatal stress and hippocampal BDNF expression: a fading imperative. *J Physiol* 590:1309-1310. (**IF = 5.139**)
62. **Picconi B**, Piccoli G, Calabresi P (2012) Synaptic dysfunction in Parkinson's disease. (2012) *Adv Exp Med Biol* 970:553-572. (**IF = 1.379**)
63. Vastagh C, Gardoni F, Bagetta V, Stanic J, Zianni E, Giampa C, **Picconi B**, Calabresi P, Di Luca M (2012) N-Methyl-D-aspartate (NMDA) Receptor Composition Modulates Dendritic Spine Morphology in Striatal Medium Spiny Neurons. *J Biol Chem* 287:18103-18114. (**IF = 5.328**)
64. Gardoni F, Sgobio C, Pendolino V, Calabresi P, Di Luca M, **Picconi B**. (2012) Targeting NR2A-containing NMDA receptors reduces L-DOPA-induced dyskinesias. *Neurobiol Aging* 33:2138-44. (**IF = 5.96**)
65. Ghiglieri V, Bagetta V, Calabresi P, **Picconi B**. (2012) Functional interactions within striatal microcircuit in animal models of huntington's disease. *Neuroscience*. 211:165-84. (**IF = 3.56**)
66. Tozzi A, Costa C, Siliquini S, Tantucci M, **Picconi B**, Kurz A, Gispert S, Auburger G, Calabresi P (2011) Mechanisms underlying altered striatal synaptic plasticity in old A53T-alpha synuclein overexpressing mice. *Neurobiol Aging* 33:1792-1799. (**IF = 5.96**)
67. Errico F, Bonito-Oliva A, Bagetta V, Vitucci D, Romano R, Zianni E, Napolitano F, Marinucci S, Di Luca M, Calabresi P, Fisone G, Carta M, **Picconi B**, Gardoni F, Usiello A (2011) Higher free d-aspartate and N-methyl-d-aspartate levels prevent striatal depotentiation and anticipate l-DOPA-induced dyskinesia. *Exp Neurol* 232:240-50. (**IF = 3.97**)
68. Bagetta V, **Picconi B**, Marinucci S, Sgobio C, Pendolino V, Ghiglieri V, Fusco FR, Giampà C, Calabresi P (2011) Dopamine-dependent long-term depression is expressed in striatal spiny neurons of both direct and indirect pathways: implications for Parkinson's disease. *J Neurosci* 31:12513-22. (**IF = 7.45**)
69. Ghiglieri V, Sgobio C, Costa C, **Picconi B**, Calabresi P. (2011) Striatum-hippocampus balance: from physiological behavior to interneuronal pathology. *Prog Neurobiol* 94:102-14. (**IF = 9.13**)
70. Tozzi A, de Iure A, Di Filippo M, Tantucci M, Costa C, Borsini F, Ghiglieri V, Giampa C, Fusco FR, **Picconi B**, Calabresi P (2011) The distinct role of medium spiny neurons and

- cholinergic interneurons in the D2/A2A receptor interaction in the striatum: implications for Parkinson's disease. *J Neurosci* 31:1850-62. (**IF = 7.45**)
71. **Picconi B**, Bagetta V, Ghiglieri V, Paille V, Di Filippo M, Pendolino V, Tozzi A, Giampa C, Fusco FR, Sgobio C, Calabresi P (2011) Inhibition of phosphodiesterases rescues striatal long-term depression and reduces levodopa-induced dyskinesia. *Brain* 134:375-87. (**IF = 9.6**)
72. Calabresi P, Filippo MD, Ghiglieri V, Tambasco N, **Picconi B**. (2010) Levodopa-induced dyskinesias in patients with Parkinson's disease: filling the bench-to-bedside gap. *Lancet Neurol* 9:1106-1117. (**IF = 14.27**)
73. Ghiglieri V, Pendolino V, Bagetta V, Sgobio C, Calabresi P, **Picconi B**. (2010) mTOR inhibitor rapamycin suppresses striatal post-ischemic LTP. *Exp Neurol* 226:328-331. (**IF = 3.97**)
74. **Picconi B**, Ghiglieri V, Calabresi P. (2010) L-3,4-dihydroxyphenylalanine-induced sprouting of serotonin axon terminals: A useful biomarker for dyskinesias? *Ann Neurol* 68:578-580. (**IF = 9.93**)
75. Paillé V, **Picconi B**, Bagetta V, Ghiglieri V, Sgobio C, Di Filippo M, Visconti MT, Giampà C, Fusco FR, Gardoni F, Bernardi G, Greengard P, Di Luca M, Calabresi P. (2010) Distinct levels of dopamine denervation differentially alter striatal synaptic plasticity and NMDA receptor subunit composition. *J Neurosci* 30:14182-14193. (**IF = 7.49**)
76. Ghiglieri V, **Picconi B**, Calabresi P (2010) Direct and indirect pathways in levodopa-induced dyskinesia: A more complex matter than a network imbalance. *Mov Disord* 25:1527-1529. (**IF = 3.89**)
77. Di Filippo M, Chiasserini D, Tozzi A, **Picconi B**, Calabresi P (2010) Mitochondria and the link between neuroinflammation and neurodegeneration. *J Alzheimers Dis* 20 Suppl 2:S369-379. (**IF = 5.1**)
78. Gubellini P, **Picconi B**, Di Filippo M, Calabresi P (2010) Downstream mechanisms triggered by mitochondrial dysfunction in the basal ganglia: From experimental models to neurodegenerative diseases. *Biochim Biophys Acta* 1802:151-161. (**IF = 2.64**)
79. Bagetta V, Ghiglieri V, Sgobio C, Calabresi P, **Picconi B** (2010) Synaptic dysfunction in Parkinson's disease. *Biochem Soc Trans* 38:493-497. (**IF = 2.97**)
80. Ghiglieri V, Sgobio C, Patassini S, Bagetta V, Fejtova A, Giampa C, Marinucci S, Heyden A, Gundelfinger ED, Fusco FR, Calabresi P, **Picconi B** (2010) TrkB/BDNF-Dependent Striatal Plasticity and Behavior in a Genetic Model of Epilepsy: Modulation by Valproic Acid. *Neuropsychopharmacology* 35:1531-1540. (**IF = 6.83**)
81. Sgobio C, Ghiglieri V, Costa C, Bagetta V, Siliquini S, Barone I, Di Filippo M, Gardoni F, Gundelfinger ED, Di Luca M, **Picconi B**, Calabresi P (2010) Hippocampal synaptic plasticity, memory, and epilepsy: effects of long-term valproic acid treatment. *Biol Psychiatry* 67:567-574. (**IF = 8.67**)
82. Costa C, Tozzi A, Luchetti E, Siliquini S, Belcastro V, Tantucci M, **Picconi B**, Ientile R, Calabresi P, Pisani F (2010) Electrophysiological actions of zonisamide on striatal neurons: Selective neuroprotection against complex I mitochondrial dysfunction. *Exp Neurol* 221:217-224. (**IF = 3.97**)
83. Di Filippo M, Tozzi A, Ghiglieri V, **Picconi B**, Costa C, Cipriani S, Tantucci M, Belcastro V, Calabresi P (2009) Impaired Plasticity at Specific Subset of Striatal Synapses in the Ts65Dn Mouse Model of Down Syndrome. *Biol Psychiatry* 2010:67:666-671. (**IF = 8.67**)
84. Belcastro V, Tozzi A, Tantucci M, Costa C, Di Filippo M, Autuori A, **Picconi B**, Siliquini S, Luchetti E, Borsini F, Calabresi P (2009) A2A adenosine receptor antagonists protect the striatum against rotenone-induced neurotoxicity. *Exp Neurol* 217:231-234. (**IF = 3.97**)
85. Di Filippo M, **Picconi B**, Tantucci M, Ghiglieri V, Bagetta V, Sgobio C, Tozzi A, Parnetti L, Calabresi P (2009) Short-term and long-term plasticity at corticostriatal synapses: implications for learning and memory. *Behav Brain Res* 199:108-118. (**IF = 3.17**)

86. Ghiglieri V, **Picconi B**, Sgobio C, Bagetta V, Barone I, Paille V, Di Filippo M, Polli F, Gardoni F, Altrock W, Gundelfinger ED, De Sarro G, Bernardi G, Ammassari-Teule M, Di Luca M, Calabresi P (2009) Epilepsy-induced abnormal striatal plasticity in Bassoon mutant mice. *Eur J Neurosci* 29:1979-1993. (**IF = 3.38**)
87. Gardoni F, Mauceri D, Malinverno M, Polli F, Costa C, Tozzi A, Siliquini S, **Picconi B**, Cattabeni F, Calabresi P, Di Luca M (2009) Decreased NR2B subunit synaptic levels cause impaired long-term potentiation but not long-term depression. *J Neurosci* 29:669-677. (**IF = 7.49**)
88. Bagetta V, Barone I, Ghiglieri V, Di Filippo M, Sgobio C, Bernardi G, Calabresi P, **Picconi B** (2008) Acetyl-L-Carnitine selectively prevents post-ischemic LTP via a possible action on mitochondrial energy metabolism. *Neuropharmacology* 55:223-229. (**IF = 3.22**)
89. **Picconi B**, Paille V, Ghiglieri V, Bagetta V, Barone I, Lindgren HS, Bernardi G, Angela Cenci M, Calabresi P (2008) L-DOPA dosage is critically involved in dyskinesia via loss of synaptic depotentiation. *Neurobiol Dis* 29:327-335. (**IF = 4.37**)
90. **Picconi B**, Ghiglieri V, Bagetta V, Barone I, Sgobio C, Calabresi P (2008) Striatal synaptic changes in experimental parkinsonism: role of NMDA receptor trafficking in PSD. *Parkinsonism Relat Disord* 14 Suppl 2:S145-149. (**IF = 2.02**)
91. Calabresi P, Di Filippo M, Ghiglieri V, **Picconi B** (2008) Molecular mechanisms underlying levodopa-induced dyskinesia. *Mov Disord* 23 Suppl 3:S570-579. (**IF = 3.89**)
92. Di Filippo M, Tozzi A, Costa C, Belcastro V, Tantucci M, **Picconi B**, Calabresi P (2008) Plasticity and repair in the post-ischemic brain. *Neuropharmacology* 55:353-362. (**IF = 3.22**)
93. Costa C, Belcastro V, Tozzi A, Di Filippo M, Tantucci M, Siliquini S, Autuori A, **Picconi B**, Spillantini MG, Fedele E, Pittaluga A, Raiteri M, Calabresi P (2008) Electrophysiology and pharmacology of striatal neuronal dysfunction induced by mitochondrial complex I inhibition. *J Neurosci* 28:8040-8052. (**IF = 7.45**)
94. Di Filippo M, **Picconi B**, Tozzi A, Ghiglieri V, Rossi A, Calabresi P (2008) The endocannabinoid system in Parkinson's disease. *Curr Pharm Des* 14:2337-2347. (**IF = 4.39**)
95. Di Filippo M, Sarchielli P, **Picconi B**, Calabresi P (2008) Neuroinflammation and synaptic plasticity: theoretical basis for a novel, immune-centred, therapeutic approach to neurological disorders. *Trends Pharmacol Sci* 29:402-412. (**IF = 9.34**)
96. Calabresi P, **Picconi B**, Tozzi A, Di Filippo M (2007) Dopamine-mediated regulation of corticostriatal synaptic plasticity. *Trends Neurosci* 30:211-219. (**IF = 14.32**)
97. Centonze D, Rossi S, Tortiglione A, **Picconi B**, Prosperetti C, De Chiara V, Bernardi G, Calabresi P (2007) Synaptic plasticity during recovery from permanent occlusion of the middle cerebral artery. *Neurobiol Dis* 27:44-53. (**IF = 4.78**)
98. Tortiglione A, **Picconi B**, Barone I, Centonze D, Rossi S, Costa C, Di Filippo M, Tozzi A, Tantucci M, Bernardi G, Annunziato L, Calabresi P (2007) Na+/Ca²⁺ exchanger maintains ionic homeostasis in the peri-infarct area. *Stroke* 38:1614-1620. (**IF = 6.29**)
99. Calabresi P, Galletti F, Saggese E, Ghiglieri V, **Picconi B** (2007) Neuronal networks and synaptic plasticity in Parkinson's disease: beyond motor deficits. *Parkinsonism Relat Disord* 13 Suppl 3:S259-262. (**IF = 2.02**)
100. Bonsi P, Cuomo D, **Picconi B**, Sciamanna G, Tscherter A, Tolu M, Bernardi G, Calabresi P, Pisani A (2007) Striatal metabotropic glutamate receptors as a target for pharmacotherapy in Parkinson's disease. *Amino Acids* 32:189-195. (**IF = 2.00**)
101. Di Filippo M, Tozzi A, **Picconi B**, Ghiglieri V, Calabresi P (2007) Plastic abnormalities in experimental Huntington's disease. *Curr Opin Pharmacol* 7:106-111. (**IF = 4.59**)
102. Tozzi A, Costa C, Di Filippo M, Tantucci M, Siliquini S, Belcastro V, Parnetti L, **Picconi B**, Calabresi P (2007) Memantine reduces neuronal dysfunctions triggered by in vitro ischemia and 3-nitropropionic acid. *Exp Neurol* 207:218-226. (**IF = 3.76**)

103. Tozzi A, Tscherter A, Belcastro V, Tantucci M, Costa C, **Picconi B**, Centonze D, Calabresi P, Borsini F (2007) Interaction of A2A adenosine and D2 dopamine receptors modulates corticostriatal glutamatergic transmission. *Neuropharmacology* 53:783-789. (**IF = 3.215**)
104. Calabresi P, **Picconi B**, Parnetti L, Di Filippo M (2006) A convergent model for cognitive dysfunctions in Parkinson's disease: the critical dopamine-acetylcholine synaptic balance. *Lancet Neurol* 5:974-983. (**IF = 12.2**)
105. **Picconi B**, Tortiglione A, Barone I, Centonze D, Gardoni F, Gubellini P, Bonsi P, Pisani A, Bernardi G, Di Luca M, Calabresi P (2006) NR2B subunit exerts a critical role in postischemic synaptic plasticity. *Stroke* 37:1895-1901. (**IF = 5.74**)
106. Di Filippo M, **Picconi B**, Costa C, Bagetta V, Tantucci M, Parnetti L, Calabresi P (2006) Pathways of neurodegeneration and experimental models of basal ganglia disorders: downstream effects of mitochondrial inhibition. *Eur J Pharmacol* 545:65-72. (**IF = 3.82**)
107. Gardoni F, **Picconi B**, Ghiglieri V, Polli F, Bagetta V, Bernardi G, Cattabeni F, Di Luca M, Calabresi P (2006) A critical interaction between NR2B and MAGUK in L-DOPA induced dyskinesia. *J Neurosci* 26:2914-2922. (**IF = 7.9**)
108. **Picconi B**, Barone I, Pisani A, Nicolai R, Benatti P, Bernardi G, Calvani M, Calabresi P (2006) Acetyl-l-carnitine protects striatal neurons against in vitro ischemia: The role of endogenous acetylcholine. *Neuropharmacology* 50:917-923. (**IF = 3.73**)
109. **Picconi B**, Passino E, Sgobio C, Bonsi P, Barone I, Ghiglieri V, Pisani A, Bernardi G, Ammassari-Teule M, Calabresi P (2006) Plastic and behavioral abnormalities in experimental Huntington's disease: a crucial role for cholinergic interneurons. *Neurobiol Dis* 22:143-152. (**IF = 4.78**)
110. Costa C, Martella G, **Picconi B**, Prosperetti C, Pisani A, Di Filippo M, Pisani F, Bernardi G, Calabresi P (2006) Multiple Mechanisms Underlying the Neuroprotective Effects of Antiepileptic Drugs Against In Vitro Ischemia. *Stroke* 37:1319-1326. (**IF = 5.74**)
111. Napolitano M, **Picconi B**, Centonze D, Bernardi G, Calabresi P, Gulino A (2006) L-DOPA treatment of parkinsonian rats changes the expression of Src, Lyn and PKC kinases. *Neurosci Lett* 398:211-214. (**IF = 2.2**)
112. Centonze D, Rossi S, Gubellini P, De Chiara V, Tscherter A, Prosperetti C, **Picconi B**, Bernardi G, Calabresi P, Baunez C (2006) Deficits of glutamate transmission in the striatum of experimental hemiballism. *Neuroscience* 143:213-221. (**IF = 3.6**)
113. Centonze D, Prosperetti C, Barone I, Rossi S, **Picconi B**, Tscherter A, De Chiara V, Bernardi G, Calabresi P (2006) NR2B-containing NMDA receptors promote the neurotoxic effects of 3-nitropropionic acid but not of rotenone in the striatum. *Exp Neurol* 202:470-479. (**IF = 3.5**)
114. Rossi S, Prosperetti C, **Picconi B**, De Chiara V, Mataluni G, Bernardi G, Calabresi P, Centonze D (2006) Deficits of glutamate transmission in the striatum of toxic and genetic models of Huntington's disease. *Neurosci Lett* 410:6-10. (**IF = 2.2**)
115. **Picconi B**, Pisani A, Barone I, Bonsi P, Centonze D, Bernardi G, Calabresi P (2005) Pathological synaptic plasticity in the striatum: implications for Parkinson's disease. *Neurotoxicology* 26:779-783. (**IF = 1.85**)
116. Centonze D, Gubellini P, Rossi S, **Picconi B**, Pisani A, Bernardi G, Calabresi P, Baunez C (2005) Subthalamic nucleus lesion reverses motor abnormalities and striatal glutamatergic overactivity in experimental parkinsonism. *Neuroscience* 133:831-840. (**IF = 3.6**)
117. Lundblad M, **Picconi B**, Lindgren H, Cenci MA (2004) A model of L-DOPA-induced dyskinesia in 6-hydroxydopamine lesioned mice: relation to motor and cellular parameters of nigrostriatal function. *Neurobiol Dis* 16:110-123. (**IF = 4.78**)
118. Centonze D, Usiello A, Costa C, **Picconi B**, Erbs E, Bernardi G, Borrelli E, Calabresi P (2004) Chronic haloperidol promotes corticostriatal long-term potentiation by targeting dopamine D2L receptors. *J Neurosci* 24:8214-8222. (**IF = 7.9**)

- 119.** **Picconi B**, Gardoni F, Centonze D, Mauceri D, Cenci MA, Bernardi G, Calabresi P, Di Luca M (2004) Abnormal Ca²⁺-calmodulin-dependent protein kinase II function mediates synaptic and motor deficits in experimental parkinsonism. *J Neurosci* 24:5283-5291. (**IF = 7.9**)
- 120.** **Picconi B**, Centonze D, Rossi S, Bernardi G, Calabresi P (2004) Therapeutic doses of L-dopa reverse hypersensitivity of corticostriatal D2-dopamine receptors and glutamatergic overactivity in experimental parkinsonism. *Brain* 127:1661-1669. (**IF = 8.2**)
- 121.** Saulle E, Gubellini P, **Picconi B**, Centonze D, Tropepi D, Pisani A, Morari M, Marti M, Rossi L, Papa M, Bernardi G, Calabresi P (2004) Neuronal vulnerability following inhibition of mitochondrial complex II: a possible ionic mechanism for Huntington's disease. *Mol Cell Neurosci* 25:9-20. (**IF = 5.45**)
- 122.** **Picconi B**, Centonze D, Hakansson K, Bernardi G, Greengard P, Fisone G, Cenci MA, Calabresi P (2003) Loss of bidirectional striatal synaptic plasticity in L-DOPA-induced dyskinesia. *Nat Neurosci* 6:501-506. (**IF = 15.7**)
- 123.** Calabresi P, Marti M, **Picconi B**, Saulle E, Costa C, Centonze D, Pisani F, Bernardi G (2003) Lamotrigine and remacemide protect striatal neurons against *in vitro* ischemia: an electrophysiological study. *Exp Neurol* 182:461-469. (**IF = 3.5**)
- 124.** Maccarrone M, Gubellini P, Bari M, **Picconi B**, Battista N, Centonze D, Bernardi G, Finazzi-Agro A, Calabresi P (2003) Levodopa treatment reverses endocannabinoid system abnormalities in experimental parkinsonism. *J Neurochem* 85:1018-1025. (**IF = 4.8**)
- 125.** Napolitano M, Centonze D, Calce A, **Picconi B**, Spiezio S, Gulino A, Bernardi G, Calabresi P (2002) Experimental parkinsonism modulates multiple genes involved in the transduction of dopaminergic signals in the striatum. *Neurobiol Dis* 10:387-395. (**IF = 4.78**)
- 126.** Centonze D, **Picconi B**, Baunez C, Borrelli E, Pisani A, Bernardi G, Calabresi P (2002) Cocaine and amphetamine depress striatal GABAergic synaptic transmission through D2 dopamine receptors. *Neuropsychopharmacology* 26:164-175. (**IF = 4.94**)
- 127.** Gubellini P, **Picconi B**, Bari M, Battista N, Calabresi P, Centonze D, Bernardi G, Finazzi-Agro A, Maccarrone M (2002) Experimental parkinsonism alters endocannabinoid degradation: implications for striatal glutamatergic transmission. *J Neurosci* 22:6900-6907. (**IF = 7.9**)
- 128.** Centonze D, Napolitano M, Saulle E, Gubellini P, **Picconi B**, Martorana A, Pisani A, Gulino A, Bernardi G, Calabresi P (2002) Tissue plasminogen activator is required for corticostriatal long-term potentiation. *Eur J Neurosci* 16:713-721. (**IF = 3.9**)
- 129.** **Picconi B**, Pisani A, Centonze D, Battaglia G, Storto M, Nicoletti F, Bernardi G, Calabresi P (2002) Striatal metabotropic glutamate receptor function following experimental parkinsonism and chronic levodopa treatment. *Brain* 125:2635-2645. (**IF = 8.2**)
- 130.** Calabresi P, Saulle E, Marfia GA, Centonze D, Mulloy R, **Picconi B**, Hipskind RA, Conquet F, Bernardi G (2001) Activation of metabotropic glutamate receptor subtype 1/protein kinase C/mitogen-activated protein kinase pathway is required for postischemic long-term potentiation in the striatum. *Mol Pharmacol* 60:808-815. (**IF = 5.08**)
- 131.** Calabresi P, Ammassari-Teule M, Gubellini P, Sancesario G, Morello M, Centonze D, Marfia GA, Saulle E, Passino E, **Picconi B**, Bernardi G (2001) A synaptic mechanism underlying the behavioral abnormalities induced by manganese intoxication. *Neurobiol Dis* 8:419-432. (**IF = 4.78**)
- 132.** Calabresi P, Gubellini P, **Picconi B**, Centonze D, Pisani A, Bonsi P, Greengard P, Hipskind RA, Borrelli E, Bernardi G (2001) Inhibition of mitochondrial complex II induces a long-term potentiation of NMDA-mediated synaptic excitation in the striatum requiring endogenous dopamine. *J Neurosci* 21:5110-5120. (**IF = 7.9**)
- 133.** Centonze D, Gubellini P, **Picconi B**, Saulle E, Tolu M, Bonsi P, Giacomini P, Calabresi P (2001) An abnormal striatal synaptic plasticity may account for the selective neuronal vulnerability in Huntington's disease. *Neurol Sci* 22:61-62. (**IF = 1.05**)

134. Centonze D, **Picconi B**, Gubellini P, Bernardi G, Calabresi P (2001) Dopaminergic control of synaptic plasticity in the dorsal striatum. *Eur J Neurosci* 13:1071-1077. (**IF = 3.8**)
135. Centonze D, Marfia GA, Pisani A, **Picconi B**, Giacomini P, Bernardi G, Calabresi P (2001) Ionic mechanisms underlying differential vulnerability to ischemia in striatal neurons. *Prog Neurobiol* 63:687-696. (**IF = 11.9**)
136. Martorana A, Fusco FR, **Picconi B**, Massa R, Bernardi G, Sancesario G (2001) Dopamine denervation induces neurotensin immunoreactivity in GABA-parvalbumin striatal neurons. *Synapse* 41:360-362. (**IF = 2.57**)
137. Pisani A, Gubellini P, Bonsi P, Conquet F, **Picconi B**, Centonze D, Bernardi G, Calabresi P (2001) Metabotropic glutamate receptor 5 mediates the potentiation of N-methyl-D-aspartate responses in medium spiny striatal neurons. *Neuroscience* 106:579-587. (**IF = 3.6**)
138. Pisani A, Bonsi P, **Picconi B**, Tolu M, Giacomini P, Scarnati E (2001) Role of tonically-active neurons in the control of striatal function: cellular mechanisms and behavioral correlates. *Prog Neuropsychopharmacol Biol Psychiatry* 25:211-230. (**IF = 1.058**)
139. Calabresi P, Gubellini P, Centonze D, **Picconi B**, Bernardi G, Chergui K, Svenssonsson P, Fienberg AA, Greengard P (2000) Dopamine and cAMP-regulated phosphoprotein 32 kDa controls both striatal long-term depression and long-term potentiation, opposing forms of synaptic plasticity. *J Neurosci* 20:8443-8451. (**IF = 7.9**)
140. Calabresi P, **Picconi B**, Saulle E, Centonze D, Hainsworth AH, Bernardi G (2000) Is pharmacological neuroprotection dependent on reduced glutamate release? *Stroke* 31:766-772; discussion 773. (**IF = 5.74**)
141. Centonze D, Gubellini P, **Picconi B**, Calabresi P, Giacomini P, Bernardi G (1999) Unilateral dopamine denervation blocks corticostriatal LTP. *J Neurophysiol* 82:3575-3579. (**IF = 3.59**)
142. Malchiodi-Albedi F, Petrucci TC, **Picconi B**, Iosi F, Falchi M (1997) Protein phosphatase inhibitors induce modification of synapse structure and tau hyperphosphorylation in cultured rat hippocampal neurons. *J Neurosci Res* 48:425-438. (**IF = 3.08**)