

Cannabinoid Function in the CNS

Gordon Research Conference

A New Dawn in Cannabinoid Neurobiology: The Road from Molecules to Therapeutic Discoveries

Dates

August 20-25, 2017

Location

Waterville Valley
Waterville Valley, NH

Organizers

Chairs:

Joseph F. Cheer & Yasmin Hurd

Vice Chairs:

Istvan Katona & Zsolt Lenkei

Application Deadline

Applications for this meeting must be submitted by **July 23, 2017**. Please apply early, as some meetings become oversubscribed (full) before this deadline. If the meeting is oversubscribed, it will be stated here. *Note:* Applications for oversubscribed meetings will only be considered by the Conference Chair if more seats become available due to cancellations.

Meeting Description

There is likely no greater hot-button topic in biomedical and clinical research today than discussions surrounding the utility of active chemicals found in marijuana and how they interact within the body's endocannabinoid system to elicit beneficial or deleterious effects. Although the chemical isolation of the two most widely studied phytocannabinoids (delta-9-THC and cannabidiol) occurred in the 1960s, there is a renewed need for more mechanistic understanding on how these lipid molecules impact neuronal functions in the brain. In this meeting, we will provide a recent view of endocannabinoid signaling as it pertains to a number of neurobiological processes.

This Gordon Research Conference on "Cannabinoid Function in the CNS" will explore topics including the neurochemical control of learning and memory, reward, motor activity and pain as well as the regulatory role of cannabinoids in feeding behavior and energy balance. We will also explore the impact of cannabinoids on neuronal development and survival as well as on glial cells. Speakers will also comment on the control by cannabinoid receptors of neural circuits involved in a number of neurological and psychiatry conditions ranging from addiction and anxiety to epilepsy and Huntington's disease amongst others. The implications of the widespread recreational use of marijuana as well as its prescription will also be discussed. Our goal is to stimulate a collegial and informal atmosphere that generates fruitful discussions and exchanges of ideas among established leaders of the field, younger scientists and newcomers.

Related Meeting



This GRC will be held in conjunction with the "**Cannabinoid Function in the CNS**" **Gordon Research Seminar (GRS)**. Those interested in attending both meetings must submit an application for the GRS in addition to an application for the GRC. Refer to the [associated GRS program page](#) for more information.

Contributors



Preliminary Program

The topics and speakers for the conference sessions are displayed below (*italics denote discussion leaders*). The Conference Chair is currently developing their detailed program, which will include the complete meeting schedule, as well as the talk titles for all speakers. The detailed program will be available by **April 20, 2017**. Please check back for updates.

- **Keynote Session: Endocannabinoids Maketh the Male: EDCs and the Sculpting of Brain Sex Differences**
(*Ken Mackie / Margaret McCarthy*)
- **Advances in the Neurobiology of Cannabinoid Use Disorders**
(*Daniela Parolaro / Margaret Haney / Zuzana Justinova / Peter Kalivas / Michael Taffe*)
- **Enduring Neural Effects of Cannabinoids: Molecular Mechanisms**
(*Tibor Harkany / Kent Hutchison / Olivier Manzoni / Miriam Melis*)
- **Regulation of Emotional Memories by the Endocannabinoid System**
(*Matthew Hill / Patrizia Campolongo / David Finn / Francis Lee / Sachin Patel*)
- **A Ray of Hope: Battling Pain Through Cannabinoid Pharmacotherapy**
(*Aron Lichtman / Andrea Hohmann / Volker Neugebauer / Rainer Spanagel*)
- **Damage, Neuroadaptation and the Role of Cannabinoid Receptors**
(*Mary Abood / Ester Aso / Debra Kendall / Lynn Raymond / David Sulzer*)
- **Orchestrating Hippocampal Function Through Cannabinoid Signaling**
(*Raffaella Tonini / Philip McGuire / Dietmar Schmitz / Ivan Soltesz*)
- **Cannabinoids and Mental Health: New Insights from Basic and Clinical Studies**
(*Robin Murray / Anissa Abi-Dargham / Cyril Deepak D'Souza / Marta Di Forti / Kuei-Yuan Tseng*)
- **Keynote Session: Endocannabinoid Signaling / Late-Breaking Topics**
(*Mauro Maccarrone / Cecilia Hillard / Michael Bruchas / Marisela Morales*)