Module I: Neurodegenerative Diseases

Monday 16 October

09:00-09:15 Welcome and Opening by Directors of the School. Federico Dajas and Cecilia Scorza (Uruguay).
09:15-10:00 Mental diseases and natural products: molecules and mechanisms. Federico Dajas (Uruguay).
10:00-11:00 Alzheimer's Disease: A Complex Multifactorial Disorder. Laura Morelli (Argentina).
11:00-11:30 Coffee break
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Tuesday 17 October

09:00-10:00 Can Mitochondria-ER coupling, bioenergetics and intracellular Aβ be linked together in a common disease pathway with potential for a targeted therapy in Alzheimer? Laura Morelli (Argentina).
10:00-11:00 miRNAs and neuron connectivity: implications for Alzheimer Disease. Federico Dajas-Bailador (United Kingdom).
11:00-11:30 Coffee break
11:30-12:30 Progressive neurological dysfunction originating early in life. Mario Herrera-Marchitz (Chile).
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Wednesday 18 October

09:00-10:00 Molecular imaging in the diagnosis of Alzheimer's disease and related disorders. Eduardo Savio (Uruguay).
10:00-11:00 A Role for astrocytes in ALS. Patricia Cassina (Uruguay).
11:00-11:30 Coffee break
11:30-12:30 Astrocyte role in CNS damage and protection. Silvia Olivera (Uruguay).
12:30-14:30 Lunch break
14:30-19:00 Hands-on
Thursday 19 October

09:00-10:00 Proteostasis impairment in neurodegenerative diseases. Claudio Hetz (Chile).
10:00-11:00 Pathophysiology of Alzheimer’s Disease. Rob Williams (United Kingdom).
11:00-11:30 Coffee break
11:30-12:00 Pathophysiology of Parkinson’s Disease. Giselle Prunell (Uruguay).
12:00-12:30 Citisinoids derivatives in Parkinson Disease. Andrés Abin Carriquiry (Uruguay).
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Friday 20 October

09:00-10:00 Integration of signals at the axon growth cone: local protein translation and degradation. Federico Dajas-Bailador (United Kingdom).
10:00-11:00 Flavanol inhibition of amyloid beta and tau pathology: a dietary intervention for Dementia. Rob Williams (United Kingdom).
11:00-11:30 Coffee break
11:30-12:00 Neuronal protection by natural flavones against oxidative stress and its relationship with the molecular structure. Carolina Echeverry (Uruguay).
12:00-12:30 Modulation of cellular defenses as a putative mechanism involved in quercetin neuroprotection. Florencia Arredondo (Uruguay).
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Saturday 21 October

Students work presentation

Sunday 22 October

Free

Module II: Mood and substance abuse disorders

Monday 23 October

09:00-10:00 Antidepressant molecules of natural origin. Federico Dajas (Uruguay).
10:00-11:00 Updates in depression neurobiology and treatment. Samia Joca (Brazil).
11:00-11:30 Coffee break
11:30-12:30 Antidepressant-like properties of natural products. Thereza de Lima (Brazil).
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Tuesday 24 October

09:00-10:00 Antidepressant-like properties of natural products: mechanisms Thereza de Lima (Brazil)
10:00-11:00 Melanin concentrating hormone (MCH), role in sleep and depression. Pablo Torterolo (Uruguay).
11:00-11:30 Coffee break
11:30-12: Melanin-Concentrating Hormone in the Dorsal Raphe and Locus Coeruleus nuclei: role in depressive-like behaviors. Jessika Urbanavicius (Uruguay).
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Wednesday 25 October

09:00-10:00 Targeting cannabinoids as new treatment options in depression: preclinical evidence. Samia Joca (Brazil).
10:00-11:00 Mechanisms underlying Prefrontal Maturation during Adolescence. Kuei Y. Tseng (USA).
11:00-11:30 Coffee break
11:30-12:30 Ibogaine and addiction. Ignacio Carrera (Uruguay).
12:30-14:30 Lunch break
14:30-19:00 Hands-on

Thursday 26 October

09:00-10:00 Timing is everything when Cannabinoids meet your Frontal Lobe. Kuei Y. Tseng (USA).
10:00-11:00 Cortico-striatal mechanism involved in amphetamine sensitization. José Fuentealba (Chile).
11:00-11:30 Coffee break
11:30-12:30 Cortical-subcortical interactions altered by psychostimulants: from neuro-enhancement to addiction. Verónica Bisagno (Argentina).
12:30-14:30 Lunch break
14:30-19:00 Hands-on and preparation of oral presentation

Friday 27 October

09:00-10:00 Therapeutic profile of nootropics. Veronica Bisagno (Argentina).
10:00-10:30 Adulterants in drugs of abuse. Cecilia Scorza (Uruguay).
10:30-11:00 Coffee break
11:00-11:30 Cocaine and caffeine interaction in motivation. José Pedro Prieto (Uruguay).
11:30-12:30 Cocaine and caffeine interaction in sleep behavior. Pablo Torterolo (Uruguay).
12:30-14:30 Lunch break
14:30-19:00 Oral presentations of hands-on activities.

20:00 Closing dinner

Saturday 28 October

Mini-symposium: Medicinal Cannabis (Open)

09:00-09:45 Current concepts of Cannabis in medicine. Raquel Peyraube (Uruguay)
09:45-10:45 Novel natural and synthetic ligands of the endocannabinoid system. Lumir Hanus (Israel).
10:45-11:15 Coffee break
11:15-12:15 Xavier Nadal (España)
12:15-14:00 Time free
14:00-14:45 Modulation of pain by cannabinoids. Leticia Cuñetti (Uruguay)
14:45-15:30 Pharmacognostic aspects of cannabis focusing on phytochemistry and analytics. Carlos García (Uruguay)
15:35-16:15 Oaksterdam Cannabis University. Ross Mirkarimi (USA)

Hands-on laboratory modules (October 16th to 25th):

1) Experimental approaches to evaluate new therapies in Parkinson’s disease. Prunell G/Costa G.

2) In vivo approaches to study the mechanism of action of drugs of abuse/COI assay. Scorza C/Fuentealba J/Tseng

3) Characterization of primary cultures from 3xTg Alzheimer’s disease model through the use of microfluidic devices. Arredondo F/Dajas-Bailador F

4) Neurodegeneration and neuroprotection in culture (glia-neuron). Echeverry C/Olivera S.

5) Effect of cocaine on sleep-awake cycle. Benedetto L/Torterolo P

Foreign Faculty

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