DSV Seminars 2019

UNIVERSITÀ DEGLI STUDI DI TRIESTE

DIPARTIMENTO DI SCIENZE DELLA VITA

Master Degree in Neuroscience

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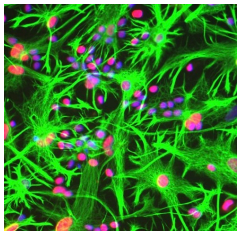
Room 1B , H3 Building – Via Valerio, 12

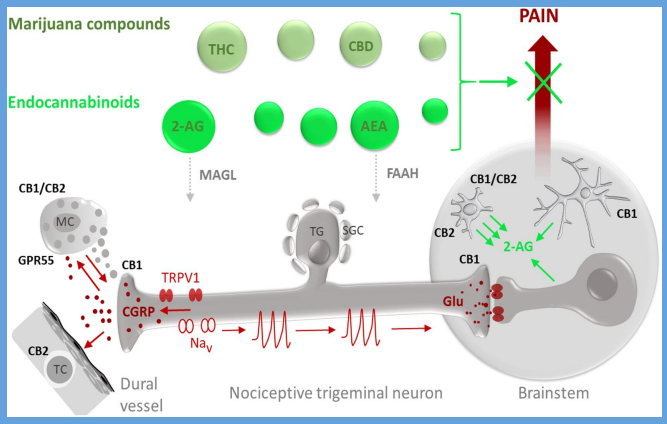


Prof. Rashid Giniatullin

University of Eastern Finland

Invited by Annalisa Bernareggi

Cannabis *vs* endocannabinoids: a struggle for migraine pain relief



Cannabinoids have emerged recently as a new class of potent analgesic and anti-migraine agents. However, the complexity of natural Exocannabinoid (exoCB) compounds in Cannabis plants and the presence of obvious psychotropic side effects, called for exploration of specific endogenous signaling pathways mediated by Endocannabinoids (endoCB). There are two major endoCB compounds: 2-arachidonylglycerol (2-AG) and anandamide (AEA). The anti-nociceptive efficiency of 2-AG and AEA is essentially determined by activity of two CB degrading enzymes – monoacylglycerol lipase (MAGL) and fatty acid hydrolase (FAAH), respectively. Notably, inhibition of MAGL and FAAH may provide a "dual benefit" because, in addition to promoting the accumulation of 2-AG and AEA, inhibition of these enzymes diminishes the level of arachidonic acid (AA) and its pro-nociceptive downstream products such as PGE2 and endovanilloids. In this seminar, we will discuss positive effects of MAGL and FAAH inhibition in animal migraine models.

Reference: Emerging Role of (Endo)Cannabinoids in Migraine. doi: 10.3389/fphar.2018.00420.