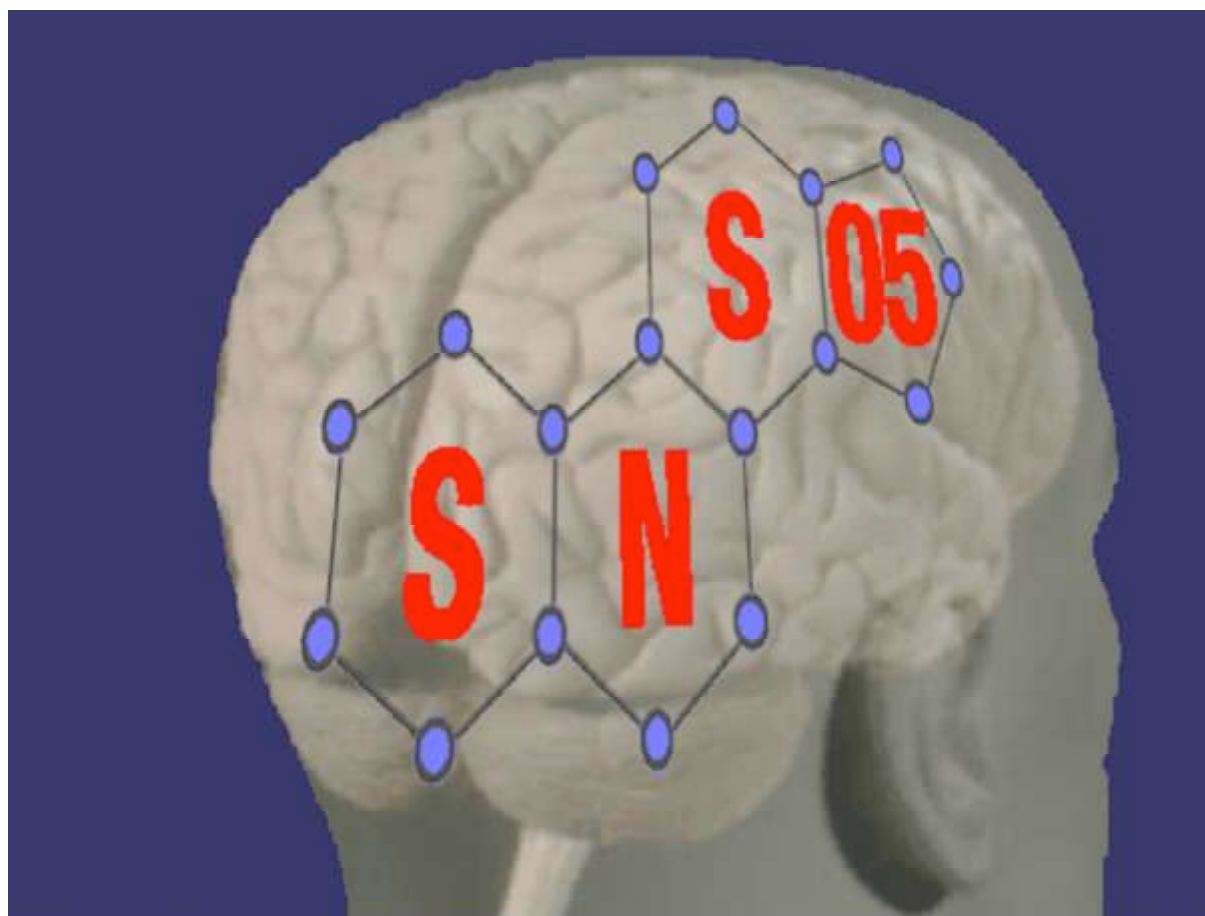


**3rd INTERNATIONAL MEETING
STEROIDS AND NERVOUS SYSTEM**



**TORINO, Italy
Villa Gualino
February 13 - 17, 2005**

FINAL PROGRAM

CONFERENCE ORGANIZED WITH THE SUPPORT OF

- **Università degli Studi di Torino**
- **Università degli Studi di Milano**
- **Dipartimento di Anatomia, Farmacologia e Medicina Legale**
- **Fondazione Cavalieri Ottolenghi, Torino**
- **Fondazione Oasi, Troina, Italy**
- **Centro Rita Levi Montalcini, Torino**
- **Center of Excellence on Neurodegenerative diseases, Milano**

- **International Brain Research Organization (IBRO)**
- **National Science Foundation**
- **Regione Piemonte**
- **Provincia di Torino**
- **Comune di Torino**

- **Applied Biosystems, Italy**
- **Bio Rad, Italy**
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- **Sigma, Italy**
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- **Karger Publisher**

COMMITTEES

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GianCarlo Panzica (Torino, Italy)

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Aldo Fasolo – Research Comm, University

MEETING SECRETARIAT

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MEETING WEBSITE

<http://www.dafml.unito.it/anatomy/panzica/neurosteroids/index.html>

MEETING LOCATION

Villa Gualino
viale Settimio Severo 63
I-10133 TORINO
Telephone +39-0116603555 Fax +39-0116603535

TOPICS OF THE CONFERENCE

The international meeting on *Steroids and Nervous System* is organized to update our knowledge on the relationships among steroid hormones synthesized in different organs (including brain) and central as well as peripheral nervous system.

This is a wide research field covering different areas from molecular biology to behavior. This year the conference is focussed on seven main topics:

- Synthesis and new interactions
- Non classical mechanisms
- Neuroactive steroids and mental health: basic understanding of steroid action
- Neuroactive steroids and mental health: Clinical studies
- Corticosteroid effects and stress
- New perspectives in sexual differentiation
- Steroid-induced plasticity

To cover these topics the conference is organized in different symposia and posters' presentation. Each symposia will run for half day and will comprise invited lectures with additional short communications (selected by the Organizing Committee) to complete the program.

The other contributions will be displayed in poster format.

CONFERENCE DESK

A conference desk will be opened at Villa Gualino throughout the conference within the following timetable:

- | | | | |
|-----------------|----|-------|--|
| • <i>Sunday</i> | 13 | 9.00 | 12.00 (for participants at the Satellite Symposia) |
| • Sunday | 13 | 16.00 | 18.00 (for participants at the meeting) |
| • Monday | 14 | 8.00 | 18.00 |
| • Tuesday | 15 | 8.00 | 18.00 |
| • Wednesday | 16 | 9.00 | 17.00 |
| • Thursday | 17 | 8.30 | 17.00 |

MEETING LOCATION

The conference will be held in Torino (Turin), Italy, at Villa Gualino (viale Settimio Severo 63, I-10133 TORINO), that is situated in a pleasant environment atop a hill in the town close to the Po river. All scientific sessions will take place in the Villa Gualino facility that includes a conference room seating 150 people, poster rooms, the conference desk, a restaurant, and a bar.

Villa Gualino overlooks the city of Torino but the road reaching the villa from the city is about 3-4 kms so it will not be practical to leave the conference site during the day for meals and return in time for the afternoon scientific sessions. There is a public bus service (running hourly) from Villa Gualino to downtown. A taxi service will be available on request.

Accommodation will be provided either in Villa Gualino, or in a variety of hotels located in various places in the city.

Torino is located in the northern part of Italy and therefore is easily accessible to other important cultural cities such as Firenze (Florence), Pisa, Verona and Venezia (Venice). However, these cities are located several hundred kms from Torino and several hours (4-6) of travel by train are required (good train or bus connections are available). Good connections by plane are with Roma (Rome) or with the south part of Italy. We encourage you to spend some additional time in Italy before of after the conference to visit these beautiful places, but because of time constrains we are not able to organize short excursions to these cities during the conference.

Torino is also placed very near the mountains and will be the capital of the Winter Olympic Games in 2006. Excursions to mountains are also possible and you could program a longer stay in Italy to spend your time skiing in our mountains.

Further tourist information are available at the website of the meeting. Additional information concerning Torino and the Region Piedmont can be found on Internet at:

<http://www.comune.torino.it/>

<http://www.provincia.torino.it/>

<http://www.regione.piemonte.it/>

PRESENTATION OF CONTRIBUTION

Poster Presentation

Posters will be on display during the entire conference from Sunday afternoon to Thursday at 15.00. The posters will be exhibited Wednesday afternoon; the authors will be requested to be present at least one hour at the poster board, according to the schedule announced at the meeting.

Size of poster boards is 90 cm horizontal by 200 cm vertical. Posters will have to be mounted with sticky tape. **Material for the mounting will be provided by the Congress staff during the set-up of the posters.**

Short Oral Communication

A limited number of oral communications of 15 min (10 min presentation + 5 min discussion) concerning the main topics of the conference will be allowed. A slide projector (5 x 5 cm) and an overhead projector will be available, on request, for all presentations, however the preferred presentation type is computer presentation. A computer with Windows 98 and PowerPoint will be available in the conference room. You should prepare your presentation on a CD that will be loaded on the computer. ***Due to "old" operative system, the USB pens could have some problems, please avoid them.*** If you require additional devices please contact the meeting organizers in advance.

Lectures

The program is also including a list of invited lectures (25 min presentation + 5 min discussion) and plenary lectures (45 min presentation). As is the case for the contributed oral communications, a slide projector (5x5 cm) or an overhead projector will be available for these presentations, however the preferred presentation type is computer presentation. A computer with Windows 98 and PowerPoint will be available in the conference room. You should prepare your presentation on a CD that will be loaded on the computer. If you require additional devices please contact the meeting organizers in advance.

Speakers should give their CDs or slides to the projectionist at least 15 min. before the starting time of their symposium. A slide viewer will be available in a separate place.

YOUNG INVESTIGATORS PROGRAM

Poster Competition

Posters presented by Young Investigators (those registered as students/trainees at the meeting) have the option of being judged by an ad hoc Committee constituted by the Educational Committee. Small prizes will be distributed according to the ranking determined by the Committee (prizes are offered by Karger Publisher and Elsevier Co Publisher). The first Prize is a one-year subscription to the journal **Hormones and Behavior** (offered by Elsevier Co). We encourage all students who are interested in having their posters be evaluated to contact a person on the Education Committee prior to the poster session to make arrangements.

Young Investigator Symposium

A limited number of oral communications of 10 min (7 min presentation + 3 min discussion) have been selected by the Scientific and Educational Committees among the contributions submitted by student registrants. These contributions will be presented during a special symposium Wednesday morning.

Students' awards

A limited number of awards have been distributed to reimburse student registration fees. These awards are due to the contribution of the International Brain Research Organization (IBRO). Students from USA have been partly supported from a National Science Foundation Grant.

Meet The Professor Lunches

Wednesday 16. Trainees and their matched professor(s) should obtain lunch tickets prior to their meeting and make arrangements with one another for a specific meeting place so that they may proceed to lunch together.

REGISTRATION

All participants (including invited speakers) must be registered. For registration please carefully fill in the PARTICIPATION FORM.

Payment of fees must be made in Euro (only).

Advanced payment by means of:

1. **Bank transfer** to: SanPaolo IMI, Filiale 00506 (IBAN IT86 V010 2501 0061 000 0106 785) account number 100000106785 in favor of INTERNATIONAL MEETING ON STEROID AND NERVOUS SYSTEM (SNS03). In case of bank transfer you should add 30.00 € to the total for handling expenses.
2. **Credit card** (VISA or MasterCard only). In this case you should fill the appropriate form, sign it and send to the meeting secretariat the original signature. Please add 10 € to the total for credit card handling expenses.

On site payment, at the registration desk, **only by cash** (no credit cards, no checks, with the exception of Italian checks).

The registration fees cover the attendance to the scientific activities (symposia, poster sessions), to the opening ceremony, to the coffee breaks during the meeting. In the price of registration is also included the abstract book of the conference (additional copies must be ordered in advances).

A social dinner will be organized, it is optional and its cost will be charged to those who are willing to participate (see the registration forms).

REGISTRATION FEES (prices in Euro)

Full registrant (including Satellite Symposia (5 days)*)	435.00
Registration for the meeting only (4 days)*	385.00
Student, including Satellite Symposia (5 days)	300.00
Student, meeting only	250.00
Registration to Satellite Symposia only (with lunch)	110.00
One-day registration	95.00
Two-day registration	170.00
Lunch tickets (5 days)	65.00
Lunch tickets (4 days)	52.00
Additional copy of the Abstracts' Book	30.00
Social dinner (only for those that have reserved in advance)	60.00

Sunday, 13th February

SATELLITE SYMPOSIA

SATELLITE SYMPOSIA

Sunday, 13th February

SATELLITE SYMPOSIA

NEUROPROTECTIVE EFFECTS OF STEROIDS IN THE SPINAL CORD AND PERIPHERAL NERVOUS SYSTEM

(Chairs: Melcangi R.C. and Mensah-Nyagan A.G.)

- 10.00 **De Nicola A.**, Gonzalez S., Labombarda, F., Gonzalez Deniselle M.C, Garay L., Mougel A., Guennoun R., and Schumacher M. (**Argentina**) *Progesterone treatment of spinal cord injury: effects on progesterone receptors, neurotrophins and myelination*
- 10.30 Patte-Mensah C., Kibaly C., Boudard D., Schaeffer V., Béglé A., Saredi S. and **Mensah-Nyagan A.G. (France)** *Effect of chronic pain on the local production of neurosteroids in spinal neural networks*
- 11.00 **Schlichter R.** Patte-Mensah C., Keller A.F., Breton J.D., Barrot, M., Freund-Mercier M.J., Mensah-Nyagan A.G., Poisbeau, P. (**France**) *Role of endogenous spinal neurosteroids in inflammatory pain*
- 11.30 **Jones K.J. (USA)** *Motoneuron injury and repair: gonadal steroids as neurotherapeutics*
- 12.00 **Melcangi R.C.** Ballabio M., Consoli A., Roglio I., Leonelli E., Magnaghi V (**Italy**) *Neuroactive steroids: a therapeutic approach to maintain peripheral nerve integrity during neurodegenerative events.*
- 12.30 **Sereda M.W.**, Meyer zu Hörste G., Prukop T. and Nave K.-A. (**Germany**) *Long-term application of progesterone antagonist in a transgenic rat model of Charcot-Marie-Tooth disease 1A (CMT1A)*

13.00-14.00

Lunch

STEROID HORMONE REGULATION OF NEUROPEPTIDE Y SYSTEM

(Chairs: Eva C. and Panzica G.C.)

- 15.00 **Galas L.**, Beaujean D., Do-Régo J.L., Fredriksson R., Larhammar D., Fournier A., Luu-The V., Pelletier G., Tonon M.C. and Vaudry H. (**France**) *Neuropeptide Y, acting through Y₁ receptors, inhibits the biosynthesis of sulfated neurosteroids in the frog brain*
- 15.30 **Eva C.**, Mele P., Serra M., and Biggio G. (**Italy**) *Modulation of amygdala Y₁ receptor expression by neuroactive steroids*
- 16.00 **Levine J.E. (USA)** *Reproductive functions of Neuropeptide Y and Neuropeptide Y-1 receptors*
- 16.30 **Sainsbury-Salis A. (Australia)** *Glucocorticoids and NPY receptors in energy homeostasis*
- 17.00 **Aubert M.L.**, Raposinho P.D., Pedrazzini T., and Pralong F.P. (**Switzerland**) *The role of Neuropeptide Y (NPY) in the control of feeding and neuroendocrine functions*

Closure of the symposia

Sunday, 13th February

INTERNATIONAL MEETING

STEROIDS AND NERVOUS SYSTEM

18.30 *Opening ceremony*

19.00 *Informal Reception*

Monday, 14th February

SYNTHESIS AND NEW INTERACTIONS

(Chairs: De Nicola A. and Vallée M.)

- 8.30 **Garcia-Segura L.M.** Sierra A., Azcoitia I., Lavaque E. (Spain) *Steroidogenic acute regulatory protein in the brain*
- 9.00 **Papadopoulos V.** Lecanu L., Brown R.C., Han Z, Yao Z-X. (USA) *Peripheral benzodiazepine receptors and neurosteroid biosynthesis in neurodegeneration*
- 9.30 Tsurugizawa T., Tanabe N., Kimoto T., Hojo Y., and **Kawato S.** (Japan) *Local synthesis and rapid action of brain estrogens in adult rat hippocampus: from neuro-endocrinology to neuro-synaptocrinology*
- 10.00 **Mani S.** Portillo W., Reyna A.M. (USA) *Signaling mechanisms in progesterone-neurotransmitter interactions*
- 10.30-11.00 *coffee break*
- 11.00 **Rune G.M.** (Germany) *Hippocampal synapses depend on hippocampal estrogen synthesis*
- 11.30 Genazzani A.R., **Bernardi F.**, Pluchino N., Picciarelli G., Lenzi E., Begliuomini S., Luisi M. (Italy) *Hippocampal allopregnanolone regulation: a sensitive system to peripheral sex steroids*
- 11.45 **Thiéry J.-C.** and Malpoux B. (France) *Photoperiodic modulation of the concentrations of Estradiol in the cerebrospinal fluid in sheep: Involvement of the pineal gland*

Plenary lecture

(Chair: Panzica G.C.)

- 12.00 **Balthazart J.** (Belgium) *Rapid changes in the production and behavioral action of estrogens*

13.00-15.00

POSTERS' EXHIBITION

NON CLASSICAL MECHANISMS

(Chair: Lambert J.J.)

- 15.00 Penatti C.A.A., Porter D.M., and **Henderson L.P.** (USA) *Anabolic androgenic steroids (AAS) induce sex-specific changes in GABA_A receptor expression and function in forebrain regions of adolescent mice*
- 15.30 **DonCarlos L.L.**, Sarkey S., Lorenz B., Azcoitia I., García-Ovejero D., Huppenbauer C., and García-Segura L.M. (USA) *Novel cellular phenotypes and subcellular sites for androgen action in the forebrain*
- 16.00-16.30 *coffee break*
- 16.30 **Grobin A.C.** Gizerian S.S., Lieberman J.A., Morrow A.L. (USA) *Perinatal neurosteroid levels influence GABAergic interneuron localization and cortical function in adult rats*
- 17.00 **Belelli D.** Herd M.B., Mitchell E.A., Vardy A.W., Peden D.R., Kylanpaa R.A. and Lambert J.J. (UK) *Neuroactive steroids and inhibitory neurotransmission: mechanism of action and physiological relevance*
- 17.30 **Hosie A.M.** Wilkins M.E., da Silva H. and Smart T.G. (UK) *Sites of action of neurosteroids on GABA_A receptors*
- 17.45 **Magnaghi V.** Roglio I., Ballabio M., Consoli A., Leonelli E., Motta M., Melcangi R.C. (Italy) *Neuroactive steroids are able to modulate the expression of GABA_B receptor subunits in the Schwann cell culture*

SCIENTIFIC PROGRAM

Tuesday, 15th February

NEUROACTIVE STEROIDS AND MENTAL HEALTH: BASIC UNDERSTANDING OF STEROID ACTION

(Chairs: Garcia-Segura L.M. and Melcangi R.C.)

- 8.30 **Veliskova J. (USA)** *The role of estrogens in seizures and epilepsy: bad guys or good guys?*
9.00 **Behl C. (Germany)** *Estrogens against Alzheimers?: Estrogen as neuroprotective hormone*
9.30 **Dorsa D., Bryant D., Sheldahl L, Mhyre A., and Shapiro R. (USA)** *Effects of estrogen in the brain: roles of ER alpha and beta in rapid signalling in neurons and glia*
10.00 **Lacreuse A. (USA)** *Estrogen effects on cognitive function in nonhuman primates*
10.30-11.00 *coffee break*
11.00 **Marchetti B., Serra P.A., Tirolo C., L'Episcopo F., Caniglia S., Testa N., Gennuso F., Desole M.S., Miele E., and Morale M.C. (Italy)** *Neuroactive steroids and neuroprotection in Parkinson's disease: glia dictates resistance versus vulnerability to neurodegeneration*
11.30 **Vegeto E., Etteri S., Ghisletti S., Belcredito S. and Maggi A. (Italy)** *Chronic estrogen administration reduces microglia activation associated with amyloid deposits in APP23 mice brain*

Plenary lecture

(Chair: Balthazart J.)

- 12.00 **Wise P. (USA)** *Estrogen therapy: Does it help or hurt the adult and aging brain? Insights derived from animal models*

13.00-15.00

POSTERS' EXHIBITION

NEUROACTIVE STEROIDS AND MENTAL HEALTH: CLINICAL STUDIES

(Chairs: Wise P. and Celotti F.)

- 15.00 **Janowsky J.S., Beer T.M., Neiss MB., Bussiere J.R. (USA)** *The role of androgens and estradiol in maintaining cognitive health in men.*
15.30 **Sherwin B.B. (Canada)** *Estrogen and cognitive aging in women*
16.00 **Maki P.M. (USA)** *Hormone therapy and brain function: Is there a critical period for neuroprotection?*
16.30-17.00 *coffee break*
17.00 **Henderson V.W. (USA)** *Hormone therapy and dementia*
17.30 **Rupprecht R., Eser D., Schüle C., Baghai T.C., Padberg F., Zwanzger P., Romeo E. (Germany)** *Neuroactive steroids as modulators of depression and anxiety*
18.00 **Ishunina T.A. and Swaab D.F. (Russia)** *Aromatase alterations in relation to estrogen receptor changes in aging and Alzheimer's disease*
18.15 **Magri F., Cravello L., Falvo F., Chytiris S., Solerte S.B., Fioravanti M., Ferrari E. (Italy)** *The role of affective and cognitive disorders on the neuroendocrine features of senescence*

ROUND TABLE : XENOESTROGENS, BRAIN AND BEHAVIOR

21.00-22.30

(Organizers: Fusani L. and Panzica G.C.)

Wednesday, 16th February

CORTICOSTEROID EFFECTS AND STRESS

(Chair: Riva M.)

- 8.30 **Russell J.A.**, Brunton P.J. (UK) *Neuroactive steroids attenuate neuroendocrine stress responses in pregnancy*
- 9.00 **Piazza P.V.**, Ambroggi F., Turiault M., Deroche V. and Tronche F. (France) *The Glucocorticoid receptor as a molecular substrate of vulnerability to drugs of abuse*
- 9.30 **Meijer O.C.** (The Netherlands) *Coactivator and corepressor proteins: mediators of corticosteroid action in the brain*
- 10.00 **Roosendaal B.** Okuda S., Nathan S.V., Griffith Q.K., McReynolds J.R., Hahn E.L., de Quervain D.J.-F., McGaugh J.L. (USA) *Brain mechanisms underlying stress and glucocorticoid effects on distinct cognitive processes*
- 10.30 **Reddy D.S.** (USA) *Physiological role of the neuroactive steroid THDOC in stress-sensitive conditions*
- 11.00-11.30 *coffee break*

YOUNG INVESTIGATORS SYMPOSIUM

(Chairs: Frye C. and Canoine V.)

- 11.30 **Berry A.**, Bonsignore L. T., Martelli F., Gaetano C., Capogrossi Colognesi M., Giorgio M., Martin-Padura I., Pelicci P. G., Alleva E., Minghetti L. and Cirulli F. (Italy) *Behavioural characterisation of a 129Sv/Ev mouse strain carrying a deletion of the P66Shc gene. An animal model to study interactions between oxidative stress and the neuroendocrine system.*
- 11.40 **Ciriza I.**, Carrero P., Azcoitia I. and García-Segura L.M. (Spain) *Neuroprotective effects of progesterone and its reduced metabolites.*
- 11.50 **George O.**, Vallée M., Vitiello S., Kharouby M., Le Moal M., Piazza P.V. and Mayo W. (France) *Steroid concentrations in the pedunculopontine nucleus predict age-associated sleep/memory impairments.*
- 12.00 **Leonelli E.**, Azcoitia I., Ballabio M., Liere P., Schumacher M., Consoli A., Roglio I., Magnaghi V., Garcia-Segura L.M. and Melcangi R.C. (Italy) *Ro5-4864, a synthetic ligand of peripheral benzodiazepine receptor, is able to reduce myelin degeneration occurring in the sciatic nerve of aged male rats*
- 12.10 **Ognibene E.**, Adriani W. and G. Laviola (Italy) *Early disruption of the mother-infant relationship in heterozygous reeler mice: evidence of sex-related vulnerability*
- 12.20 **Rhodes M.E.**, Petralia S.M., Jahagirdar V. and Frye C.A. (USA) *Actions of the neurosteroid, 3alpha,5alpha-THP, in the ventral tegmental area mediate socio-sexual behaviors*
- 12.30 **Safiulina D.**, Peet N., Zharkovsky A., Seppet E. & Kaasik A. (Estonia) *Dehydroepiandrosterone induces cell death in neuronal cultures and impairs locomotor function in mice*

13.00-15.00

TRAINEE-FACULTY LUNCH

(Organizers: Frye C.A., Canoine V.)

Trainees and their matched professor will proceed upstairs to lunch where they will discuss topics of common scientific interests and professional development.

15.00-18.30

POSTERS' EXHIBITION

20.30

Social Dinner

Castle of the Solaro

Villanova Solaro (Cuneo)

<http://www.castellodeisolaro.it/>



SCIENTIFIC PROGRAM

Thursday, 17th February

NEW PERSPECTIVES IN SEXUAL DIFFERENTIATION

(Chairs: Matsumoto A. and Etgen A.)

- 9.30 **Simerly R. (USA)** *Estrogen receptor dependent axon targeting in the limbic forebrain*
10.00 **Forger N.G. (USA)** *Cell death and sexual differentiation*
10.30 **Fusani L. Hutchison J. and Gahr M. (Italy)** *Steroid induced masculinization of song and the neural song system in adult songbirds*
11.00 **De Vries G.J. (USA)** *Sexual differentiation of central vasopressin and vasotocin systems among vertebrates: different mechanisms, similar endpoints*
11.30 **Juraska J.M. (USA)** *Sexual differentiation of the rat cerebral cortex*
11.45 **Negri-Cesi P. Colciago A., Pravettoni A, Celotti F. (Italy)** *Expression of total and brain specific aromatase in male and female hypothalamic areas of developing rats*

Plenary lecture

(Chair: De Vries G.J.)

- 12.00 **Rissman E.F. (USA)** *Genetic models for the study of gonadal steroid dependent behaviors*

13.00-15.00

POSTERS' EXHIBITION

STEROID-INDUCED PLASTICITY

(Chairs: Russell J. and Mensah-Nyagan G.A.)

- 15.00 **MacLusky N.J. (USA)** *Gonadal hormones and CA1 spine synapse density*
15.30 **Mong J.A. and Blutstein T. (USA)** *Role of hormonally-responsive astrocytes in the modulation of amino acid neurotransmission*
16.00 **Parducz A. Hoyk S., Kurunczi A., Csakvari E., Kis Zs., and Garcia-Segura L.M. (Hungary)** *Estradiol-induced synaptic plasticity: functional consequences*
16.30-17.00 *coffee break*
17.00 **Panzica G.C. (Italy)** *Gonadal hormones modulation of central nitrinergic systems*
17.30 **Cooke B.M. (USA)** *Studies of hormone-dependent plasticity in the medial nucleus of the amygdala*
18.00 **Felix G., Saenz C., Dominguez R., de Lacalle S. (USA)** *Estrogen-mediated cholinergic outgrowth*
18.15 **Petralia S.M., Sumida K., Walf A.A., Frye C.A. (USA)** *Progestin-facilitated sexual behavior of female rats may involve activity of adenylyl cyclase in the ventral tegmental area*

18.30

Meeting closure

POSTER EXHIBITION

A SYNTHESIS AND NEW INTERACTIONS

- A-1 Benmessahel Y.**, Troadec J-D., Cadepond F., Guennoun R., Schumacher M. and Groyer G. (**France**) *Downregulation of steroidogenic acute regulatory protein (StAR) GENE expression by cyclic AMP in cultured Schwann cells*
- A-2 Hojo Y.**, Enami T., Nakajima K., Furukawa A., Ishii H., Mukai H., Morrison J. H., Janssen W. G. M., Tamura Ho., Kominami S., Harada N., Kimoto T., and Kawato S. (**Japan**) *Synthesis of brain neurosteroids and localization of P450S in the hippocampal neurons of adult male rats*
- A-3 Kimoto T.**, Murakami G., Takata N., Mukai H., Ogiue-Ikeda M., Ooishi Y., Hojo Y., Kominami S., Morrison J.H., Janssen W.G.M., and Kawato S. (**Japan**) *Acute effect of brain neurosteroids on the hippocampal neurons of adult male rats*
- A-4 Peruffo A.**, Massimino M.L., Ballarin C., Cozzi B. (**Italy**) *Preliminary results on the expression of aromatase cytochrome P450 in the bovine fetal hypothalamus*

B NON CLASSICAL MECHANISMS

- B-1 Barabás, K.**, Szegò, É., Kövesdi, D., Barad, Zs., Kaszás, A., Sármay, G., Juhász, G. and Ábrahám I. (**Hungary**) *Is the B cell activation and immune response-induced MAPK phosphorylation in GnRH neuron estrogen-dependent?*
- B-2 Consoli A.**, Ballabio M., Gherardi G., Leonelli E., Magnaghi V., Nobbio L., Roglio I., Schenone A., Melcangi R.C. (**Italy**) *Mifepristone influences expression of glycoprotein PO and morphological parameters at the level of the level of rat sciatic nerve*
- B-3 Havlíková H.**, Hill M. and J. Vrbíková (**Czech Republic**) *Neuroactive conjugated and free pregnanolone isomers in normally cycling women as measured by gas chromatography-mass spectrometry*
- B-4 Jantas-Skotniczna D.**, Kajta M., Lasoń W. (**Poland**) *Estrone enhances neuroprotective effects of memantine on staurosporine-induced toxicity in hippocampal cultured neurons*
- B-5 Johansson B.T.**, Frändberg P-A., Nyberg F., Le Grevés P. (**Sweden**) *Sulphated neurosteroids modulate the binding of 3[H]Ifenprodil in E2 cell line membrane*
- B-6 Kajta M.**, Jantas-Skotniczna D. and Lasoń W. (**Poland**) *Effects of TCDD (Tetrachlorodibenzo-p-Dioxin), an anti-estrogenic agent, on apoptosis of neuronal cells in primary hippocampal and neocortical cultures*

SCIENTIFIC PROGRAM

POSTER EXHIBITION

- B-7** **McCobb D.P.**, King J.T., and Zeeman M.L. (USA) *Slo beta-subunits act as steroid receptors for acute modulation of BK Potassium channel gating*
- B-8** Meffre D, Delespierre B, Gouézou M, Schumacher M, Stein DG and **Guennoun R.** (France) *The progesterone-binding protein 25-Dx is expressed in brain regions involved in water homeostasis and is up-regulated after traumatic brain injury*
- B-9** **Muller C.** and Morfin R. (France) *Dehydroepiandrosterone-derived neurosteroids and the human 11beta-Hydroxysteroid dehydrogenase type 1*
- B-10** **Szegö, É.**, Barabás, K., Balog, J., Korach K. S., Juhász, G. and Ábrahám, I. (Hungary) *Signaling pathway dependent effects of estrogen on mouse cholinergic neurons*
- B-11** **Walf A.A.**, Sumida K. and Frye C.A. (USA) *Progesterone-facilitated lordosis of female rodents involving dopamine-like type 1 and GABA_A/Benzodiazepine receptors in the ventral tegmental area require activity of G-proteins*

C NEUROACTIVE STEROIDS AND MENTAL HEALTH: BASIC UNDERSTANDING OF STEROID ACTION

- C-1** **Apanites L.-A.** and Reddy D. S. (USA) *Anxiolytic activity of Progesterone in Progesterone Receptor Knockout Mice*
- C-2** **Canoine, V.**, London, S.E., Hau, M. and Schlinger, B.A. (Germany) *CYP17 mRNA expression in a free-living tropical suboscine bird, the spotted Antbird (*Hylophylax naevioides*)*
- C-3** **J. L. Maguire, B. M. Stell, M. Rafizadeh, and I. Mody** (USA) *Estrous cycle mediated changes in GABAergic inhibition and excitability*
- C-4** **Maj P.F.**, Molteni R., Cirulli F., Racagni G., Riva M.A. (Italy) *Short-term changes in neurotrophic factor expression following maternal deprivation in rats*
- C-5** **Petralia, S.M.** and Frye, C.A. (USA) *D1 and D2-initiated intracellular signaling cascades in the ventral tegmental area may mediate progesterone's actions for lordosis of hamsters*
- C-6** **D. S. Reddy, B. W. O'Malley, and M. A. Rogawski** (USA) *Anticonvulsant Activity of Progesterone and Neurosteroids in Progesterone Receptor Knockout Mice*
- C-7** **Veiga S.**, Azcoitia I, García-Segura LM (Spain) *RO5-4864, a peripheral benzodiazepine receptor ligand, reduces reactive gliosis and protects hippocampal hilar neurons from kainic acid excitotoxicity*

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C-8 Zrouri H., Le Goascogne C., Li WW, **Pierre M.**, Courtin F. (**France**) *The role of MAP kinases in rapid gene induction after lesioning of the rat sciatic nerve*

C-9 **Pawlak J.**, and Beyer C. (**Germany**) *Estrogen stimulates the expression of astroglial glutamate transporters*

D NEUROACTIVE STEROIDS AND MENTAL HEALTH: CLINICAL STUDIES

D-1 **Eser D.**, di Michele F. , Zwanzger P., Pasini A., Baghai T. C., Schüle C., Rupprecht R., Romeo E. (**Germany**) *Panic induction with cholecystokinin-Tetrapeptide (CCK-4) increases plasma concentrations of the neuroactive steroid 3alpha,5alpha-Tetrahydrodeoxycorticosterone (3alpha,5alpha -THDOC) in healthy volunteers*

D-2 **Hill M.**, Popov P., Havlíková H. and J.Vrbíková (**Czech Republic**) *The reinstatement of neuroactive serum pregnanolone isomers and progesterone during alcohol detoxification therapy in premenopausal women*

D-3 **Khaksary M.**, Rezvani M., E Samimi F. and Hematpure L. (**Iran**) *Enhanced anticonvulsant activity of phenytoin by progesterone in rat model of chemical kindling*

D-4 **Nobahar M.**, Vafaei AA., Samaei A. and Masoumi S. (**Iran**) *The role of sex differentiation on incidence of risk factors in cerebral stroke*

D-5 **Zeeman M.L.**, Lyles D.J., Tien J.H. and McCobb D.P. (**USA**) *What is the feedback mechanism by which sustained high levels of estradiol initiate the LH surge in the human menstrual cycle?*

E CORTICOSTEROID EFFECTS AND STRESS

E-1 Akhyani E., Vafaei AA., **Taherian AA.** and Rashidy-Pour A. (**Iran**) *Injections of corticosterone into basolateral amygdala impair retrieval of long-term memory in rat*

E-2 **Calabrese F.**, Molteni R., Zacher C., Racagni G., Gass P., Riva M.A. (**Italy**) *Role of Glucocorticoid receptors in stress-induced changes of neuronal plasticity*

E-3 Salehi R., Vafaei AA., Taherian AA. and **Rashidy-Pour A.** (**Iran**) *Evaluation the role of hippocampal opioid receptors in mediating the effects of peripheral corticosterone on consolidation of emotional memory*

E-4 **Vafaei AA.**, and Rashidy-Pour A. (**Iran**) *Modulation of glucocorticoid receptors in orbitofrontal cortex does not interfere with hippocampus-dependent spatial memory in rats*

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E-5 Vallée M., Vitiello S., Kharouby M., Le Moal M., Piazza P.V. and Mayo W. (**France**) *Neuroactive steroids pattern expression in a chronic stress rat model of anxiety- and depression-like syndrome*

F NEW PERSPECTIVES IN SEXUAL DIFFERENTIATION

F-1 Allieri F., Spigolon G., Viglietti-Panzica C., Guillamon A., Collado P., Panzica G.C. (**Italy**) *The Tfm rat, a model to study the influence of testosterone on the development of limbic vasopressinergic system*

F-2 Carrillo, B., Pinos, H., Panzica, G.C., Guillamón, A. and Collado, P. (**Spain**) *Hormonal modulation of the Nitric Oxide producing system in a vomeronasal nucleus: the Medial Amygdala*

F-3 Klein S. and Grossmann R. (**Germany**) *Colocalization for galanin (GAL) and arginine vasotocin (AVT) in sexual dimorphic chicken brain structures*

F-4 Pinos H., Collado P., Salas M., Pérez-Torrero E. (**Spain**) *Undernutrition does not increase the cell death during the development of locus coeruleus in rats*

G STEROID-INDUCED PLASTICITY

G-1 Aloisi A.M. and Ceccarelli I. (**Italy**) *Testosterone affects formalin-induced C-FOS expression differently in male and female rats*

G-2 Bonifazi M., Ginanneschi F., della Volpe R., Fusani L. and Rossi A. (**Italy**) *Input-output properties in the human corticospinal pathway: Effects of gonadal steroids in males*

G-3 Charlier T.D., Ball G.F. and Balthazart J. (**Belgium**) *Modulation of steroid-dependent male sexual behavior and neural gene expression: A role for steroid receptor co-activators*

G-5 Franceschini IA, Tanguy D., Lomet D., Cognié J., Tillet Y., Duittoz A., and Caraty A. (**France**) *A role for PSA-NCAM in the regulation of the preovulatory GnRH surge in ewes?*

G-6 García-Falgueras A., Barona M.L., Collado P., Fernández R., Pásaro E. and Guillamón A. (**Spain**) *Implications of androgen receptor in maternal behaviour of lactating female rats*

G-7 Ientile R., Campisi A., Spataro P., Caccamo D., Li Volti G., Cannavò G., Currò M., Bramanti V., Raciti G., Vanella A. and Avola R. (**Italy**) *Effect of neurosteroid-growth factor interaction on cell cycle and cyclin D1 and transglutaminase activity and expression during astroglial cell proliferation and differentiation in primary culture*

POSTER EXHIBITION

- G-8 Martini M.**, Sica M., Eva C., Viglietti-Panzica C., Panzica G.C. (**Italy**) *Effects of estrous cycle on the expression of Y1 receptor of NPY in mouse hypothalamus and limbic system*
- G-9 Matsumoto A.** (**Japan**) *Androgen prevents synaptic loss in the perineal motoneuron pool of male rats exposed to stress*
- G-10 Patrizi A.**, Orso F., Sica M., Taverna D., De Bortoli M., Panzica G.C. (**Italy**) *Influence of estrous cycle on the AP2 transcription factor expression in adult mouse brain*
- G-11 Prange-Kiel J.**, Leranth C. and Rune G.M. (**Germany**) *The role of the median raphe and its serotonergic system in the mediation of estrogenic effects to the hippocampus*
- G-12 Roglio I.**, Ballabio M., Consoli A., Leonelli E., Magnaghi V., Melcangi R.C. (**Italy**) *Testosterone metabolites influence the synthesis of glycoprotein P0 and peripheral myelin protein 22 in sciatic nerve of male rats*
- G-13 Sica M.**, Markerink M., Panzica G.C., Viglietti-Panzica C., Steinbusch H.W.M., DeVente J. (**Italy**) *Effects of estrous cycle on NO-cGMP signal transduction in rats and mouse hypothalamus*
- G-14 Stamatakis A.**, Panagiotaropoulos T., Philippidis H. and Stylianopoulou F. (**Greece**) *Effects of perturbed mother-infant interaction on the distribution of estrogen receptor- beta (ER- beta) immunoreactivity in the rat brain during the post-partum period*
- G-15 Sumida K.**, Rhodes M.E., Dudek B.C., Lydon J.P., O'Malley B.W., Pfaff D.W., Frye C.A. (**USA**) *Progesterone alters arousal behavior of aged PRKO mice*

H XENOESTROGENS

- H-1 Corrieri L.**, Canoine V., Della Seta D., and Fusani L. (**Italy**) *Environmental-like treatment with a pure oestrogen affects Morris Water Maze (MWM) performance in male rats*
- H-2 Della Seta D.**, Farabollini F., Dessì-Fulgheri F., and Fusani L. (**Italy**) *Developmental exposure to environmental levels of a pure estrogen affects oestrous cycle, sexual behaviour and reproductive fitness of female rats*
- H-3 Fissore E.**, Prato Previde E., Aldrovandi G., Franceschini P., and Palanza P. (**Italy**) *Estrogenic endocrine disrupters can interfere with development of sex differences in different learning paradigms*
- H-4 Mura E.**, Panzica G.C. and Viglietti-Panzica C. (**Italy**) *Effects of early embryonic exposure to genistein on male copulatory behavior and vasotocin system of Japanese quail*
- H-5 Sárvári, M.**, A. Jávör, K. Barabás, É. Szegő, Sz. Tóth & I.M. Ábrahám (**Hungary**) *Genistein induces phosphorylation of CREB in rat hypothalamus in vivo*