

## Topic DAT18-07: Basic Research on Opioids

### Purpose

To encourage basic science research aimed at enhancing our ability to prevent or treat opioid abuse, overdose, addiction and/or relapse.

### Background

The extent of opioid misuse and its trajectory to addiction has escalated into a major public health epidemic characterized by an overdose rate of over 100 people daily, decreased quality of life, increase in adverse health consequences, increased socioeconomic burden and a crisis in the ability to treat pain. To address this crisis, basic research at all levels of analysis is needed to understand the mechanisms by which opioids lead to tolerance, physical dependence and the compulsive behavior that characterizes addiction, the neurobehavioral underpinnings of relapse and the factors that determine recovery. The neurobiological basis for vulnerability/resilience to these effects needs to be determined. In order to accelerate research in these areas, applications for administrative supplements to existing grants that are not currently focused on opioids are being requested.

### Research Objectives

NIDA welcomes applications studying diverse aspects of opioid use including, but not limited to:

- Genetics and epigenetics related to opioid use disorder vulnerability
- Opioid receptor structure, chemistry and pharmacology
- Opioid-induced cellular and circuit plasticity that may influence vulnerability to tolerance, physical dependence, addiction or relapse or determine the trajectory to recovery
- Behavioral and/or environmental determinants of the consequences of opioid administration.

### Relevant Funding Opportunities

Parent funding opportunities that can be used to pursue these and other research activities include, but are not limited to:

Administrative Supplements to Existing NIH Grants and Cooperative Agreements (Parent Admin Supp Clinical Trial Optional) [PA-18-591](#) Budgets for the supplements should be less than \$100,000.

R01 NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed) [PA-18-484](#)

R01 NIH Research Project Grant (Parent R01 Clinical Trial Required) [PA-18-345](#)

R21 NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Not Allowed) [PA-18-489](#)

R21 NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Required) [PA-18-344](#)

R03 NIH Small Research Grant Program (Parent R03 Clinical Trial Not Allowed) [PA-18-488](#)

### Scientific/Research (Program) Contacts

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#### SHORT LIST OF AREAS OF EXPERTISE

- Genetics and Epigenetics
- Molecular Biology
- Pharmacology of Drugs of Abuse