

INFORMAZIONI PERSONALI **Cosimo Roberto Melcangi**

ESPERIENZA PROFESSIONALE

Dal 2017 **Professore Ordinario di Endocrinologia (MED13)**
Università degli Studi di Milano

Dal 2001 al 2017 **Professore Associato di Endocrinologia (MED13)**
Dipartimento di Scienze Farmacologiche e Biomolecolari , Università degli Studi di Milano

DAL 1992 AL 2001 **Ricercatore Universitario,**
Istituto di Endocrinologia e Dipartimento di Endocrinologia, Università degli Studi di Milano

1987 **Postdoctoral fellow at the Centre of Neurochimie,**
Strasbourg, France

ISTRUZIONE E FORMAZIONE

1988 **PhD in Scienze Endocrinologiche e Metaboliche**
Università degli Studi di Milano

1982 **Laurea in Chimica e Tecnologia Farmaceutiche, Facoltà di Farmacia**
Università degli Studi di Milano

COMPETENZE PERSONALI

Lingua madre Italiano

Altre lingue Inglese

Competenze Comunicative

Ottime capacità comunicative ottenuta grazie all'esperienza di docente Universitario e di relatore a conferenze Internazionali e Nazionali

Competenze organizzative e gestionali

Leader di un gruppo di ricerca da piu di 20 anni
Esperienza nell'organizzazione e nel coordinamento di un gruppo di ricerca e coordinazione di progetti su scala nazionale ed internazionale

ULTERIORI INFORMAZIONI

Publicazioni	Autore di 221 pubblicazioni in riviste peer-review H Index: 57
Citazioni	Numero totale citazioni: 9005
Conferenze Seminari	Ultimi 7 anni-Invited speakers a: 2016- 29th ECNP Congress, Vienna, Austria 2016- 9th European Congress of Andrology, Rotterdam, The Netherlands. 2016- XII National Congress of Italian Society for Andrology and Sexual Medicine, Roma, Italy. 2017- 11th Annual Meeting Organization for the Study of Sex Differences, Montreal, Quebec 2018- Colegio Colombiano de Neurociencias, Bogotá, Colombia. 2018- The new challenge of biomedicine: The study of gender-specific disease in basic and clinical sciences, Roma, Italy 2019- 21st Congress of the European Society for Sexual Medicine, Ljubljana, Slovenia 2020- Breaking the Frontiers of Endocrine Body-Brain Signaling, Madrid, Spain 2022- 60 años Dept de Fisiología, Biofísica y Neurociencias-Mexico City 2022- Androgen Society Annual Meeting 2022- Orlando-Florida, USA
Progetti/Grants	Responsabile e coordinatore di progetti finanziati da Agenzie Italiane (Ministero dell'Università e Ricerca, Ministero della Salute), Fondazioni (CARIPOLO, Telethon, FISM, Post-Finasteride Syndrome Foundation), Comunità Europea (RTD program).
Organizzazione di Congressi	1998- POC "IV International Congress of Neuroendocrinology" Kitakyushu, Japan. 2000- Organizzatore della tavola rotonda "Hormones, Glia and Myelin in Central and Peripheral Nervous System" -IV European meeting on glial cell function in health and disease, Barcelona, Spain. 2000- Organizzatore del Simposio "Growth factor-gonadal steroid interactions in hypothalamic function" -Forum of European Neuroscience 2000, Brighton, UK. 2004- POC "4 th Forum of European Neuroscience" Lisbon, Portugal. 2006- POC "12 th International Congress on Hormonal Steroids and Hormones & Cancer" Athens, Greece. 2007 Organizzatore del 1° Meeting del Gruppo Italiano di Scienze Neuroendocrine (GISNe), Torino, Italia. 2009- Organizzatore del Congresso Nazionale della Società Italiana di Neuroscienze, Milano, Italia 2010 Organizzatore del 4° Meeting GISNe, Torino, Italia. 2010- Organizzatore del National Meeting of PhD students in Neuroscience, Busto Arsizio, Italy. 2011- Organizzatore del 5° Meeting GISNe, Torino, Italia. 2013- POC "XI European Meeting on Glial Cells in Health and Disease" Berlin, Germany 2014- LOC "Federation of European Neurosciences" 2014, Milano, Italia. 2000-2002-2004-2006-2008-2010-2012 International Symposium on Neurobiology and Neuroendocrinology of Aging" Bregenz, Austria. 2001-2003-2005-2007-2009-2011-2013-2015-2017-2019-2022 Organizer of International Meeting "Steroids and Nervous System" Torino, Italy.
Altre Attività	2001-2007 Rappresentante Europeo nel Direttivo dell' International Neuroendocrine Federation 2005-2009 Membro del Direttivo della Società Italiana di Neuroscienze (SINS) 2005-2009 Membro della Commissione Scientifica della Società Italiana di Endocrinologia (SIE) 2006-on Membro del Direttivo GISNe 2006-on Membro del Direttivo del Centro di Eccellenza per Malattie Neurodegenerative (CEND) 2010-2011 Membro della Commissione di aggiornamento scientifico della SIE 2011-2013 Member of Scientific Commission of SIE 2011-2013 Membro della Commissione Regionale (Lombardia) della SIE 2013-2017 Membro del Direttivo della SIE Attività Editoriale-Guest Editor: Brain Res. Rev. 37:1-384, 2001/Annals of the New York Academy of Sciences volume 1007, anno 2003/ Neuroscience 138:733-1048, 2006/ J. Mol. Neurosci, 28:1-102, 2006/ Neurochem. Int. 52:503-904, 2008/ Brain Res. Rev. 57: 271-605, 2008/ Psychoneuroendocrinology 34, supplement 1, December 2009 ISSN 0306-4530/ Neuroscience 191: 2011/ Neuroendocrinology, 24: 1-248, 2012/ J. Neuroendocrinol., 25: 957-1237, 2013/ Prog.Neurobiol. 113: 1-136, 2014/ J. Steroid Biochem. Mol. Biol., 160: 1-226, 2016/ Neurosci. Biobehav. Rev. 67: 1-146, 2016/J. Neuroendocrinol, 30, 2019/ Frontiers in Neuroendocrinology,48:1-78, 2019
Memberships	Società Italiana di Endocrinologia (SIE) Società Italiana di Neuroscienze (SINS) www.europass-center.europa.eu

ALLEGATI

Lista delle pubblicazioni Scientifiche

Dati Personali

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 (Codice in materia di protezione dei dati personali) e sue successive modifiche e integrazioni, nonché del Regolamento UE 679/2016 (Regolamento Generale sulla Protezione dei dati o, più brevemente, RGPD).

Firma

ANNEX 1 - Lista delle pubblicazioni

Celotti F., Negri-Cesi P., Limonta P., Melcangi C. Is the 5 α -reductase of the hypothalamus and of the anterior pituitary neurally regulated? Effects of hypothalamic deafferentations and of centrally acting drugs. *J. Steroid Biochem.* 19:229-234, 1983.

Celotti F., Avogadri N., Melcangi C., Milani S., Negri-Cesi P. Cyclophenil, a non steroidal compound with higher central than peripheral estrogenic activity: study of its uterine growth activity in comparison with some central parameters in castrated female rats. *Acta Endocrinol.* 107:340-345, 1984.

Melcangi R.C., Celotti F., Negri-Cesi P., Martini L. Testosterone 5 α -reductase in discrete hypothalamic nuclear areas in the rat: effect of castration. *Steroids* 45:347-356, 1985.

Celotti F., Apud J.A., Melcangi R.C., Masotto C., Tappaz M., Racagni G. Endocrine modulation of GABAergic innervation in the rat fallopian tube. *Endocrinology* 118:334-339, 1986.

Celotti F., Melcangi R.C., Negri-Cesi P., Ballabio M. and Martini. A comparative study of the metabolism of testosterone in the neuroendocrine structures of several animal species. *Neuroendocrinology lett.* 8:227-235, 1986.

Celotti F., Apud J.A., Rovescalli A.C., Melcangi R.C., Negri-Cesi P., Racagni G. The GABAergic extrinsic innervation of the rat fallopian tubes: biochemical evidence and endocrine modulation. *Advances Biochem Psychopharmacol.* 42: 251-264, 1986.

Negri-Cesi P., Celotti F., Melcangi R.C., Zanisi M. and Motta M. Tamoxifen does not block the inhibitory effect of testosterone on FSH release in rat. *Acta Endocrinol.* 114:84-89, 1987.

Celotti F., Melcangi R.C., Negri-Cesi P., Ballabio M. and Martini L. Differential distribution of the 5 α -reductase in the central nervous system of the rat and the mouse: are the white matter structures of the brain target tissue for testosterone action? *J. Steroid. Biochem.* 26:125-129, 1987.

Negri-Cesi P., Celotti F., Melcangi R.C. and Martini L. Androgen metabolism in the male hamster. 1. Metabolism of testosterone in the pituitary gland and in the brain of animals exposed to different photoperiods. *J. Steroid Biochem.* 28:179-184, 1987.

Melcangi R.C., Celotti F., Poletti A., Negri-Cesi P. and Martini L. The 5 α -reductase activity of the subcortical white matter, the cerebral cortex and the hypothalamus of the rat and of the mouse: possible sex differences and effect of castration. *Steroids* 49:259-270, 1987.

Melcangi R.C., Celotti F., Ballabio M., Poletti A., Castano P. and Martini L. Testosterone 5 α -reductase activity in the rat brain is highly concentrated in white matter structures and in purified myelin sheaths of axons. *J. Steroid Biochem.* 31:173-179, 1988.

Melcangi R.C., Celotti F., Ballabio M., Castano P., Poletti A., Milani S., Martini L. Ontogenetic development of the 5 α -reductase in the rat brain: cerebral cortex, hypothalamus, purified myelin and isolated oligodendrocytes. *Dev. Brain Res.* 44:181-188, 1988.

Melcangi R.C., Celotti F., Ballabio M., Carnaghi R., Poletti A., Martini L. Effect of postnatal starvation on the 5 α -reductase activity of the brain and of the isolated myelin membranes. *Exp. Clin. Endocrinol.* 94:253-261, 1989.

Poletti A., Celotti F., Melcangi R.C., Ballabio M., Martini L. Kinetic properties of 5 α -reductase of testosterone in the purified myelin, in the subcortical white matter and in the cerebral cortex of the male rat brain. *J. Steroid Biochem.* 35:97-101, 1990.

Melcangi R.C., Celotti F., Ballabio M., Castano P., Massarelli R., Poletti A., Martini L. 5 α -reductase activity in isolated and cultured neuronal and glial cells of the rat. *Brain Res.* 516: 229-236, 1990.

Martini L., Celotti F., Lechuga M.J., Melcangi R.C., Motta M., Negri-Cesi P., Poletti A., Zoppi S. Androgen metabolism in different target tissues. *Annals of the New York Academic Sciences* 595:184-198, 1990.

Melcangi R.C., Celotti F., Ballabio M., Poletti A., Martini L. Testosterone metabolism in peripheral nerves: presence of the 5 α -reductase-3 α -hydroxysteroid-dehydrogenase enzymatic system in the sciatic nerve of

adult and aged rats. *J. Steroid Biochem.* 35:145-148,1990.

Celotti F., Melcangi R.C., Negri-Cesi P., Poletti A. Testosterone metabolism in brain cells and membranes. *J. Steroid Biochem. Molec. Biol.* 40: 673-678,1991.

Martini L., Melcangi R.C. Androgen metabolism in the brain. *J. Steroid Biochem. Molec. Biol.* 39: 819-828, 1991.

Celotti F., Melcangi R.C., Martini L. The 5 α -reductase in the brain: molecular aspects and relation to brain function. *Front. Neuroendocrinol.* 13:163-215,1992.

Negri-Cesi P., Melcangi R.C., Celotti F., Martini L. Aromatase activity in cultured brain cells: difference between neurons and glia. *Brain Res.* 589:327-332,1992.

Melcangi R.C., Celotti F., Castano P., Martini L. Is the 5 α -reductase-3 α -hydroxysteroid dehydrogenase complex associated with the myelin in the peripheral nervous system of young and old male rats? *Endocrine Reg.* 26:119-125,1992.

Melcangi R.C., Celotti F., Castano P., Martini L. Intracellular signalling systems controlling the 5 α -reductase in glial cell cultures. *Brain Res.* 585: 411-415,1992.

Volterra A., Trotti D., Cassuti P., Tromba C., Salvaggio A., Melcangi R.C., Racagni G. High sensitivity of glutamate uptake to extracellular free arachidonic acid levels in rat cortical synaptosomes and astrocytes. *J. Neurochem.* 59:600-606,1992.

Negri-Cesi P., Melcangi R.C., Celotti F., Martini L. Distribution of aromatase activity in cultured neurons and glia cells. *J. Steroid Biochem. Molec. Biol.* 44: 637-639, 1993.

Martini L., Melcangi R.C., Maggi R. Androgen and progesterone metabolism in the central and peripheral nervous system. *J. Steroid Biochem. Molec. Biol.* 47:195-205,1993.

Melcangi R.C., Celotti F., Castano P., Martini L. Differential localization of the 5 α -reductase and the 3 α -hydroxysteroid dehydrogenase in neuronal and glial cultures. *Endocrinology* 132:1252-1259, 1993.

Melcangi R.C., Maggi R., Martini L. Testosterone and progesterone metabolism in the human neuroblastoma cell line SH-SY5Y. *J. Steroid Biochem. Molec. Biol.* 46: 811-818,1993.

Melcangi R.C., Celotti F., Martini L. Progesterone 5 α -reduction in neurons, astrocytes and oligodendrocytes. *Brain Res.* 639:202-206, 1994.

Melcangi R.C., Celotti F., Martini L. Neurons influence the metabolism of testosterone in cultured astrocytes via humoral signals. *Endocrine* 2:709-713, 1994.

Santagati S., Melcangi R.C., Celotti F., Martini L., Maggi A. Estrogen receptor is expressed in different types of glial cells in culture. *J. Neurochem.* 63:2058-2064,1994.

Poletti A., Melcangi R.C., Negri-Cesi P., Maggi R., Martini L. Steroid binding and metabolism in the luteinizing hormone-releasing hormone-producing neuronal cell line GT1-1. *Endocrinology* 135:2663-2628,1994.

Melcangi R.C., Ballabio M., Magnaghi V., Celotti F. Metabolism of steroids in pure cultures of neurons and glial cells: role of intracellular signalling. *J. Steroid Biochem. Molec. Biol.* 53:331-336, 1995.

Melcangi R.C., Galbiati M., Messi E., Piva F., Martini L., Motta M. Type 1 astrocytes influence luteinizing hormone-releasing hormone release from the hypothalamic cell line GT1-1: is transforming growth factor- β the principle involved? *Endocrinology* 136:679-686,1995.

Melcangi R.C., Riva M.A., Fumagalli F., Magnaghi V., Racagni G., Martini L. Effect of progesterone, testosterone and their 5 α -reduced metabolites on GFAP gene expression in type 1 astrocytes. *Brain Res.* 711:10-15, 1996.

Martini L., Celotti F., Melcangi R.C. Testosterone and progesterone metabolism in the central nervous system: cellular localization and mechanism of control of the enzymes involved. *Cell Molec. Neurobiol.* 16, 271-282, 1996.

Melcangi R.C., Froelichsthal P., Martini L., Vescovi A.L. Steroid metabolizing enzymes in pluripotential progenitor CNS cells: effect of differentiation and maturation. *Neuroscience* 72:467-475, 1996.

Galbiati M., Zanisi M., Messi E., Cavarretta I., Martini L., Melcangi R.C. Transforming growth factor- β and astrocytic conditioned medium influence luteinizing hormone-releasing hormone gene expression in the hypothalamic cell line GT1. *Endocrinology* 137: 5605-5609, 1996.

Melcangi R.C., Galbiati M., Messi E., Magnaghi V., Cavarretta I., Riva, M.A., Zanisi M. Astrocyte-neuron interactions in vitro: role of growth factors and steroids on LHRH dynamics. *Brain Res. Bull.* 44: 465-469, 1997.

Poletti A., Negri-Cesi P., Melcangi R.C., Colciago A., Martini L., Celotti F. Expression of androgen-activating enzymes in cultured cells of developing rat brain. *J. Neurochem.* 68: 1298-1303, 1997.

Martini L., Melcangi R.C. The brain: a vulnerable target. *Exp. Gerontol.* 32: 355-362, 1997.

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De Marchis S., Melcangi R.C., Modena C., Cavarretta I., Peretto P., Agresti C., Fasolo A. Identification of the glial cell types containing carnosine-related peptides in the rat brain. *Neuroscience Letters* 237: 37-40, 1997.

Melcangi R.C., Poletti A., Cavarretta I., Celotti F., Colciago A., Magnaghi V., Motta M., Negri-Cesi P., Martini L. The 5 α -reductase in the central nervous system: expression and modes of control. *J. Steroid Biochem. Molec. Brain Res.* 65:295-299, 1998.

Melcangi R.C., Cavarretta I., Magnaghi V., Ballabio M., Martini L., Motta M. Crosstalk between normal and tumoral brain cells. Effect on sex steroid metabolism. *Endocrine* 8: 65-71, 1998.

Melcangi R.C., Magnaghi V., Cavarretta I., Martini L., Piva F. Age-induced decrease of glycoprotein P0 and Myelin Basic Protein gene expression in the rat sciatic nerve. Repair by steroid derivatives. *Neuroscience* 85: 569-578, 1998.

Melcangi R.C., Magnaghi V., Cavarretta I., Riva M.A., Piva F., Martini L. Effects of steroid hormones on gene expression of glial markers in the central and peripheral nervous system: variations induced by aging. *Exp. Gerontol.*, 33:827-836, 1998.

Melcangi R.C., Magnaghi V., Cavarretta I., Zucchi I., Bovolin P., D'Urso D., Martini L. Progesterone derivatives are able to influence peripheral myelin protein 22 and P0 gene expression: possible mechanisms of action. *J. Neurosci. Res.*, 56: 349-357, 1999.

Magnaghi V., Cavarretta I., Zucchi I., Susani L., Rupprecht R., Hermann B., Martini L., Melcangi R.C. P0 gene expression is modulated by androgens in the sciatic nerve of adult male rats. *Mol. Brain Res.*, 70:36-44, 1999.

Melcangi R.C., Magnaghi V., Martini L. Steroid metabolism and effects in central and peripheral glial cells. *J. Neurobiol.*, 40:471-483, 1999.

Messi E., Galbiati M., Magnaghi V., Zucchi I., Martini L., Melcangi R.C. Transforming growth factor β 2 is able to modify mRNA levels and release of luteinizing hormone-releasing hormone in a immortalized hypothalamic cell line (GT1-1). *Neuroscience Lett.* 270:165-168, 1999.

Cavarretta I., Magnaghi V., Ferraboschi P., Martini L., Melcangi R.C. Interactions between type 1 astrocytes and LHRH-secreting neurons (GT1-1 cells): modification of steroid metabolism and possible role of TGF β 1. *J. Steroid Biochem. Mol. Biol.* 71:41-47, 1999.

Martini L., Melcangi R.C. Effects of steroid hormones on myelin proteins of the peripheral nervous system. *J. Endocrinol. Invest.* 22:7-9, 1999.

Melcangi R.C., Magnaghi V., Martini L. Aging in peripheral nerves: regulation of myelin protein genes by steroid hormones. *Prog. Neurobiol.* 60:291-308, 2000.

Casulari L.A., Melcangi R.C., Piva F., Martini L., Maggi R. Factors released by rat type 1 astrocytes exert different effects on the proliferation of human neuroblastoma cells (SH-SY5Y) in vitro. *Endocrine-related Cancer*, 7:63-71, 2000.

Magnaghi V., Riva M.A., Cavarretta I., Martini L., Melcangi R.C. Corticosteroids regulate the gene expression of FGF-1 and FGF-2 in cultured rat astrocytes. *J. Mol. Neurosci.*, 15:11-18, 2000.

Melcangi R.C., Magnaghi V., Galbiati M., Ghelarducci B., Sebastiani L., Martini L. The action of steroid hormones on peripheral myelin proteins: a possible new tool for the rebuilding of myelin? *J. Neurocytol.*, 29:327-339, 2000.

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Melcangi R.C., Cavarretta I., Magnaghi V., Ciusani E., Salmaggi A. Corticosteroids protect oligodendrocytes from cytokine-induced cell death. *NeuroReport*, 11:3969-3972, 2000.

Galbiati M., Magnaghi V., Martini L., Melcangi R.C. Hypothalamic transforming growth factor $\alpha 1$ and basic fibroblast growth factor mRNA expression is modified during the rat oestrus cycle. *J. Neuroendocrinol.* 13:483-489, 2001.

Melcangi R.C., Magnaghi V., Galbiati M., Martini L. Steroid effects on the gene expression of peripheral myelin proteins. *Hormones and Behavior*, 40:210-214, 2001.

Melcangi R.C., Magnaghi V., Galbiati M., Martini L. Glial cells: a target for steroid hormones. *Progress in Brain Research*, 132:31-40, 2001.

Melcangi R.C., Magnaghi V., Galbiati M., Martini L. Formation and effects of neuroactive steroids in the central and peripheral nervous system. *International Review of Neurobiology*, 46: 145-175, 2001.

Melcangi R.C., Panzica G. Steroids in nervous system: a Pandora's box? *TINS* 24: 311-312, 2001.

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Magnaghi V., Cavarretta I., Galbiati M., Martini L., Melcangi R.C. Neuroactive steroids and peripheral myelin proteins. *Brain Res. Rev.* 37:360-371, 2001.

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Melcangi R.C., Martini L., Galbiati M. Growth factors and steroid hormones: a complex interplay in the hypothalamic control of reproductive functions. *Prog. Neurobiol.* 67:421-449, 2002.

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Melcangi R.C., Leonelli E., Magnaghi V., Gherardi G., Nobbio L., Schenone A. Mifepristone (RU 38486) influences expression of glycoprotein P0 and morphological parameters at the level of rat sciatic nerve: in vivo observations. *Exp. Neurol.* 184: 930-938, 2003.

Melcangi R.C., Ballabio M., Cavarretta I., Gonzalez L.C., Leonelli E., Veiga S., Martini L., Magnaghi V.

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Martini L., Magnaghi V., Melcangi R.C. Actions of progesterone and its 5 α -reduced metabolites on the major proteins of the myelin of the peripheral nervous system. *Steroids*, 68:825-829, 2003.

Galbiati M., Martini L., Melcangi R.C. Role of glial cells, growth factors and steroid hormones in the control of LHRH-secreting neurons. *Domest. Anim. Endocrinol.* 25:101-108, 2003.

Melcangi R.C. Editorial-Introduction. *Prog. Neurobiol.* 71:1-2, 2003.

Schumacher M., Weill-Engerer S., Liere P., Robert F., Franklin R.J., Garcia-Segura L.M., Lambert J.J., Mayo W., Melcangi R.C., Parducz A., Suter U., Carelli C., Baulieu E.E., Akwa Y. Steroid hormones and neurosteroids in normal and pathological aging of the nervous system. *Prog. Neurobiol.* 71:3-29, 2003.

Garcia-Segura L.M., Veiga S., Sierra A., Melcangi R.C., Azcoitia I. Aromatase: a neuroprotective enzyme. *Prog. Neurobiol.* 71:31-41, 2003.

Ibanez C., Shields S.A., El-Etr M., Leonelli E., Magnaghi V., Li W.W., Sim F.J., Baulieu E.E., Melcangi R.C., Schumacher M., Franklin R.J. Steroids and the reversal of age-associated changes in myelination and remyelination. *Prog. Neurobiol.* 71:49-56, 2003.

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Giachino C., Galbiati M., Fasolo A., Peretto P., Melcangi R.C. Neurogenesis in the subependymal layer of the adult rat: A role of neuroactive derivatives of progesterone. *Ann. N.Y. Acad. Sci.* 1007:335-339, 2003.

Melcangi R.C., Galbiati M. Testosterone metabolism and its effects on glial cells of the central nervous system. In: *Hormone replacement therapy and the brain.* A.R. Genazzani (Ed.) pp. 72-78. The Parthenon Publishing Group 2003.

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Magnaghi V., Melcangi R.C. Role of neuroactive steroids in glial cells of the central and peripheral nervous system. *Recent Res. Devel. Neurosci* 1: 81-102, 2004.

Veiga S., Melcangi R.C., DonCarlos L.L., Garcia-Segura L.M., Azcoitia I. Sex hormones and brain aging. *Exp. Gerontol.* 39:1623-1631, 2004.

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