International Pain Summer School Program

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

Date: January 8\textsuperscript{th} - 12\textsuperscript{th}, 2018
Venue: Heidelberg Center Latin America, Santiago de Chile

Monday, January 8\textsuperscript{th}, 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: Sensory neurons and pain

10:15 – 11:00 Marucia Chacur, University of Sao Paulo, Brazil: Spinal circuits of pain

11:00 – 11:30 Coffee break

11:30 – 13:00 REFRESHER COURSE: NEUROBIOLOGY MODULE


12:15 – 13:00 Michael Salter, University of Toronto, Canada: Glia, signaling mediators

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: Neuropathic pain

15:45 – 16:30 Anke Tappe-Theodor, Heidelberg University, Germany: Animal models of pain

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: Psychological factors in chronic pain

18:15 – 19:00 Karen Davis, University of Toronto, Canada: Functional and structural brain imaging methods to study pain

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: Treatment of neuropathic pain: An update for clinicians

09:30 – 10:00  Margarita Calvo, Pontificia Universidad Católica de Chile, Chile: New target for treatment in neuropathic pain

10:00 – 10:30  Coffee break

10:30 – 11:00  Marucia Chacur, University of Sao Paulo, Brazil: No pharmacological therapies for pain treatment

11.00- 12:30  Trainee presentations:

  Preclinical development of clinical approaches: Chary Ely, Nicole Silva, Victória Oliveira, Lilanea Franca, Heloisa Alonso Matielo, Lucas Vasconcelos Lima

12:30 – 14:00  Lunch

14:00 – 17:00  Methods workshops

  Linette Tan, Heidelberg University: Methods of optogenetics

  Ulf Baumgärtner, Heidelberg University: Human electrophysiology, MEG and fMRI

17:00 – 18:00  Coffee break

18:00 – 18:30  EVENING RESEARCH LECTURE

18:00 – 18:30  Jimmy S. Libermann, Universidad Andrés Bello, Chile: The role of the insula in pain, anxiety and pain-associated depression

18:30 – 19:00  Trainee presentations

  Pain and affect: Titilola Akintola, Luis Martin Gonzalez Gomez

19:00 – 20:30  Dinner, end of school activities