

PROGRAM

Wednesday, October 1st

14:00-17:15 REGISTRATION

17:15-17:30 WELCOME

17:30-18:30 OPENING LECTURE

John Hildebrand, University of Arizona

Explorations of a 'Simple' Olfactory System.

Host: Juan Bacigalupo

18:30-20:30 MESA REDONDA:

Ciencia y Sociedad

Chair: Adrián Palacios

20:30 WELCOME COCKTAIL

Thursday, October 2nd

9:00-11:00 SYMPOSIUM 1: **Computational Neuroscience: Vision, cold and more**

Chair: Patricio Orio

9:00-9:30 Hans Albert Braun, University of Marburg, Germany. *From cold currents to cold receptor activity patterns: A computational study based on experimental data*

9:30-10:00 Patricio Orio, CINV, Universidad de Valparaíso, Chile. *Models of dynamic detection of cold in mammals*

10:00-10:30 Guillaume S. Masson, Marseille, France. *Speed processing in non-human primate visual system*

10:30-11:00 María-José Escobar, Universidad Técnica Federico Santa María, Chile. *Motion and speed processing in the retina*

9:00-11:00 SYMPOSIUM 2: **Mechanisms of memory formation and their alterations**

Chairs: Francisco Aboitiz, Pablo Fuentealba

9:00-9:30 Pedro Maldonado, Universidad de Chile. *The memory of motor learning: the whole is more than the sum of the parts*

9:30-10:00 Conrado Bosman, University of Amsterdam, The Netherlands. *Neuronal Synchronization and Attentional Stimulus Selection in Visual Cortex*

10:00-10:30 Pablo Billeke, Universidad del Desarrollo, Chile. *Role of cortical theta and alpha oscillations during a social interaction.*

10:30-11:00 Jose Luis Valdés, Universidad de Chile. *Brain histamine and hippocampal neuronal dynamics during learning and memory*

11:00-11:30 COFFEE BREAK

- 11:30-12:30 PLENARY LECTURE
Alain Marty, Université Rene Descartes, Paris
Deciphering synaptic signaling at single site level
 Host: Alan neely
- 12:30-14:30 LUNCH
- 14:30-16:30 **SPECIAL YOUNG NEUROSCIENTISTS SYMPOSIUM**
 Chair: Juan Bacigalupo
- 16:30-18:30 COFFEE BREAK AND POSTERS I
- 18:30-19:30 PLENARY LECTURE
Edward Tehovnik, Federal do Rio Grande do Norte
Myth and reality behind AVATAR: Brain-machine interfaces
 Host: Jorge Mpodozis

Friday, October 3rd

- 9:00-11:00 SYMPOSIUM 3: ***The Avian Brain from a broad and comparative perspective***
 Chair; Gonzalo Marín
- 9:00-9:30 Jorge Mpodozis, Universidad de Chile. *Birds do have a brain: columns and layers in the avian pallium*
- 9:30-10:00 Douglas Wylie, Department of Psychology, University of Alberta, Canada. *Principles of cerebellar organization: what we have learned from birds*
- 10:00-10:30 Andrew Iwaniuk, University of Lethbridge, Canada. *Ecology, phylogeny and the evolution of the avian brain*
- 10:30-11:00 Gonzalo Marín, Universidad de Chile. *The avian tectofugal system, a pathway for understanding vision and attention*
- 9:00-11:00 SYMPOSIUM 4: ***Channels and transporters as key modulators of neuronal excitability.***
 Chairs: Patricio Rojas, Magdalena Sanhueza.
- 9:00-9:30 Steven Mennerick, Washington University, USA. *Novel positive allosteric modulators of NMDA receptors in health and dysfunction.*
- 9:30-10:00 Magdalena Sanhueza, Universidad de Chile. *Sub- and supra-threshold dynamics of resonant neurons in the olfactory amygdala.*
- 10:00-10:30 Maite Castro, Universidad Austral de Chile. *Nutrient transporters feeding starving synapses.*
- 10:30-11:00 Patricio Rojas, University of Santiago de Chile. *Role of Chloride transporter NKCC1 in neuropsychiatry.*
- 11:00-11:30 COFFEE BREAK
- 11:30-12:30 PLENARY LECTURE
Isabel Llano, Université Rene Descartes, Paris
Imaging cerebellar activity in vivo with genetically-encoded calcium-dependent proteins
 Host: Magdalena Sanhueza
- 12:30-14:30 LUNCH

14:30-16:30 ORAL PRESENTATIONS I AND II

17:00-18:30 COFFEE BREAK AND POSTERS II

18:30-19:30 SOCIEDAD CHILENA DE NEUROCIENCIA AWARD LECTURE
Luis Robles, ICBM, Universidad de Chile
Auditory perception: Cochlear mechanisms and modulation by attentional processes.

Host: Paul Délano

19:30-20:15 ASAMBLEA DE SOCIOS

21:00 DINNER

Saturday, October 4th

9:00-11:00 SYMPOSIUM 5: ***Exploration of brain dynamics and human cognition by intracranial EEG***
Chair: Tomás Ossandón
9:00-9:30 Tristán Bekinschtein, U. Cambridge, UK. *Conscience, intracranial recordings and clinical applications*
9:30-10:00 Agustín Ibañez, Universidad Diego Portales-Ineco, Chile. *Neurocognitive evidence for neuropsychiatric models by means of intracranial recordings in humans*
10:00-10:30 Carlos Hamamé, CNRS Marseille, France. *Towards an ecological neuroscience: natural vision, language and imagination.*
10:30-11:00 Tomás Ossandón, P. Universidad Católica, Chile. *Control, training and alterations of attention from a novel view*

9:00-11:00 SYMPOSIUM 6: ***Genetics and Development of the Nervous System***
Chair: Kate Whitlock.
9:00-9:30 Claudio Araya, Universidad Austral de Chile. *Making Brains: in vivo imaging analysis in the developing zebrafish embryo*
9:30-10:00 John Ewer, ICNV, Universidad de Valparaíso, Chile. *Genetic analysis of neuroendocrine control of developmental behaviors*
10:00-10:30 Ralph Greenspan, University of California San Diego, USA. *Developmental Genes and Drosophila Behavior*
10:30-11:00 Kathleen Whitlock, ICNV, Universidad de Valparaíso, Chile. *Analysis of genes controlling peripheral nervous system development*

11:00-11:15 CLOSING REMARKS