

## MEETING OBJECTIVES

The goals of this meeting are:

- 1) To share the state of the science — in epidemiology, basic science and neuroscience, and intervention research — focused on physical activity as a strategy to prevent substance abuse;
- 2) To facilitate development and testing of new trans-theoretical paradigms for prevention; and
- 3) To promote future research in these areas through unsolicited grant applications and responses to targeted solicitations.

There is growing interest in the importance of physical activity for promoting general physical health while addressing problem behaviors (e.g., substance use, obesity, internalizing disorders, juvenile delinquency, or interpersonal violence) and the associations among these behaviors. Though some existing knowledge in this area is compelling, the science is not well developed and does not provide a comprehensive view of relationships between the underlying neurobiological, emotional, social, environmental, and prevention findings associated with physical activity and healthy recreation. This information could help identify different pathways of substance use among those who do and do not participate in these activities. This science meeting will explore opportunities to more fully utilize existing preclinical, epidemiological, and prevention research data to promote understanding of the relationships between physical activity and healthy recreation and the onset and progression of drug abuse. The meeting will bring together experts who have studied the effects of physical activity and recreation on animal and human subjects, with the primary goal of elucidating the most useful directions for prevention research to incorporate physical activity and recreation as a new paradigm. The experts will focus on two principal areas: 1) preliminary evidence for a link between level of physical activity/recreation and onset of drug abuse, as well as evidence for environmental, behavioral, and biological mechanisms that explain such a link; and 2) promising intervention studies to test hypotheses related to the relationship of exercise/recreation to drug abuse outcomes. Our ability to identify ways to fill critical research gaps, meant to enhance our knowledge and use of physical activity and healthy recreation to prevent substance use and related problems, will serve as a measure of success of the workshop.