

## **ALLEGATO A**

UNIVERSITÀ DEGLI STUDI DI MILANO

Procedura di valutazione per la chiamata a professore di I fascia da ricoprire ai sensi dell'art. 24, comma 6, della Legge n. 240/2010 per il settore concorsuale 06/D2-Endocrinologia, Nefrologia e Scienze della Alimentazione e Del Benessere, (settore scientifico-disciplinare MED/13-Endocrinologia)

presso il Dipartimento di SCIENZE FARMACOLOGICHE E BIOMOLECOLARI, Codice concorso 3534

## **COSIMO ROBERTO MELCANGI CURRICULUM VITAE**

### **INFORMAZIONI PERSONALI**

COGNOME	MELCANGI
NOME	COSIMO ROBERTO
DATA DI NASCITA	28 OTTOBRE 1956

**1979-** Frequenta come studente interno l'Istituto di Endocrinologia dell'Università degli Studi di Milano, diretto dal prof. Luciano Martini.

**1982-** Laurea in Chimica e Tecnologie Farmaceutiche, discutendo la tesi sperimentale dal titolo "Controllo del metabolismo del testosterone nell'ipofisi anteriore e nell'ipotalamo di ratto".

**1987-** Centre De Neurochimie, Strasbourg, Francia (Prof. R. Massarelli).

**1988-** Dottore di Ricerca in: "Scienze Endocrinologiche e Metaboliche".

**1992-** Ricercatore presso l'Istituto di Endocrinologia dell'Università degli Studi di Milano.

**2001-ad oggi** Professore Universitario Associato (settore MED-13), attualmente presso il Dipartimento di Scienze Farmacologiche e Biomolecolari dell'Università degli Studi di Milano.

**2003-2009** Segretario del Consiglio di Corso di Laurea in Chimica e Tecnologie Farmaceutiche.

**01-12-2014** Abilitazione Nazionale Professore Universitario Prima Fascia (settore concorsuale 06/D2).

**2015- ad oggi** Presidente della Commissione Paritetica di Biotecnologie Farmaceutiche e Biotecnologie del Farmaco.

### **BORSE DI STUDIO E PREMI**

**1988-** Vince, per concorso, una borsa di studio offerta dalla ditta Recordati S.p.A., per ricerche sul tema: "Metabolismo del testosterone nel sistema nervoso centrale".

**1988-** Vince, per concorso, una borsa di studio offerta dal CNR (Bando n. 203.04.11), da usufruirsi presso Istituti o laboratori esteri, per ricerche nel campo delle discipline afferenti al Comitato Nazionale per le Scienze Biologiche e Mediche.

**1989-** Ottiene il rinnovo della borsa offerta dalla ditta Recordati S.p.A.

**1990-** Ottiene un ulteriore rinnovo della borsa offerta dalla Recordati S.p.A.

**1992-** Vince, per concorso, una borsa di studio biennale per lo svolgimento di ricerca Post-Dottorato bandita dall'Università di Milano (area n. 005-Scienze Biologiche).

**1999-** Vincitore del premio "P.G. Chiodini" per la Neuroendocrinologia.

## **ATTIVITA' DIDATTICA**

**1996-2005** Docente della Scuola di Specialità in Endocrinologia Sperimentale dell'Università degli Studi di Milano, insegnamento di "Biochimica degli Ormoni (area Endocrinologia Molecolare)".

**1998-2001** Gli viene affidato l'incarico di insegnamento di "Endocrinologia II" per il corso di Laurea in Chimica e Tecnologie Farmaceutiche, Facoltà di Farmacia.

**2000-ad oggi** Partecipazione alle Commissioni di Laurea per la Facoltà di Farmacia e relatore di 51 tesi di Laurea.

**2001-2006** Titolare dell'insegnamento di "Endocrinologia generale e modelli sperimentali" per il corso di Laurea in Chimica e Tecnologie Farmaceutiche, Facoltà di Farmacia

**2003-2015** Partecipazione al collegio di Dottorato in "Scienze Endocrinologiche e Metaboliche", Università degli studi di Milano e Docente Tutor di Dottorandi.

**2006- 2012** Titolare dell'insegnamento di "Endocrinologia" per il corso di Laurea in Chimica e Tecnologie Farmaceutiche, Facoltà di Farmacia, UNIMI.

**2009-2015** Titolare dell'insegnamento di "Endocrinologia Molecolare" per il corso di Laurea in Biotecnologie del Farmaco, Facoltà di Farmacia (Dal 1-10- 2012-Facoltà Scienze del Farmaco), UNIMI.

**2010-2014** Titolare dell'insegnamento di "Endocrinologia e controllo della nutrizione" per il corso di Laurea in Biotecnologie Farmaceutiche, Facoltà di Farmacia (Dal 1-10- 2012-Facoltà Scienze del Farmaco), UNIMI.

**2012-ad oggi** Titolare del corso "Endocrinologia e Metabolismo" per il corso di Laurea in Chimica e Tecnologie Farmaceutiche, Facoltà Scienze del Farmaco, UNIMI.

**2013-ad oggi** Partecipazione al collegio di Dottorato in "Ricerca Biomedica Integrata", Università degli studi di Milano e Docente Tutor di Dottorandi.

**2014-ad oggi** Titolare del corso "Basi molecolari dell'azione di ormoni e farmaci" per il corso di Laurea in Biotecnologie del Farmaco

**2015-2016** Titolare del corso "Ormoni/fitormoni e patologie metaboliche" per il corso di Laurea in Farmacia, Facoltà Scienze del Farmaco, UNIMI.

## **ATTIVITA' ORGANIZZATIVA**

**1998-** Membro del Comitato Organizzatore del Programma del "IV International Congress of Neuroendocrinology, Kitakyushu, Japan".

**2000-** Membro del Comitato Organizzatore del Programma del "V International Symposium on Neurobiology and Neuroendocrinology of Aging, Bregenz, Austria"

**2000-** Organizzatore della Tavola Rotonda "Hormones, Glia and Myelin in Central and Peripheral Nervous System" al 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" al Forum of European Neuroscience 2000, Brighton, UK.

**2001-** Organizzatore del Meeting Internazionale "Steroids and Nervous System" Torino, Italia.

**2002-** Membro del Comitato Organizzatore del Programma del "VI International Symposium on Neurobiology and Neuroendocrinology of Aging, Bregenz, Austria"

**2003-** Organizzatore del 2° Meeting Internazionale "Steroids and Nervous System" Torino, Italia.

**2003-** Membro del Comitato Organizzatore del 30° Congresso Nazionale della SIE.

**2004-** Membro del Comitato Organizzatore del Programma del "4<sup>th</sup> Forum of European Neuroscience, Lisbon-2004, Portugal"

**2004-** Membro del Comitato Organizzatore del Programma del "VII International Symposium on Neurobiology and Neuroendocrinology of Aging, Bregenz, Austria"

- 2005-** Organizzatore del 3° Meeting Internazionale “Steroids and Nervous System” Torino, Italia.
- 2006-** Membro del Comitato Organizzatore del Programma del “VIII International Symposium on Neurobiology and Neuroendocrinology of Aging” Bregenz, Austria.
- 2006-** Membro del Comitato Organizzatore del Programma del “12<sup>th</sup> International Congress on Hormonal Steroids and Hormones & Cancer” Athens, Greece.
- 2007-** Organizzatore del 4° International Meeting “Steroids and Nervous System” Torino, Italia.
- 2007-** Organizzatore della 1° Riunione Scientifica del Gruppo Italiano di Scienze Neuroendocrine. Torino, Italia.
- 2008-** Membro del Comitato Organizzatore del Programma del “IX International Symposium on Neurobiology and Neuroendocrinology of Aging” Bregenz, Austria.
- 2009-** Organizzatore del 5° International Meeting “Steroids and Nervous System” Torino, Italia.
- 2009-** Organizzatore del Congresso Nazionale della Società Italiana di Neuroscienze, Milano, Italia.
- 2010-** Organizzatore della 4° Riunione Scientifica del Gruppo Italiano di Scienze Neuroendocrine. Milano, Italia.
- 2010-** Membro del comitato organizzatore della Riunione Nazionale Dottorandi e Borsisti Italiani in Neuroscienze e materie affini. Busto Arsizio, Varese.
- 2010-** Membro del Comitato Organizzatore del Programma del “X International Symposium on Neurobiology and Neuroendocrinology of Aging” Bregenz, Austria.
- 2011-** Organizzatore del 6° International Meeting “Steroids and Nervous System” Torino, Italia.
- 2011-** Organizzatore della 5° Riunione Scientifica del Gruppo Italiano di Scienze Neuroendocrine. Torino, Italia.
- 2012-** Membro del Comitato Organizzatore del Programma del “XI International Symposium on Neurobiology and Neuroendocrinology of Aging” Bregenz, Austria.
- 2013-** Organizzatore del 7° International Meeting “Steroids and Nervous System” Torino, Italia.
- 2013-** Membro del Comitato Organizzatore del Programma del XI European Meeting on Glial Cells in Health and Disease, Berlino, Germania.
- 2014-** Membro del Comitato Locale della "Federation of European Neurosciences" 2014, Milano, Italia.
- 2015-** Organizzatore del 8° International Meeting “Steroids and Nervous System” Torino, Italia.
- 2017-** Organizzatore del 9° International Meeting “Steroids and Nervous System” Torino, Italia.

#### **INVITI A CONGRESSI NAZIONALI O INTERNAZIONALI.**

- 1994-** IX International Congress on Hormonal Steroids, Dallas, Texas, USA.
- 1995-** 1° Riunione biennale Internazionale sull'Adolescenza, Cagliari, Italia.
- 1995-** VI Congresso della Società Italiana di Neuroscienze, Milano, Italia.
- 1996-** 5th International conference on hormones, brain and behaviour, Torino, Italia.
- 1997-** Convegno della Società Italiana di Neuroscienze: "Fisiopatologia della funzione gliale", Genova, Italia.
- 1997-** International Symposium on Psychoneuroendocrine and Immunological Correlates of Aging, Pavia, Italia.
- 1998-** IV European Congress of Endocrinology, Sevilla, Spagna.
- 1998-** IV International Symposium on Neurobiology and Neuroendocrinology of aging, Bregenz, Austria.
- 2000-** Forum of European Neuroscience 2000, Brighton, UK
- 2000-** V International Symposium on Neurobiology and Neuroendocrinology of aging, Bregenz, Austria
- 2000-** Joint Meeting of the VI International Conference on Hormones, Brain and Behavior and the Society for Behavioral Neuroendocrinology, Madrid, Spain
- 2002-** Fifth European Meeting on glial function in Health and Disease (EUROGLIA 2002), Rome, Italy

**2002-** Workshop: Progress in Reproductive Physiology, Neustadt, Germany  
**2002-** European Society for Paediatric Endocrinology, 41<sup>st</sup> Annual Meeting, Madrid, Spain  
**2002-** International Congress on Hormonal Steroids and Hormones and Cancer, Fukuoka, Japan  
**2002-** Second International symposium on “Progestins, progesterone receptor modulators and progesterone antagonists” Siena, Italy.  
**2003-** Workshop: Immunology of multiple sclerosis: from molecular pathogenesis to treatment, Milano.  
**2003-** Symposium: New frontiers in neuroendocrinology. Milano, Italy.  
**2003-** XXXIII Annual congress of the International society of psychoneuroendocrinology, Pisa, Italy.  
**2003-** Sixth IBRO World Congress of Neuroscience. Prague, Czech Republic.  
**2004-** 23rd Joint Meeting of the British Endocrine Societies, Brighton, UK.  
**2004-** 1° International OASI Workshop and Satellite Symposium “Glia-neuron crosstalk in neuroinflammation, neurodegeneration and neuroprotection”, Troina (EN) and Catania, Italy.  
**2004-** International Meeting “The Aging People”, Pavia, Italy.  
**2004-** Workshop “Current knowledge on neurosteroids: correlation with the treatment of neurodegeneration, pain, anxiety, depression and memory deficiency”. Engelberg, Switzerland.  
**2005-** ECE2005 (European Congress of Endocrinology), Goteborg, Sweden.  
**2005-** International Symposium “Glial cells as key elements for brain function, protection and regeneration” Madrid, Spain  
**2006-** X Riunione Annuale del Gruppo di Studio Sistema Nervoso Periferico, Verona, Italia.  
**2006-** International Workshop “Role of locally-synthesized steroids in synaptic plasticity and neuroprotection” Strasbourg, France.  
**2006-** 6th International Symposium on “Experimental spinal cord repair and regeneration”, Brescia, Italy.  
**2007-** The 2nd World Congress on “Gender-Specific Medicine and Ageing, The Endocrine Impact”, Roma, Italy  
**2007-** 7th IBRO World Congress of Neuroscience, Melbourne, Australia  
**2007-** 32° Congresso Nazionale della Società Italiana di Endocrinologia, Verona, Italia.  
**2008-** Sociedad Argentina de Investigación Clínica and Sociedad Argentina de Fisiología. Mar del Plata, Argentina.  
**2009-** 33° Congresso Nazionale della Società Italiana di Endocrinologia, Sorrento, Italia.  
**2009-** Expert Meeting "Neuroplasticity, sex steroids, other modulators: impact on aging brain" Siena, Italy.  
**2009-** International Symposium Peripheral Nerve Repair and Regeneration and 2nd Club Brunelli Meeting, Torino, Italy  
**2010-** 14th World Congress of Gynecological Endocrinology, Firenze, Italy.  
**2010-** 1° Seminario post-specialistico in terapia ormonale in ginecologia e ostetricia "Ormoni e salute della donna" Siena, Italy.  
**2010-** International Behavioral Neuroscience Society-Annual Meeting. Villasimius, Cagliari, Italy.  
**2010-** 7th FENS. Amsterdam, The Netherlands.  
**2010-** 14th International Congress on Hormonal Steroids and Hormones & Cancer. Edinburgh, Scotland.  
**2011-** 10th European Meeting on Glial Cells in Health and Disease. Prague, Czech Republic  
**2011-** Insubria Autumn School of Neuroimmunopharmacology, Varese, Italy  
**2012-** 4i- Incontri Italiani Ipotalamo Ipofisi, Napoli, Italy  
**2012-** Congresso della Società Italiana di Neuroscienze, Catania, Italia  
**2012-** ISN Advanced School on New Approaches in Glial Cell Research, Barcellona, Spain  
**2105-** 38° Congresso Nazionale della Società Italiana di Endocrinologia, Taormina, Italia  
**2015-** XVI Congresso della Società Italiana di Neuroscienze, Cagliari, Italia.

**2016-** Donne in Neuroscienze, Istituto Mario Negri, Milano, Italy  
**2016-** 29th ECNP Congress, Vienna, Austria  
**2016-** 9th European Congress of Andrology, Rotterdam, The Netherlands.

## **ATTIVITÀ EDITORIALE.**

Guest Editor:

- Neuroactive Steroids in the Third Millennium*, Brain Res. Rev. 37:1-384, 2001.
- Steroids and the nervous system*, Annals of the New York Academy of Sciences volume 1007, anno 2003.
- Neuroactive steroids: old players in a new game*, Neuroscience 138:733-1048, 2006.
- Neuroprotective effects of steroids in the spinal cord and peripheral nervous system*, J. Mol. Neurosci, 28:1-102, 2006.
- Neurosteroids*, Neurochem. Int. 52:503-904, 2008.
- The endocrine nervous system: source and target for neuroactive steroids*, Brain Res. Rev. 57: 271-605, 2008.
- Neuroactive steroids: effects and mechanisms of action*, Psychoneuroendocrinology 34, supplement 1, December 2009 ISSN 0306-4530.
- Neuroactive Steroids: Focus on Human Brain*, Neuroscience 191: 2011.
- *Special issue in J. Neuroendocrinol.*, 24: 1-248, 2012.
- Special issue in J. Neuroendocrinol.*, 25: 957-1237, 2013
- Allopregnanolone: State of the art*, Prog.Neurobiol. 113: 1-136, 2014
- *Special issue- Steroids & Nervous System*, J. Steroid Biochem. Mol. Biol., 160: 1-226, 2016
- *Gender influence on neurodegenerative and psychiatric disorders*, Neurosci. Biobehav. Rev. 67: 1-146, 2016.

**2004-2012** Comitato Editoriale della rivista "Journal Endocrinological Investigation"

**2006- ad oggi** Comitato Editoriale della rivista "Neuroendocrinology"

**2001-2007** Rappresentante Europeo nel Consiglio della "International Neuroendocrine Federation".

**2005- 2009** Consiglio Direttivo della "Società Italiana di Neuroscienze"

**2005- 2009** Commissione Scientifica della SIE

**2006-ad oggi** Comitato fondatore del "Gruppo Italiano di Scienze Neuroendocrine"

**2006- ad oggi** Consiglio Direttivo del "Centro di Eccellenza per lo Studio delle Malattie Neurodegenerative"

**2010-2012** Comitato iniziative giovani ricercatori della "Società Italiana di Neuroscienze"

**2010-2011** Commissione Aggiornamento Clinico-Scientifico della SIE

**2010-2011** Commissione proposte innovative della SIE

**2011-2013** Commissione regionale (Lombardia) della SIE

**2013-ad oggi** Consiglio Direttivo della SIE

## **FINANZIAMENTI OTTENUTI**

**1997-** Coordinatore del progetto Fondazione Italiana Sclerosi Multipla: Apoptosi Oligodendrocitaria e ormoni steroidei (n° 97/R/S)

**1998- 2000** Coordinatore del progetto Telethon: Hereditary demyelinating diseases: Possible steroid effects (E.0765)

**2000-** Coordinatore del progetto Azioni Integrate Italia-Spagna: Neuroni LHRH e cellule astrogliali: relazioni morfologiche e funzionali

**2000-2003** Responsabile di Unità del progetto RTD Programme "Quality of Life and Management of Living Resources: The Role of Neurosteroids in Healthy Ageing: Therapeutical Perspectives (QLK6-CT-2000-00179)

**2001-2004** Coordinatore progetto FIRB Progetti Autonomi Steroidi e demielinizzazione periferica:

un nuovo possibile approccio terapeutico

**2002** Responsabile di Unità del progetto Programma Vigoni (Italia Germania): Neuroprotective role of steroid hormones and glia-derived growth factors in the nigrostriatal system (Prot. n°14-2001)

**2005-2007** Responsabile di Unità progetto PRIN: Malattia di Charcot-Marie-Tooth: caratterizzazione dei nuovi geni e possibili strategie di terapia molecolare.

**2007-2009** Responsabile di Unità progetto PRIN: Effetto dell'esposizione prenatale a dosi sub-tossiche di 2,3,7,8-tetraclodibenzo-p-diossina sullo sviluppo e la maturazione del cervello endocrino

**2006-2008** Responsabile di Unità del progetto Ricerca Finanziata Ministero della Salute: Mediatori endogeni ed esogeni per contrastare i danni indotti da farmaci oncologici (2005/51)

**2010-2012** Responsabile di Unità per il Progetto Neuroscienze-Fondazione San Paolo: Gender and affective

disorders: role of vasopressin and neuroactive steroids (PF\_2009.1180)

**2011-** Coordinatore del progetto Fondazione Italiana Sclerosi Multipla: Valutazione degli effetti protettivi

degli steroidi neuroattivi nel modello della encefalomyelite autoimmune sperimentale (2010/23)

**2012-2016** Coordinatore del progetto Fondazione Cariplo: Diabetic peripheral neuropathy: relationships between neuroactive steroids and myelin lipid synthesis (n. 2012-0547)

Ha ricevuto diversi contributi liberali da enti pubblici e privati a sostegno dell'attività di ricerca nel campo degli effetti degli steroidi neuroattivi.

**Autore di 186 pubblicazioni in Riviste Internazionali (con peer review) e capitoli di libri**

**N° totale delle citazioni: 5720 (Scopus)**

**H-index: 46 (Scopus)**

## **PUBBLICAZIONI**

1- Celotti F., Negri-Cesi P., Limonta P., **Melcangi C.** Is the 5 $\alpha$ -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.

2- 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.

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

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

5- 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.

6- 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.

- 7- 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.
- 8- Celotti F., **Melcangi R.C.**, Negri-Cesi P., Ballabio M. and Martini L. Differential distribution of the  $5\alpha$ -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.
- 9- Negri-Cesi P., Celotti F., **Melcangi R.C.** and Martini L. Androgen metabolism in the male hamster. I. Metabolism of testosterone in the pituitary gland and in the brain of animals exposed to different photoperiods. *J. Steroid Biochem.* 28:179-184,1987.
- 10- **Melcangi R.C.**, Celotti F., Poletti A., Negri-Cesi P. and Martini L. The  $5\alpha$ -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.
- 11- **Melcangi R.C.**, Celotti F., Ballabio M., Poletti A., Castano P. and Martini L. Testosterone  $5\alpha$ -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.
- 12- **Melcangi R.C.**, Celotti F., Ballabio M., Castano P., Poletti A., Milani S., Martini L. Ontogenetic development of the  $5\alpha$ -reductase in the rat brain: cerebral cortex, hypothalamus, purified myelin and isolated oligodendrocytes. *Dev. Brain Res.* 44:181-188, 1988.
- 13- **Melcangi R.C.**, Celotti F., Ballabio M., Carnaghi R., Poletti A., Martini L. Effect of postnatal starvation on the  $5\alpha$ -reductase activity of the brain and of the isolated myelin membranes. *Exp. Clin. Endocrinol.* 94:253-261,1989.
- 14- Poletti A., Celotti F., **Melcangi R.C.**, Ballabio M., Martini L. Kinetic properties of  $5\alpha$ -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.
- 15- **Melcangi R.C.**, Celotti F., Ballabio M., Castano P., Massarelli R., Poletti A., Martini L.  $5\alpha$ -reductase activity in isolated and cultured neuronal and glial cells of the rat. *Brain Res.* 516: 229-236,1990.
- 16- 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.
- 17- **Melcangi R.C.**, Celotti F., Ballabio M., Poletti A., Martini L. Testosterone metabolism in peripheral nerves: presence of the  $5\alpha$ -reductase- $3\alpha$ -hydroxysteroid-dehydrogenase enzymatic system in the sciatic nerve of adult and aged rats. *J. Steroid Biochem.* 35:145-148,1990.
- 18- 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.
- 19- Martini L., **Melcangi R.C.** Androgen metabolism in the brain. *J. Steroid Biochem. Molec. Biol.* 39: 819-828, 1991.

- 20- Celotti F., **Melcangi R.C.**, Martini L. The 5 $\alpha$ -reductase in the brain: molecular aspects and relation to brain function. *Front. Neuroendocrinol.* 13:163-215,1992.
- 21- 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.
- 22- **Melcangi R.C.**, Celotti F., Castano P., Martini L. Is the 5 $\alpha$ -reductase-3 $\alpha$ -hydroxysteroid dehydrogenase complex associated with the myelin in the peripheral nervous system of young and old male rats? *Endocrine Reg.* 26:119-125,1992.
- 23- **Melcangi R.C.**, Celotti F., Castano P., Martini L. Intracellular signalling systems controlling the 5 $\alpha$ -reductase in glial cell cultures. *Brain Res.* 585: 411-415,1992.
- 24- 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.
- 25- 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.
- 26- 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.
- 27- **Melcangi R.C.**, Celotti F., Castano P., Martini L. Differential localization of the 5 $\alpha$ -reductase and the 3 $\alpha$ -hydroxysteroid dehydrogenase in neuronal and glial cultures. *Endocrinology* 132:1252-1259, 1993.
- 28- **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.
- 29- **Melcangi R.C.**, Celotti F., Martini L. Progesterone 5 $\alpha$ -reduction in neurons, astrocytes and oligodendrocytes. *Brain Res.* 639:202-206, 1994.
- 30- **Melcangi R.C.**, Celotti F., Martini L. Neurons influence the metabolism of testosterone in cultured astrocytes via humoral signals. *Endocrine* 2:709-713, 1994.
- 31- 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.
- 32- 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.
- 33- **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.
- 34- **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- $\beta$  the principle involved? *Endocrinology* 136:679-686,1995.



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