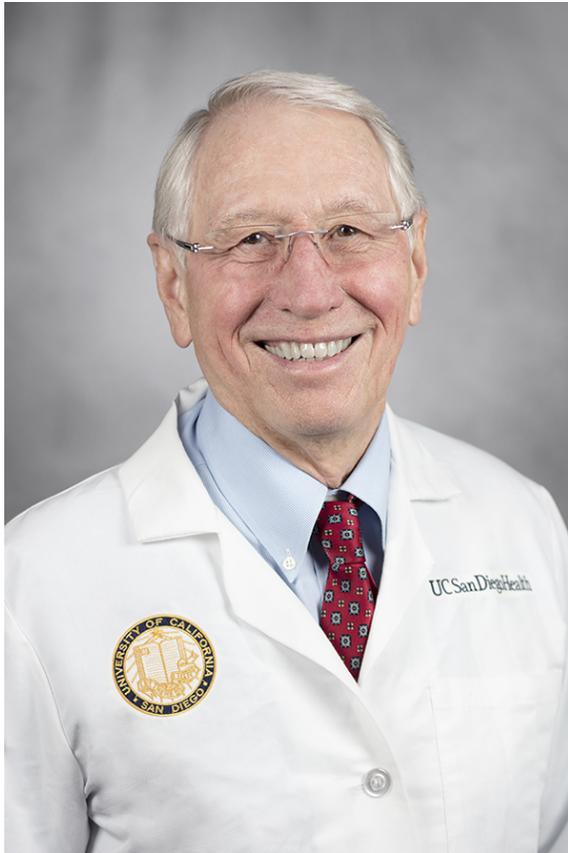




## Cannabis Research Buds Out in New Directions, Arthritis to Insomnia

With 33 states and the District of Columbia having legalized medical marijuana, it was inevitable that there would be much talk of its therapeutic benefits, real or imagined. But lost in the equally inevitable hype has been hard scientific proof.

For almost two decades, the [Center for Medicinal Cannabis Research](#) (CMCR) at UC San Diego has been conducting such research, for much of that time largely alone and often, given the controversial nature of the subject, with limited resources. But times are changing, and CMCR recently announced a first wave of five new grants worth a total of \$3 million to explore the efficacy and safety of medical cannabis as a supplementary or alternative treatment for schizophrenia, rheumatoid arthritis, insomnia, alcohol dependence and anxiety linked to anorexia.



“Within the medical community, there is significant interest in the role of medical cannabis and CBD,” said Dr. Igor Grant, Distinguished Professor in the Department of Psychiatry and CMCR director. “There is a hope that it could be yet another useful agent in some of these conditions, which are difficult to treat or disabling.”

The cannabis plant produces a number of compounds called cannabinoids, the most widely known of which are tetrahydrocannabinol (THC), its principal psychoactive agent, and cannabidiol (CBD), which has been linked to reducing pain, anxiety and inflammation. CMCR scientists are currently preparing studies to investigate CBD as a possible treatment option for [autism](#) and [essential tremor](#), a nervous system disorder. Other studies are looking at the use of cannabis to alleviate pain.

The five new studies focus on CBD as possible remedy for a broader list of diseases and disorders:

### **Effects of Cannabidiol versus Placebo as an Adjunct to Treatment in Early Psychosis**

The \$825,000 grant, awarded to Dr. Kristin Cadenhead, professor of psychiatry at UC San Diego School of Medicine, and colleagues, will explore whether medical cannabis could serve as an alternative treatment for patients facing early psychosis, a time when traditional treatments, such as antipsychotic medications, are moderately effective but can produce serious side effects.

### **Therapeutic Response of Cannabidiol in Rheumatoid Arthritis**

The \$825,000 grant, awarded to Dr. Veena Ranganath, a rheumatologist at UCLA Medical Center. Ranganath’s research focuses on CBD’s use as an anti-inflammatory agent, an application she hopes to exploit in treating rheumatoid arthritis, a chronic autoimmune condition that affects an estimated 1.5 million people in the United States.

### **Cannabidiol for Sedative/Hypnotic-sparing Management of Insomnia in Adults**

The \$825,000 grant, awarded to Mariana Cherner, professor of psychiatry at UC San Diego School of Medicine, and colleagues, will investigate whether CBD might be a viable alternative for sleeping pills among patients with chronic sleep disorders.

“Sleeping pills are moderately safe but they can also be habit-forming and they do have side effects, particularly in older people,” said Grant. “Since many people are prescribed sleeping pills, there is good reason to look for something that might be safer and not have that side effect profile.”

### **Cannabidiol as a Strategy to Treat Alcohol Dependence**

The \$300,000 grant, awarded to Giordano de Guglielmo, assistant professor of Psychiatry at UC San Diego School of Medicine, is the only study using an animal model. It will look at the role CBD might play in reducing alcohol cravings and withdrawal syndromes among alcohol-addicted rats, with findings perhaps applicable to future human research.



### **The Role of Cannabidiol in Regulating Meal Time Anxiety in Anorexia Nervosa**

The \$300,000 grant, awarded to Dr. Emily Gray, associate clinical professor of psychiatry at UC San Diego School of Medicine, and colleagues, will explore whether CBD can help reduce a core symptom of anorexia—anxiety about food—and whether or not that reduction helps patients also reduce their food aversions overall.

The grants are funded by California Proposition 64, which was passed Nov. 8, 2016 and legalized recreational marijuana in the state. The measure allocated tax revenue to the CMCR for research on cannabinoids as treatments, as well as evaluation of their safety.

The grants mark CMCR’s first awarding of Prop. 64 funding for new research grants. The selection process involved review of 66 letters of intent, leading to 26 formal submissions by investigators throughout California.

A second round of CMCR grants is scheduled for 2020.

“These studies are exciting because they represent first steps to apply the rigors of empirical science to the questions of whether cannabis or its products can offer therapeutic benefit, safely and effectively. If the findings are promising, the studies become the foundation for larger efforts,” said Grant. “There’s so much talk out there about what cannabis can do, much of it based upon very thin evidence or none at all. We’re trying to clear away some of the smoke.”

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