Neuropharmacology of Addiction

October 09-13, 2017

Overview

Addiction is a chronic relapsing disorder that places an enormous health, economic and social burden on society. While there are some pharmacotherapeutics licensed to treat drug and alcohol abuse, relapse is still a major problem. Advancing our knowledge of the neurobiology underlying this disorder is likely to reveal novel therapeutic targets that may be of benefit. This program will consider animal models of addiction and discuss their strengths & weaknesses. In addition, the program will discuss how these models have highlighted novel circuitry and chemistry that may well lead to more focused treatments. This course will comprise a number of lectures and discussion sessions around the 5 topics listed below. In addition, there will be opportunity to workshop the details of how to start up these models in terms of infrastructure and methodology. Accordingly, this will provide an opportunity for interested researchers to gain insight into the fast evolving field of addiction neuroscience.

In the current course, we will focus on recent advances on
- ❖Animal models relevant to addiction: from simple to complex
- ❖Neurobiology of addiction
- ❖Self-administration and relapse models to screen potential therapeutics
- ❖Assessment of drug-induced adaptations
- ❖Role of mGlu5 signaling in drug-seeking and extinction
- ❖Neuropeptide systems that modulate drug-seeking: potential therapeutic targets
- ❖Secondary complications of alcoholism
- ❖Phytochemicals as potential therapeutic adjuncts for Addiction

Those who will attend this course will learn both theoretical and practical aspects of contemporary research into addiction. This will include an appraisal of the various animal models employed, characterisation of potential therapeutic targets and the broader consequences of substance abuse. Course participants will learn these topics through lectures and hands-on experiments. Also case studies and assignments will be shared to stimulate research motivation of participants.

Group size	Number of participants for the course will be limited to fifty.
You Should Attend If…	▪ you are a Researchers, Scientists, Social Worker or Clinicians working in the area of addiction and substance abuse, de-addiction, alcohol etc ▪ you are a Bachelor's, Master's, PhDs, Post-Doc or faculty from medicine, pharmacy, psychology, psychiatry, basic sciences etc. from academic and technical institutes
Fees	The participation fees for taking the course is as follows: **Participants from abroad : US $300** **Participants from Industry/ Research Organizations: INR 5000** **Participants from Academic Institutions: INR 2500** **Need based discount may be given to deserving Bachelor's and Master's students.** The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free internet facility. The participants will be provided with accommodation on payment basis.

The Faculty

Professor Andrew J Lawrence, Associate Director, Florey Institute of Neuroscience & Mental Health, Melbourne Brain Centre, University of Melbourne, Australia. He is Head of the Division of Behavioural Neuroscience and runs the Addiction Neuroscience laboratory. His research interests include animal models of drug-taking, drug-seeking and drug-induced adaptations.

Professor S. K. Kulkarni, a Stalwart Pharmacologist, is Professor Emeritus at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh. Professor Kulkarni's research area is neuropsychopharmacology with special focus on addiction biology.

Dr Anurag Kuhad is an Assistant Professor of Pharmacology at University Institute of Pharmaceutical Sciences, Panjab University, Chandigarh. His research interest is neuropsychopharmcology.

Course Co-ordinator

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