Art, Pain, & Cannabinoids: Results from Research

Bill Griesar, Ph.D., Jeff Leake, M.F.A., Ram Kandasamy

Saturday, January 21, 1:00 - 4:30pm

LOCATION: Washington AGD Educational Center-19415 International Blvd Seattle, WA 98188, Suite 410, Floor 4

How and where do cannabinoids, chemicals found in marijuana, act in the brain, and what are the effects on behavior? How have artists, approached (and sometimes used) these drugs to develop works that compel, move, influence, inspire, or incite..? What does current research suggest about the potential therapeutic benefits of cannabinoids, particularly with regards to chronic pain?

Learning Objectives

- Participants will understand the complexity, and variability of drug content in sources of marijuana.
- Participants will have a clear grasp of where cannabinoids act in the brain, and how drug action might relate to various therapeutic effects, including pain reduction.
- Participants will gain an understanding of the long history of cultivation, artistic inspiration, and use, including medical use, of marijuana.

SYLLABUS/TIME OUTLINE

1:00 - 1:10pm

Bill Griesar, Ph.D.

Instructor and Outreach Coordinator, Neuroscience, WSU Vancouver Instructor, Psychology, Portland State University

Affiliate Graduate Faculty, Behavioral Neuroscience, Oregon Health & Science University

Neuroscience Coordinator, nwnoggin.org

Welcome and introductions!

1:10 - 2:00pm

Bill Griesar, Ph.D.

Introduction to marijuana/cannabis, drug actions and effects of cannabinoids, research methods involved in the study of cannabinoid receptors, and behavioral effects. Marijuana prevalence, attitudes, brief history, Schedule 1 status, psychopharmacology, phytocannabinoid drug actions and effects, methods of administration, endocannabinoids and receptor targets (CB1 and CB2); Cannabinoids and anxiety, pain, appetite stimulation, nausea relief, multiple sclerosis, epilepsy, memory impairment, and additional cognitive effects, risks to adolescent brain development, summary of NIH summit on marijuana (2016)

2:00 – 2:10pm BREAK

2:10 - 3:00pm

Jeff Leake, M.F.A.

Instructor and Outreach Coordinator, Neuroscience, WSU Vancouver Arts Coordinator, nwnoggin.org

Visual culture and social attitudes towards marijuana use from antiquity to modernity. How has visual culture influenced the choices of policy makers, patients, the public and clinical practitioners, and availability of marijuana for treatment and research? The history of marijuana use, laws, and policies that have impacted the psychology of pain, user perceptions, and scientific inquiry into mental health effects of cannabinoids.

3:00 – 3:10pm BREAK

3:10 - 4:00pm

Ram Kandasamy

Ph.D. graduate student, Neuroscience, WSU Vancouver
New evidence from the lab for cannabinoids and pain reduction, and additional therapeutic effects of cannabis; Definition of pain, the protective and damaging effects of pain, worldwide prevalence of chronic pain, the neural pathway of pain transmission, cannabinoids and opioid prescriptions, arguments against the use of marijuana, overview of cannabinoids, clinical pharmacology of marijuana, mechanisms of cannabinoid analgesia, cannabinoid-based therapies, cannabinoid efficacy for pain conditions, cannabinoids and migraine, sex differences in cannabinoid analgesia, cannabinoids vs. opioids

4:00 - 4:30pm

Jeff, Bill, Ram & Cole

Brain viewing, questions, and activity: visualizing the effects of marijuana with a brain map; clarifying the links between structure and behavioral consequences of cannabinoids, and the psychology of pain (and additional therapeutic and side effects - including effects on memory, and learning)

Welcome assitance from **Cole Dawson**, Neuroscience undergraduate, WSU Vancouver, who currently studies opioid dependence and withdrawal in Mike Morgan's lab.

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