

INFORMAZIONI PERSONALI

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Sesso Maschile | [Data di nascita](#) 18/07/1965 | [Nazionalità](#) Italiana

TITOLO DI STUDIO
POSIZIONE RICOPERTA**Studi compiuti**

- 1993 Laurea in Medicina e Chirurgia, Università degli Studi di Milano
- 1993 Abilitazione alla professione medica e iscrizione all'Ordine Provinciale dei Medici Chirurghi e degli Odontoiatri, Milano
- 1998 Dottorato di ricerca in Farmacologia e Tossicologia dell'Università degli Studi di Milano

ESPERIENZA
PROFESSIONALE**Posizioni ricoperte**

- Ricercatore CNR presso l'Istituto di Neuroscienze dal Novembre 2001 al Dicembre 2005
- Primo ricercatore CNR dal Gennaio 2006 presso l'Istituto di Neuroscienze

ULTERIORI INFORMAZIONI

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Esperienze professionali all'estero

- 1998-2001 Postdoctoral research fellow presso il laboratorio di Morgan Sheng al Howard Hughes Medical Institute, Department of Neurobiology, Harvard Medical School, Boston USA
- Giugno 2002-Luglio 2002 Visiting scientist presso The Picower Center for Learning and Memory and Howard Hughes Medical Institute Massachusetts Institute of Technology, Cambridge, USA

Partecipazione a Comitati di Redazione (Editorial Board)

- Review editor di *Frontiers in Cellular Neuroscience* dal 15/02/2014
- Handling editor di *Journal of Neurochemistry* dal 01/01/2013
- Associated editor di *Journal of Neuroscience* dal 01/01/2013
- Associate editor di *Frontiers in Molecular Neuroscience* dal 11/02/2015
- Associate editor in *Synaptic Neuroscience* dal 15/02/2016
- Editore di: *Synaptic Plasticity, Advances in Experimental Medicine and Biology*, 2012, Volume 970, Part 4, 433-449, DOI: 10.1007/978-3-7091-0932-8_19
- Editore di: *Synaptic Dysfunction in Autism Spectrum Disorder and Intellectual Disability*, in uscita nel 2016

Riconoscimenti Scientifici e Premi

- Premio "Domenico Libro" per miglior tesi di laurea in Farmacologia dell'Università degli Studi di Milano 1995
- 1998 Borsa di studio CNR per l'estero,
- 2000 Giovanni Armenise-Harvard Foundation Career Development Award

Articoli Pubblicati a stampa su giornali scientifici censiti dal JCR

Profilo su Google Scholar: <http://scholar.google.it/citations?user=J8RoQs8AAAAJ&hl=it>

Elenco pubblicazioni principali

- Vicidomini C, Ponzoni L, Lim L, Schmeisser M, Reim D, Morello N, Orelanna D, Tozzi A, Durante V, Scalmani P, Mantegazza M, Genazzani AA, Giustetto M, Sala M, Calabresi P, Boeckers TM, **Sala C**, Verpelli C (2016) Pharmacological enhancement of mGlu5 receptors rescues behavioral deficits in SHANK3 knock-out mice. *Mol Psychiatry* (in press).
- Heise C, Taha E, Murru L, Ponzoni L, Cattaneo A, Guarnieri FC, Montani C, Mossa A, Vezzoli E, Ippolito G, Zapata J, Barrera I, Ryazanov AJ, Cook J, Poe M, Stephen M, Kopanitsa M, Benfante R, Rusconi F, Braida D, Francolini M, Proud CG, Valtorta F, Passafaro M, Sala M, Bachi A, Verpelli C, Rosenblum K, **Sala C** (2016) eEF2K/eEF2 pathway controls the excitation/inhibition balance and susceptibility to epileptic seizures Cereb Cortex (in press)
- **Sala C**, Vicidomini C, Bigi I, Mossa A, Verpelli C. (2015) Shank synaptic scaffold proteins: keys to understanding the pathogenesis of autism and other synaptic disorders. *J Neurochem*. 2015 Jul 6. doi: 10.1111/jnc.13232.
- Ramos-Brossier M, Montani C, Lebrun N, Gritti L, Martin C, Seminatore-Nole C, Toussaint A, Moreno S, Poirier K, Dorseuil O, Chelly J, Hackett A, Gez J, Bieth E, Faudet A, Heron D, Kooy RF, Loeys B, Humeau Y, **Sala C**, Billuart P (2015) Novel IL1RAPL1 mutations associated with intellectual disability impair synaptogenesis. *Hum Mol Genet*. 24(4):1106-18.
- **Sala C**, Segal M (2014) Dendritic spines: the locus of structural and functional plasticity. *Physiological Reviews* 94(1):141-188.
- Heise C, Gardoni F, Culotta L, di Luca M, Verpelli C, **Sala C** (2014) Elongation factor-2 phosphorylation in dendrites and the regulation of dendritic mRNA translation in neurons. *Front Cell Neurosci*. Feb 10;8:35. eCollection 2014.
- Carlessi L, Fusar Poli E, Bechi G, Mantegazza M, Pascucci B, Narciso L, Dogliotti E, **Sala C**, Verpelli C, Lecis D, Delia D. (2014) Functional and molecular defects of hiPSC-derived neurons from patients with ATM deficiency. *Cell Death Dis*. 2014 Jul 17;5:e1342. doi: 10.1038/cddis.2014.310.
- Studtmann K, Olschläger-Schütt J, Buck F, Richter D, **Sala C**, Bockmann J, Kindler S, Kreienkamp HJ. (2014) A non-canonical initiation site is required for efficient translation of the dendritically localized Shank1 mRNA. *PLoS One*. 2014 Feb 12;9(2):e88518. doi: 10.1371/journal.pone.0088518.
- Pischedda F, Szczurkowska J, Cîrnaru MD, Giesert F, Vezzoli E, Ueffing M, **Sala C**, Francolini M, Hauck SM, Cancedda L, Piccoli G A (2014) Cell Surface Biotinylation Assay to Reveal Membrane-associated Neuronal Cues: Negr1 Regulates Dendritic Arborization. *Mol Cell Proteomics*. 2014 Mar;13(3):733-48
- Yuan T, Mamei M, O'Connor EC, Dey P, Verpelli C, **Sala C**, Perez-Otano I, Lüscher C, Bellone C. (2013) Expression of cocaine-evoked synaptic plasticity by GluN3A-containing NMDA receptors. *Neuron* 80(4):1025-38.
- Verpelli C, Carlessi L, Bechi G, Poli EF, Orellana D, Heise C, Franceschetti S, Mantegazza R, Mantegazza M, Delia D, **Sala C**. (2013) Comparative neuronal differentiation of self-renewing neural progenitor cell lines obtained from human induced pluripotent stem cells. *Front Cell Neurosci*. 2013 Oct 7;7:175
- Toffolo E, Rusconi F, Paganini L, Tortorici M, Pilotto S, Heise C, Verpelli C, Tedeschi G, Maffioli E, **Sala C**, Mattevi A, Battaglioli E. Phosphorylation of neuronal LSD1/KDM1A (Lysine Specific Demethylase 1) impairs transcriptional repression by regulating interaction with CoREST and histone acetylase HDAC1/2. (2013) *J Neurochem*. 2013 Sep 20. doi: 10.1111/jnc.12457.
- Mameza MG, Dvoretzkova E, Bamann M, Hoencck HH, Guler T, Boeckers TM, Schoen M, Verpelli C, **Sala C**, Barsukov I, Dityatev A, Kreienkamp HJ. (2013) SHANK3 mutations associated with autism facilitate ligand binding to the Shank3 Ankyrin repeat region. *J Biol Chem*, 288(37):26697-708.

- Verpelli C, Galimberti I, Gomez-Mancilla B, **Sala C** (2013) Molecular basis for prospective pharmacological treatment strategies in intellectual disability syndromes. *Dev Neurobiol*. doi: 10.1002/dneu.22093.
- Penzes P, Buonanno A, Passafaro M, **Sala C**, Sweet RA (2013) Developmental vulnerability of synapses and circuits associated with neuropsychiatric disorders. *J Neurochem*, 126(2):165-82.
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- Verpelli C, **Sala C** (2012) Molecular and synaptic defects in intellectual disability syndromes. *Curr Opin Neurobiol*. 22(3):530-6.
- Valnegri P, Montrasio C, Brambilla D, Ko J, Passafaro M, **Sala C** (2011) The X-linked intellectual disability protein IL1RAPL1 regulates excitatory synapse formation by binding PTP{delta} and RhoGAP2. *Hum Mol Genet*. 20:4797-809.
- Valnegri P, Khelifaoui M, Dorseuil O, Bassani S, Lagneaux C, Gianfelice A, Benfante R, Chelly J, Billuart P, **Sala C**, Passafaro M (2011) A circadian clock in hippocampus is regulated by interaction between oligophrenin-1 and Rev-erba. *Nat Neurosci*. 14:1293-301.
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- Naisbitt S, Kim E, Tu JC, Xiao B, **Sala C**, Valtschanoff J, Weinberg RJ, Worley PF, Sheng M (1999) Shank, a novel family of postsynaptic density proteins that binds to the NMDA receptor/PSD-95/GKAP complex and cortactin. *Neuron* 23:569-582.
- Passafaro M, **Sala C**, Niethammer M, Sheng M (1999) Microtubule binding by CRIPT and its potential role in the synaptic clustering of PSD-95. *Nat Neurosci* 2:1063-1069.
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Libri e capitoli di libri

- Michael R. Kreutz and **Carlo Sala** Editors (2012) Synaptic Plasticity. Adv Exp Med Biol. Springer Edition
- Valnegri P, **Sala C**, Passafaro M. (2012) Synaptic dysfunction and intellectual disability. *Adv Exp Med Biol.* 2012;970:433-49.
- Verpelli C, Schmeisser MJ, **Sala C**, Boeckers TM. (2012) Scaffold proteins at the postsynaptic density. *Adv Exp Med Biol.* 2012;970:29-61.
- Romorini S, Piccoli G. **Sala C**. (2006) Regulation of dendritic spine morphology and synaptic function by scaffold proteins. In: Molecular mechanisms of synaptogenesis. Springer Edition, edited by Dityatev A, El-Husseini A.