

## Einladung zum Kolloquium

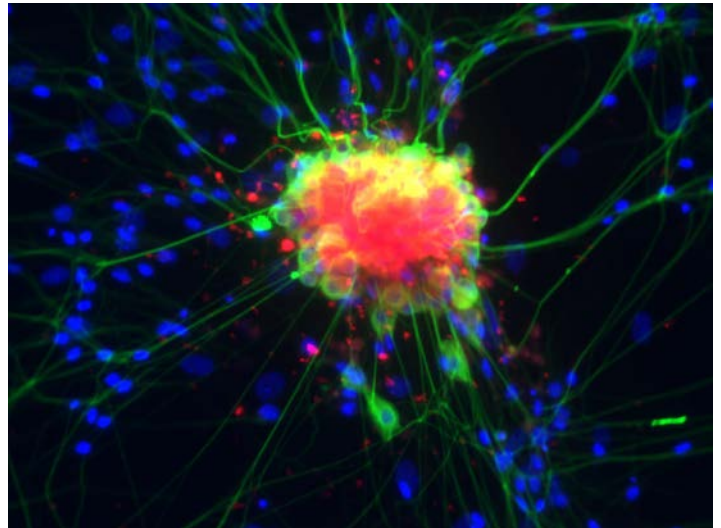
Am Freitag, dem 20. Juni 2014, **14:00 Uhr** spricht:

**Herr Professor Dr. Lawrence J. Marnett**

**Vanderbilt University**

### **"Cyclooxygenase-2 Oxidation of Endocannabinoids: New Biological Mediators and Therapeutic Opportunities"**

The active component of marijuana is  $\Delta^9$ -tetrahydrocannabinol (THC). THC mimics endogenous ligands (i.e., endocannabinoids) in binding to the cannabinoid receptors, CB1 and CB2. The two best-characterized endocannabinoids are the arachidonic acid derivatives, 2-arachidonoylglycerol (2-AG) and arachidonoyl-ethanolamide (AEA). 2-AG and AEA are substrates for oxygenation by cyclooxygenase-2 (COX-2) and are converted to prostaglandin glycerol esters and prostaglandin ethanolamides, respectively.



These compounds exert potent activities by binding to receptors that appear distinct from CB receptors or prostaglandin receptors and thereby represent a novel class of bioactive lipids. The Marnett laboratory has developed a series of non-steroidal anti-inflammatory drug derivatives that selectively inhibit endocannabinoid oxygenation but not arachidonic acid oxygenation by COX-2. These compounds exhibit interesting pharmacological activities in vivo such as anxiolytic activity and analgesic activity.

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**Alle Interessenten sind zu diesem Vortrag herzlich eingeladen**

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