Established in 2000, the Center for Medicinal Cannabis Research (CMCR) has been at the forefront of advancing science and policy relating to the potential clinical benefits, and limitations, of cannabis and cannabinoids as medicine.

Director: Igor Grant, MD
Co-Directors: J. Hampton Atkinson, MD; Thomas Marcotte, PhD

A Cornerstone of Cannabis Research
- Longest-running clinical cannabis research center in the United States
- Founded in 2000 via California Senate Bill 847
- Completed 8 studies, numerous additional studies are underway
- A strong team of investigators with broad expertise plus integration with the larger UC San Diego research and clinical resource (see back)

Policy Involvement
Advice to policy-makers at all levels:
- International (e.g., Canada House of Commons)
- Federal/National (e.g., FDA hearing on CBD, House Veterans Affairs Committee, advising legislators proposing cannabis research bills, consultation with other States on medicinal cannabis issues)
- State (e.g., Blue Ribbon Commission on Marijuana Policy, Medical Board of California, Veterinary Board, California Highway Patrol, Office on Traffic Safety, Bureau of Cannabis Control, various Legislative offices)
- Local (e.g., county supervisors, mayors, councils, law enforcement)

Funding
CMCR receives over $15 million in project specific support from a variety of sources

- National Institute of Health 7.1M
- Foundation Support 4.9M
- State of California Funded Studies 2.6M

California Proposition 64 directs $2 million per year to CMCR in long-term support, which includes funding for the CMCR Grants Program
### CMCR Resources

**Regulatory Expertise:** Federal, State, institutional IRB (human subjects)

**Clinical Research Expertise:** Study design, statistical analysis, outcome selection, specimen collection, cross-study standardization enabling data aggregation

**Study Participant Registry:** A registry of individuals who are interested in participating in cannabis research, including healthy controls and individuals with a variety of health conditions

**Data Management and Information Systems:** Web-based data management and reporting, hardware/software resources, enabling of big data analysis

**Specimen Collection, Processing and Storage:** Blood, oral fluid, breath, spinal fluid, urine, stool; specimen repository (24-hour temperature monitoring), custom web-based inventory system

**Toxicology Services:** Mass-spectrometry to evaluate cannabis metabolites in human samples and tissues; plans to develop capability to evaluate plant and other products

**Facilities and Equipment:** Negative pressure rooms (inhaled cannabis), driving simulation rooms, clinical exam rooms, cognitive testing equipment

### In-House Investigative Expertise

- Psychiatry
- Pain medicine
- Neurosciences
- Neurology
- Toxicology
- Neuropsychology
- Pharmacology
- Translational science
- Public health and safety (e.g. driving)

### Current Studies

- Clinical trials for low-back pain, severe autism, essential tremor
- Observational and mechanistic studies examining the effects of cannabis in persons with bipolar disorder, HIV-associated neuropathic pain
- Effects of cannabis, and cannabis plus alcohol, on driving ability, and methods for detecting impairment

### CMCR Grants Program

- Using funds provided by California Prop 64, CMCR will issue funds *annually* for studies in California to evaluate the efficacy and adverse effects of cannabis and cannabinoids
- Issued 1st request for applications in 2019: 66 letters of intent from 19 institutions; selected 26 applications for a full application
- Committed $3 million in funding to 5 studies: insomnia, rheumatoid arthritis, early psychosis, anorexia nervosa, and alcohol dependence

### UC San Diego Extended Resources

*Nested within UC San Diego, one of the top research institutions in the country, CMCR has access to additional experts and patient populations across a broad range of disciplines*

[See www.cmcr.ucsd.edu for the latest listing of CMCR-related studies and publications]

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**Original Studies**

- Selected and funded at 5 UC campuses
- Completed 7 cannabis clinical trials; the first smoked in over 20 years
- Demonstrated short-term efficacy in neuropathic pain from several causes, and in muscle spasticity due to multiple sclerosis

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