# **Understanding the Research**

With New Life CA

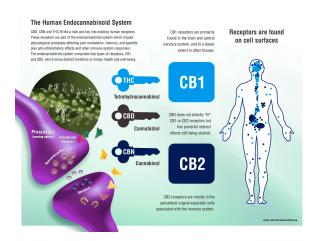
## Endocannabinoid System

CB1 and CB2 receptors have been the most studied cannabinoid receptors, with research being found in the 1950's.

CB1: Widely found throughout the body. Mainly in Central Nervous System (brain, spinal cord) and peripheral Nervous system.

CB2: Found in lymphoid and immune tissue. Which implicates key to suppressing pain and inflammation.

- >30% pain improvement
- Can be used as adjunct
- More relief with Indica
- Start Low and go slow



# What about Terpenes?

#### **Mvrcene**

- Targets CB1 receptor
- Provides increased psychoactive effects.
- Analgesic, blocks inflammation.
- Insomnia
- Peptic Ulcer disease

### Caryophyllene

- Targets CB2 receptors
- Low side effect profile when mixed with THC products.
- Highly effective for neuropathic and nociceptive pain.
- Anti-inflammatory effects, used in chinese medicine.

#### Pinene

- Anti-inflammatory
- Expectorant
- Bronchodilator
- Local antiseptic
- Psychoactive effects decrease with higher levels of pinene.

#### Linalool

- Local anesthetic effects
- Promotes calming effects, has been used as sleep aid.
- Decreases anxious feelings experienced by THC.
- Boosts immune system

### THC and neurotransmitters

- **Serotonin** Increases production, decreases reuptake. Benefits for pain, anxiety and depression.
- **<u>Dopamine</u>** Blocks dopamine reuptake, benefits for pain.
- **Glutamergic system** assist with neuropathic pain.

#### Resources

**OSHER Center**- UCSF San Francisco, Donald Abrams, MD

### **IMPACT network-**

www.impactcannabis.org

Medicaljane- www.medicaljane.com

**<u>Dr. Lester Gribson</u>**- Harvard Medical School; studied effects of THC on mood.



# **Medical Cannabis Practitioners**

www.greenhealthconsultants.com

