

THE HUMAN BRAIN

INTERNATIONAL CONFERENCE ON THE STRUCTURAL BASIS FOR UNDERSTANDING HUMAN BRAIN FUNCTION AND DYSFUNCTION

IRCCS Santa Lucia - Rome, October 5th - 10th 2002

Scientific Program

General Topics (05.10.2002)

Evolution, Development, Structure (Cytoarchitecture, Chemoarchitecture, Connectivity) and Functional Integration

- 09:00 - 09:20: **Opening of the Conference.** Levi Montalcini R, Roma, Italy.
09:20 - 10:00: **The structural basis for understanding human brain function and dysfunction.** Frackowiak RSJ, London, UK.
10:00 - 10:40: **Comparative and evolutionary perspectives of the human brain.** Striedter GF, Irvine, USA.

Coffee Break

- 10:55 - 11:35: **Genetic "Bauplan" of the vertebrate brain.** Puelles L, Murcia, Spain.
11:35 - 12:15: **Receptors in the human brain.** Palacios JM, Barcelona, Spain.
12:15 - 13:15: **Press Conference**
Lunch / **Poster session**

Imaging, Neurology, Degenerative processes, Pathology

- 14:30 - 15:10: **In-vivo visualisation of brain structures.** Evans AC, Montreal, Canada.
15:10 - 15:50: **Interindividual variability, postnatal brain development and lifetime-related changes.**
Toga AW, Los Angeles, USA.
Coffee Break
16:10 - 16:50: **Neural plasticity, regeneration and restoration of function.** Pascual-Leone A, Boston, USA.
16:50 - 17:30: **Noninvasive high resolution spatio-temporal imaging of oscillatory neural circuits.**
Valdes-Sosa, P, Havana, Cuba.
17:30 - 18:10: **Integration of brain structural and functional analysis data bases and information management Systems.** Koslow, S.H., Bethesda, USA.

Brainstem, Cerebellum (06.10.2002)

Evolution, Development, Structure (Cytoarchitecture, Chemoarchitecture, Connectivity) and Functional Integration

- 09:00 - 09:45: **New approaches to teach functional human brainstem morphology.**
De Vos RAI, Enschede, NL & Schröder H, Cologne, Germany.
09:45 - 10:30: **Organisation of brainstem nuclei.** Paxinos G, Sydney, Australia.
10:30 - 11:15: **Cerebellum.** Voogd J, Rotterdam, NL.
Coffee Break
11:30 - 12:10: **Raphe nuclei - The serotonin system.** Hornung JP, Lausanne, CH.
12:10 - 12:50: **Attention and behavioral flexibility: function of the noradrenergic locus coeruleus system in monkey.**
Aston-Jones G, USA.
12:50 - 13:30: **Human cholinergic basal forebrain: Chemoarchitecture, connectivity, chemistry and neurologic disease.**
Mufson EJ, Chicago, USA.
Lunch / **Poster session**

Imaging, Neurology, Degenerative processes, Pathology

- 15:00 - 15:45: **Lower brainstem dys-regulation of autonomic function.** Blessing B, Bedford Park, Australia.
15:45 - 16:30: **Pathophysiological implications of the structural organization of the excitatory synapse.**
Di Luca M, Milano, Italy.
Coffee Break
16:45 - 17:30: **New ideas and experimental observations on the cerebellar contribution to cognition.**
Petrosini L, Rome, Italy.
17:30 - 18:15: **Free oral communications ***** (15 min per contribution)
Poster discussions ****
18:15 - 19:00: **Telecommunication ** and Parallel workshops *******

Hypothalamus, Thalamus (07.10.2002)

Evolution, Development, Structure (Cytoarchitecture, Chemoarchitecture, Connectivity) and Functional Integration

- 09:00 - 09:45: **Development of the human hypothalamus.** Koutcherov Y, Sydney, Australia.
09:45 - 10:30: **Development of the human thalamus.** Mai JK, Duesseldorf, Germany.
10:30 - 11:15: **The hypothalamus.** Saper CB, Boston, USA.
Coffee Break
11:30 - 12:10: **Thalamus - Structure and connectivity.** Percheron G, Paris, France.
12:10 - 12:50: **Thalamo-cortical information processing.** Villa EP, France
12:50 - 13:30: **Single unit recordings in human thalamus.** Dostrovsky J, Toronto, Canada.
Lunch / **Poster session**

Imaging, Neurology, Degenerative processes, Pathology

- 15:00 - 15:45: **Functional stereotaxy of the substantia innominata.** Sturm V, Cologne, Germany.
15:45 - 16:30: **Stereotaxic neurosurgery in the subthalamic nucleus.** Benabid AL, Grenoble, France.
Coffee Break
16:45 - 17:30: **Lessons from the damaged insula.** Lenzi GL, Rome, Italy.
17:30 - 18:15: **Free oral communications**
Poster discussions
18:15 - 19:00: **Telecommunication and Parallel workshops**

Basal ganglia (08.10.2002)

Evolution, Development, Structure (Cytoarchitecture, Chemoarchitecture, Connectivity) and Functional Integration

- 09:00 - 09:45: **Morphogenetic deformation at the thalamo-telencephalic boundary and the lamina affixa myth.** Puellas L, Murcia, Spain.
09:45 - 10:30: **Development of the human neurotransmitter systems.** Verney C, Paris, France.
10:30 - 11:15: **Basal ganglia.** Haber S, Rochester, USA.
Coffee Break
11:30 - 12:15: **Chemical anatomy of the human striatum in health and disease.** Parent A, Québec, Canada.
12:15 - 13:00: **Dopaminergic control of brain synaptic plasticity.** Calabresi P, Rome, Italy.
Lunch / Poster session

Imaging, Neurology, Degenerative processes, Pathology

- 15:00 - 15:45: **Degenerative mechanisms in the basal ganglia and restoration of function.** Kordower N, Chicago, USA.
15:45 - 16:30: **Lessons from basal ganglia diseases.** Speaker to be announced.
16:30 - 17:30: **Wine and oil tasting.** This event is designed to be informal and interactive. Wine and oil will be served free of charge. Registration is not necessary.
17:30 - 18:15: **Free oral communications**
Poster discussions
18:15 - 19:00: **Telecommunication and Parallel workshops**

Limbic structures (09.10.2002)

Evolution, Development, Structure (Cytoarchitecture, Chemoarchitecture, Connectivity) and Functional Integration

- 09:00 - 09:45: **Development of the human amygdala with special reference to the ganglionic eminence.** Ulfing N, Rostock, Germany.
09:45 - 10:30: **Amygdala.** DeOlmos J, Cordoba, Argentina.
10:30 - 11:15: **Human Hippocampal formation.** Insausti R, Spain.
Coffee Break
11:30 - 12:15: **Cingulate cortex.** Vogt B, Syracuse, USA.
12:15 - 13:00: **Emotional motor system.** Holstege G, Groningen, NL.
Lunch / Poster session

Imaging, Neurology, Degenerative processes, Pathology

- 15:00 - 15:45: **Limbic system anatomy in neuropsychiatric disorders.** Rasmussen, SA, Providence, USA.
15:45 - 16:30: **Structural-functional changes in schizophrenia.** Bertolino, A., Bari, Italy.
Coffee Break
16:45 - 18:15: **Free oral communications**
Poster discussions
18:15 - 19:00: **Telecommunication and Parallel workshops**

Cortex (10.10.2002)

Evolution, Development, Structure (Cytoarchitecture, Chemoarchitecture, Connectivity) and Functional Integration

- 09:00 - 09:30: **Cortical development.** Rakic P, New Haven, USA.
09:30 - 10:00: **Olfactory system and paleocortex.** Price JL, St. Louis, USA.
10:00 - 10:30: **Gustatory system and cortex.** Pritchard T, Hershey, USA.
Coffee Break
11:00 - 11:30: **Somatosensory system and cortex.** Kaas JH, Nashville, USA.
11:30 - 12:00: **Motor cortex.** Matelli M, Parma, Italy.
Lunch / Poster session

Imaging, Neurology, Degenerative processes, Pathology

- 14:00 - 14:30: **Visual cortex.** Goebel R, Maastricht, NL.
14:30 - 15:00: **Parietal cortex.** Zilles K, Duesseldorf, Germany.
15:00 - 15:30: **Frontal cortex.** Petrides MI, Montreal, Canada.
Coffee Break
16:00 - 16:45: **Abstraction and concept formation in art and in the brain.** Zeki, S, London, GB.

Farewell

** **Telecommunication:** Discussions of Internet contributions and Internet discussion forum

*** **Free Oral communications** (preferentially by Young Scientists to be announced)

**** **Poster Discussions**

***** **Parallel Workshops (WS):**

- WS-A: Gross anatomy and sectional anatomy of the normal and dysfunctional human brainstem (*Sunday until Wednesday 17:15-19:15*): **Schröder H**, Cologne, Germany; **De Vos RAI**, Enschede, NL.
WS-C: MR-images from the human brain: influence of imaging modalities: **Assheuer J**, Cologne, Germany.
WS-D: Volumetric measure of Magnetic Resonance Imaging of the Brain: semiautomatic and automatic procedures. **Collins DL**, Montreal, Canada; **Tomaiuolo F**, Rome, Italy.
WS-E: Nomenclature: **Paxinos G**, Sydney, Australia.

As this schedule is still preliminary and may be subject to changes please check the website for program updates.