Motivational disorders including drug addiction, obesity and gambling are rampant in the industrialized world and have a heavy health and socioeconomic cost. To address this problem The Alcoholism and Addiction Research Group was established as a research division of the UCSF Neurology Department. Group members have already made seminal contributions to understanding the neural mechanisms of the drug actions that mediate reward and on mechanisms of learning and memory -- phenomena that play key roles in the addictive process.

The primary goal of the group is to bring a broad scope of basic scientific inquiry and fresh insights to the study of motivation and reward in order to develop new and more effective treatments. A related goal is to attract the brightest graduate students and early career investigators to the field of addiction research. A major strength of the group is the collaborative culture. Center research depends on the synergies resulting from frequent multidisciplinary interactions at all levels. These interactions explicitly focus on accelerating the discovery process and advancing knowledge through exploiting new technologies, whenever and wherever they emerge.

Group investigators analyzing the effects of addicting drugs on the specialized junctions between nerve cells (synapses), seek to explain what happens when addictive drugs reach the brain's pleasure centers. Those concentrating on the neural circuits involved in motivation, reward and learning hope to reveal the connections between molecular changes in nerve cells and drug tolerance, drug-dependence, and drug self-administration. Finally, our program encourages collaboration with the clinical addiction research community at UCSF to accelerate discovery and development of new and effective treatments.