

**INTERNATIONAL PhD PROGRAM IN NEUROPHARMACOLOGY  
UNIVERSITY OF CATANIA**

**SUMMER SCHOOL OF NEUROSCIENCE (11)**  
*Undicesima Scuola Estiva di Neuroscienze (11)*

UNDER THE AUSPICES  
OF THE FEDERATION OF EUROPEAN PHARMACOLOGICAL SOCIETIES  
(EPHAR)  
THE ITALIAN SOCIETY OF PHARMACOLOGY  
(SIF)  
AND THE ITALIAN SOCIETY OF NEUROPSYCHOPHARMACOLOGY  
(SINPF)

**July 6-12, 2013**

**INNOVATION IN CNS DRUG DISCOVERY:  
*FROM SMALL MOLECULES TO BIOLOGIC THERAPIES***

**Catania**

**Aula Magna  
Palazzo Centrale dell'Università  
Piazza Università, 2**

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**Filippo Drago** (*Catania*)

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**Filippo Caraci** (*Catania*)

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**Giancarlo Pepeu** (*Florence*)

**Giorgio Racagni** (*Milan*)

**Salvatore Salomone** (*Catania*)

**Maria Angela Sortino** (*Catania*)

**Saturday July 6<sup>th</sup>, 2013**

**14.00-14.45 Registration**

**14.45-15.00 Opening remarks**  
*Filippo Drago (Catania)*

**15.00-16.00 Opening lecture** (*introduced by Filippo Drago*)  
**Innovation in neuroscience: which implications for CNS drug research ?**  
*Siegfried Kasper (Austria)*

**Innovation in CNS drug discovery: general principles**  
*Introduced and moderated by Mariano Malaguarnera (Italy)*

**16.00-17.00 Role of neuroimaging in CNS drug discovery**  
*Richard G. Wise (United Kingdom)*

**17.00-18.00 Genomics and pharmacogenomics of brain disorders: implications for CNS drug research**  
*Ramon Cacabelos (Spain)*

**18.00-18.30 Discussion**

**18.30-19.30 Clinical trials design for disease-modifying drugs: the role of biological markers**  
*Daniela Galimberti (Italy)*

**19.30 Welcome reception**

**Sunday July 7<sup>th</sup>, 2013**

**CNS disorders in childhood: new targets and new drugs**

*Introduced and moderated by Salvatore Salomone (Italy)*

- 10.00-11.00** Pathways to drug development for autism spectrum disorders  
*Kathryn Chadman (USA)*
- 11.00-12.00** New pharmacological approaches to neurocutaneous disorders  
*Martino Ruggieri (Italy)*
- 12.00-12.15** Discussion
- 12.15-13.15** Sponsored lecture by Biogen Idec  
New Perspectives for MS Treatment: focus on BG-12 mechanism  
of action  
*Ralf Linker (Germany)*

**Multiple sclerosis**

*Introduced and moderated by Filippo Drago (Italy)*

- 16.00-17.00** Immunomodulatory treatment strategies in multiple sclerosis  
*Ferdinando Nicoletti (Italy)*
- 17.00-18.00** Neuroprotection and repair in multiple sclerosis  
*Rina Aharoni (Israel)*
- 18.00-18.30** Discussion
- 18.30-19.30** Special Lecture:  
Novel drugs for the treatment of multiple sclerosis: from biologic to small  
molecules?  
*Giancarlo Comi (Italy)*
- 19.30-19.40** Questionnaire

Monday July 8<sup>th</sup>, 2013

**Drug discovery in CNS disorders**

*Introduced and moderated by Eugenio Aguglia (Italy)*

**10.00-11.00 Advancing schizophrenia drug discovery: optimizing rodent models to bridge the translational gap**

*Neil Dawson (United Kingdom)*

**11.00-12.00 Novel antipsychotic drugs for schizophrenia**

*Edoardo Spina (Messina)*

**12.00-12.30 Discussion**

**12.30-13.00 Glutamate-dopamine interaction in the pathogenesis of Parkinson's disease: new targets for the treatment**

*Paolo Barone (Italy)*

**Depression**

*Introduced and moderated by Donatella Marazziti (Italy)*

**16.00-17.00 Antistress properties of antidepressant drugs and their clinical implications**

*Marco Riva (Italy)*

**17.00-18.00 The cytokine hypothesis of depression: new targets for adjunctive treatments in depression**

*Nicoletta Brunello (Italy)*

**18:00-18:30 Discussion**

**18.30-19.30 Special Lecture:  
Emerging therapies for depression**

*Ronald Duman (USA)*

**19.30- 19.40 Questionnaire**

**Tuesday July 9<sup>th</sup>, 2013**

**Neurodegenerative disorders**

*Introduced and moderated by Maria Angela Sortino (Italy)*

- 10.00-11.00 The kynurenine pathway in neurodegenerative disorders**  
*Francesca M. Notarangelo (USA)*
- 11.00-12.00 Cell therapies for ischemic stroke - are we ready for clinical translations ?**  
*Johannes Boltze (Germany)*
- 12.00-13.00 Current and prospective disease-modifying therapies for amyotrophic lateral sclerosis**  
*Francesco Fornai (Italy)*
- 13.00-13.30 Discussion**

**Alzheimer's disease**

*Introduced and moderated by Giancarlo Pepeu (Italy)*

- 16.00-17.00 Target identification for drug discovery in Alzheimer's disease**  
*Monica Di Luca (Italy)*
- 17.00-18.00 Neuroinflammation in Alzheimer's disease: perspectives for drug development**  
*Claudio Cuello (Canada)*
- 18.00-18.30 Discussion**
- 18.30-19.30 Can Alzheimer disease be prevented by amyloid-beta immunotherapy?**  
*Cynthia A. Lemere (USA)*
- 19.30-19.40 Questionnaire**

**Wednesday July 10<sup>th</sup>, 2013**

**Drug discovery in ocular pharmacology**

*Introduced and moderated by Claudio Bucolo (Italy)*

- 10.00-11.00 Retinal neuroprotection: novel pharmacological targets**  
*Rossella Russo (Italy)*
- 11.00-12.00 Neuroprotection in glaucoma**  
*M. Francesca Cordeiro (United Kingdom)*
- 12.00-12.30 Discussion**

**Parkinson's disease**

*Introduced and moderated by Luigi Grimaldi (Italy)*

- 16.00-17.00 Drug discovery in Parkinson's disease: evidence from animal models**  
*David T. Dexter (United Kingdom)*
- 17.00-18.00 Pharmacological treatment of Parkinson's disease: current options and new avenues**  
*Mario Zappia (Italy)*
- 18.00-18.30 Discussion**
- 18.30-19.30 Neuroprotection in Parkinson's disease**  
*Miquel Vila (Spain)*
- 19.30-19.40 Questionnaire**

**Thursday July 11<sup>th</sup>, 2013**

**Epilepsy**

*Introduced and moderated by Carmela Parenti (Italy)*

**10.00-11.00** New horizons in the development of antiepileptic drugs: the search for new targets

*Anna Maria Vezzani (Italy)*

**11.00-12.00** Novel drugs for epilepsy

*Emilio Perucca (Italy)*

**12.00-12.30** Discussion

**Chronic Pain Syndromes**

*Introduced and moderated by Fabio Tascedda (Italy)*

**16.00-17.00** New strategies for target identification in chronic pain

*Santina Chiechio (Italy)*

**17.00-18.00** Peripheral mechanisms of pain and analgesia: implications for drug development

*Cristophe Stein (Germany)*

**18.00-18.30** Discussion

**18.30-19.30** Neuropathic pain: diagnosis, pathophysiological mechanisms and treatment

*Ralf Baron (Germany)*

**19.30-19.40** Questionnaire



**Friday July 12<sup>th</sup>, 2013**

**Innovation in CNS drug discovery: from small molecules to biologic therapies**

***Introduced and moderated by Filippo Caraci (Italy)***

**10.00-11.00 Can we vaccinate against depression ?**

*Stefan Reber (Germany)*

**11.00-12.00 Monoclonal antibodies as novel neurotherapeutic agents in CNS injury and repair**

*Hari Shankar Sharma (Sweden)*

**12.00-12.15 Discussion**

**12.15-13.15 Sponsored lecture by Roche**

**Glutamatergic system as a new target for the treatment of negative symptoms in schizophrenia**

*Ferdinando Nicoletti (Italy)*

**13.15-13.30 Closing remarks**

*Filippo Drago (Catania)*

**13.30-14.00 Questionnaire**