



International Pain Summer School Program

The societal burden of chronic pain: neural circuits, mechanisms and new therapeutic avenues

Date: January 8th - 12th, 2018

Venue: Heidelberg Center Latin America, Santiago de Chile

Monday, January 8th, 2018

08:30 - 09:00	Registration
09:00 - 09:30	Orientation talk – Rohini Kuner
09:30 - 11:00	REFRESHER COURSE: BASIC CIRCUIT MODULE - I
09:30 - 10:15	Jan Siemens , Heidelberg University, Germany: <i>Sensory neurons and pain</i>
10:15 - 11:00	Marucia Chacur , University of Sao Paulo, Brazil: <i>Spinal circuits of pain</i>
11:00 - 11:30	Coffee break
11:30 - 13:00	REFRESHER COURSE: NEUROBIOLOGY MODULE
11:30 - 12:15	Rohini Kuner , Heidelberg University, Germany: <i>Neurobiology of pain.</i>
12:15 - 13:00	Michael Salter , University of Toronto, Canada: <i>Glia, signaling mediators</i>
13:00 - 15:00	Lunch
15:00 - 16:30	REFRESHER COURSE: CLINICAL PAIN SYNDROMES MODULE
15:00 - 15:45	Rolf-Detlef Treede , Heidelberg University, Germany: <i>Neuropathic pain</i>
15:45 - 16:30	Anke Tappe-Theodor , Heidelberg University, Germany: <i>Animal models of pain</i>
16:30 - 17:30	Coffee break
17:30 - 19:00	REFRESHER COURSE: BASIC CIRCUIT MODULE - II
17:30 - 18:15	Herta Flor , Central Institute of Mental Health, Mannheim, Germany: <i>Psychological factors in chronic pain</i>
18:15 - 19:00	Karen Davis , University of Toronto, Canada: <i>Functional and structural brain imaging methods to study pain</i>
19:00 - 20:00	Dinner

Tuesday, January 9th, 2018

09:00 – 11:30 **MORNING RESEARCH LECTURES**

09:00 – 09:30 **Michael Salter**, University of Toronto, Canada: *Sex, pain and microglia*

09:30 – 10:00 **Yves De Koninck**, Laval University, Quebec, Canada: *Chronic pain: when you need to worry about the chloride tap*

10:00 – 10:30 Coffee break

10:30 – 11:00 **Thomas Kuner**, Heidelberg University, Germany: *Neuronal structural plasticity in chronic pain*

11:00 – 11:30 **Trainee presentations**

Microglia, spinal mechanisms: Rangel Silva, Trinidad Mariqueo

11:30 – 12:00 Distribution of lunch packets and boarding in the bus

12:30 – 15:30 Lab visits

15:30 – 18:30 boarding in the bus and social activity at Cajon del Maipo

18:30 – 20:00 Dinner

20:00 Departure to hotel

Wednesday, January 10th, 2018

09:00 – 10:00 **MORNING RESEARCH LECTURES**

09:00 – 09:30 **Mario Campero**, Universidad de Chile, Chile: *Mechanisms of neuropathic pain in humans*

09:30 – 10:00 **Rolf-Detlef Treede**, Heidelberg University, Germany: *Spinal latent sensitization to input from muscle as a model of nonspecific low-back pain*

10:00 – 10:30 Coffee break

10:30 – 12:30 **Trainee presentations**

Peripheral ion channels and spinal mediators:

Boris Lavanderos, Rodrigo Sandoval, Francina Agosti, Rafaela Mano Guimarães, Andreza Urba de Quadros

Clinical analysis: Rodrigo Melo Conde, Alejandra Escobar

12:30 – 14:00 Lunch

14:00 – 17:00 **Methods workshops**

Ulf Baumgärtner, Heidelberg University, **Margarita Calvo**, Pontificia Universidad Católica de Chile: *Human QST workshop*

Katrin Schrenk-Siemens, Heidelberg University: *Human iPSC and human ES-cell derived nociceptors*

17:00 – 18:00 Coffee break

18:00 – 19:00 **EVENING RESEARCH LECTURES**

18:00 – 18:30 **Jan Siemens**, Heidelberg University, Germany: *Modulation of pain signals: GABA and other metabolites*

18:30 – 19:00 **Rohini Kuner**, Heidelberg University, Germany: *Cortical circuits and rhythms in pain*

19:00 – 19:30 **Trainee presentations**

Pain and the brain: Paul Naser, Jiaojiao Zhang

19:30 – 19:40 Break and rearrangement of groups

19:40 – 20:40 Exercise in research planning, 4 parallel sessions, moderated by faculty

20:40 – 21:40 Dinner

Thursday, January 11th, 2018

09:00 – 10:00 **MORNING RESEARCH LECTURES**

09:00 – 09:30 **Karen Davis**, University of Toronto, Canada: *The dynamic pain connectome: a model to understand individual pain sensitivity and coping in health and chronic pain*

09:30 – 10:00 **Herta Flor**, Heidelberg University, Germany: *Phantom pain and reorganization*

10:00 – 10:30 Distribution of lunch packets and boarding in the bus

10:30 – 12:30 Lab visits

12:30 – 13:00 Lunch break

13:00 – 15:00 Lab visits

15:00 – 18:00 Departure to and guided city tour Valparaiso

18:00 – 20:00 Dinner

20:00 Departure to hotel

Friday, January 12th, 2018

09:00 – 10:00	MORNING RESEARCH LECTURES
09:00 – 09:30	Roberto Guiloff , Imperial College London, UK: <i>Treatment of neuropathic pain: An update for clinicians</i>
09:30 – 10:00	Margarita Calvo , Pontificia Universidad Católica de Chile, Chile: <i>New target for treatment in neuropathic pain</i>
10:00 – 10:30	Coffee break
10:30 – 11:00	Marucia Chacur , University of Sao Paulo, Brazil: <i>No pharmacological therapies for pain treatment</i>
11:00- 12:30	Trainee presentations: Preclinical development of clinical approaches: Chary Ely, Nicole Silva, Victória Oliveira, Lilalea Franca, Heloísa Alonso Matielo, Lucas Vasconcelos Lima
12:30 – 14:00	Lunch
14:00 – 17:00	Methods workshops Linette Tan , Heidelberg University: <i>Methods of optogenetics</i> Ulf Baumgärtner , Heidelberg University: <i>Human electrophysiology, MEG and fMRI</i>
17:00 – 18:00	Coffee break
18:00 – 18:30	EVENING RESEARCH LECTURE
18:00 – 18:30	Jimmy S. Libermann , Universidad Andrés Bello, Chile: <i>The role of the insula in pain, anxiety and pain-associated depression</i>
18:30 – 19:00	Trainee presentations Pain and affect: Titilola Akintola, Luis Martin Gonzalez Gomez
19:00 – 20:30	Dinner, end of school activities