NIDA Director’s Report to the CRAN Joint Council

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Nora D. Volkow, M.D.
Director
National Institute on Drug Abuse
@NIDAnews
Kurt Rasmussen, Ph.D., Director, DTMC
Formerly: Senior Research Advisor, Neuroscience Division, Eli Lilly & Co.
Past Month **Marijuana Use Remains Steady** while Alcohol and Cigarette Use Declining among High School Seniors

![Graph showing trends in marijuana, alcohol, cigarettes, and e-cigarettes use from 1991 to 2017.](source.png)

**SOURCE:** University of Michigan, 2017 Monitoring the Future Study
**DAILY MARIJUANA USE MOSTLY STEADY**

**2007 – 2017**

- 8th graders: 0.8%
- 10th graders: 2.9%
- 12th graders: 5.9%

**TEENS MORE LIKELY TO USE MARIJUANA THAN CIGARETTES**

- Daily use among 12th graders:
  - 1992: 1.9%
  - 1997: 24.6%

71% of high school seniors do not view regular marijuana smoking as being very harmful, but 64.7% say they disapprove of regular marijuana smoking.

**PAST-YEAR E-VAPORIZER USE AND WHAT TEENS ARE INHALING**

- 8th graders: 13.3%
- 10th graders: 23.9%
- 12th graders: 27.8%

Nearly 1 in 3 students in 12th grade report past-year use of e-vaporizers, raising concerns about the impact on their long-term health.

**BINGE DRINKING RATES STEADY AFTER DECADES OF DECLINE**

Binge drinking appears to have leveled off this year, but is significantly lower than peak years.

**PAST-YEAR MISUSE OF PRESCRIPTION/OVER-THE-COUNTER VS. ILLEGAL USE**

**STUDENTS REPORT LOWEST RATES SINCE START OF THE SURVEY**

Almost all grades, past-year use of heroin, methamphetamine, cigarettes, and synthetic cannabinoids are at their lowest by many measures.
Co-sponsored by NIH Office of Behavioral and Social Sciences

11 researchers with diverse disciplinary perspectives

Developmental Effects of Social Media – opportunities:
- Understand effects of social media on the brain
- Build on existing longitudinal studies
- Key neurobiological, behavioral, social skill outcomes
- Intensive measurement

Collaboration with other NIH components in meeting follow up
29 states have legalized medical marijuana along with D.C., Guam and Puerto Rico

States with MML vary on:
• Allowable conditions and routes of administration.
• Dispensaries/home growth and registries.
• Testing, regulatory requirements.

States with Recreational Laws vary on:
• Marketing, product labeling, distribution (home growth).
• Taxation.

As of Jan. 22, 2018, the Vermont legislature passed adult-use legalization legislation and the governor signed the bill. The measure does NOT set up a regulatory system for sales or production.
THE EIGHT PRINCIPLES

- The NIDA’s research mission is understood to be inclusive, flexible, and public health oriented.
- Research must be neutral about actions, laws, and policies set by any jurisdiction regarding cannabis.
- Priority should be given to research that will remain germane under a wide range of policy frameworks.
- Research should focus on behaviors and consequences that are associated with the greatest harms or benefits and the policies that ameliorate or exacerbate those harms.
- Research should consider both short- and long-term effects.
- Research should be sensitive to the realities of cannabis laws and policies.
- Research should be sensitive to the realities of cannabis production, marketing, and use.
- Research should acknowledge that, sometimes, large gaps can emerge between a law or policy as written and its implementation.
ABCD Update

ABCD Study Fast Track Data

DICOM images from ~6,000 participants currently available.

Interim curated data on first 4,500 participants released Feb 2018!

- Basic demographics
- Assessments of:
  - Physical and mental health,
  - Substance use,
  - Culture and environment, and
  - Neurocognition
- Tabulated structural and functional neuroimaging data
- Minimally processed brain images
- Biological data (e.g., pubertal hormone analyses)
- Residential history derived data related to residential density/walkability, crime, area deprivation, population density, and satellite-based pollution measures

https://data-archive.nimh.nih.gov/abcd
New NIDA FOAs

Workshop on the Use of Adolescent Brain Cognitive Development (ABCD) Data (R25 Clinical Trial Not Allowed)
(RFA-DA-19-006)

Issued: March 28, 2018; Application Receipt/Submission Date(s): July 25, 2018.

FOA will support creative educational activities with a primary focus on courses for skills development that will allow participants to explore the hands-on use of ABCD data, through cooperative or competitive approaches.
Overdose Death Rates

1999

2016

1. Over prescription of opioid medications led to misuse
2. Addiction to prescription opioids led to heroin
3. Emergence of fentanyl(s), with higher potency and greater profitability in the black market than heroin.
NIH OPIOID RESEARCH INITIATIVE

Using Research to End the Opioid Crisis

- PREVENTION
  - OUD

- OPIOID ADDICTION
  - TREATMENT
    - New and innovative medications and technologies

- PAIN MANAGEMENT
  - Safe, more effective strategies

- OVERDOSE REVERSAL
  - Interventions to reduce mortality and link to treatment
New NIH Initiative to Address the Crisis:
HEAL: *Helping to End Addiction Long-term*

- Collaborative, cross-cutting research
  - From basic to behavioral – and everything between
  - Innovative partnerships – across agencies, sectors, organizations – will ensure rapid progress
- $500M just added by Congress
  - Adds to $600M current funds = $1.1B for FY18
  - Will propel HEAL
- Advances national priorities for pain, addiction research…
Drug Poisoning Deaths 2016

Source: CDC NCHS, census.gov
NIDA Topics of Interest (DAT)

Important: Please contact the Program Official/Contact(s) before submitting an application.

NIDA is attempting to limit the number of Program Announcements we issue each year; however, we remain committed to informing applicants about emerging and continuing areas of research interest. The Drug Abuse Topics (DATs) of interest will leverage existing parent funding opportunity announcements to solicit topic-specific applications within areas of emerging interest to the Institute. Note that we continue to encourage investigator-initiated projects in topics not listed here, and that applications submitted in response to the Relevant Funding Opportunities are NOT limited to the research and development areas described below.

This website only lists scientific/research topics and contact information and instructions for linking applications to specific topics of interest to NIDA (DATs). What is not included are additional application instructions, eligibility restrictions, review criteria, selection criteria, or other items related to the completeness or compliance of an application. These are found in the SF424 application guide.
NIH HEAL Initiative: Some Priorities

**Prevention**
- Understand Origins of Chronic Pain
- Develop New Non-Addictive Treatments for Pain
- Build Clinical Trial Network for Chronic Pain
- Enhance Precision Pain Management

**Treatment**
- Improve Therapeutic Approaches to Addiction
- Evaluate Treatments, Consequences of NOWS
- Optimize Effective Treatments through Pilot Demonstration Projects
The HEALing Communities Study
Multisite Implementation Research Study

**Purpose**: To test the implementation of an integrated evidence-based intervention demonstration project to prevent and treat OUD and prevent overdose death in 2-3 high-impact areas of the Nation.

**Aims in FY 2018**:
- Coordinating Center (grant): Facilitate Research Center activities, data harmonization, analysis, and outcome synthesis and dissemination ($6M in FY2018 funding)
- Research Centers (2-3) (grant): Conduct studies based on implementation of an array of evidence-based interventions along a continuum of care framework ($90M in FY2018 funding)

**Budget (FY 2018)**: $96,250,000

**Total Proposed Budget** (FY2018-FY2021): $361,000,000
NIDA Clinical Trials Network (CTN) Expansion

**Purpose:** Expand size and scope of research conducted by NIDA’s CTN, to develop, validate, refine, and deliver new treatments for OUD

**Aims in FY 2018:**

- **Infrastructure Development (supplements):** Incorporation of new sites and investigators into existing Nodes to add expertise in critical clinical and scientific areas; expansion of Coordinating and Data Centers ($8M in FY2018 funding)
- **Active Studies (supplements):** Expansion of current studies to address “next step” research questions on OUD ($3.4M in FY2018 funding)
- **New Studies (supplements):** Improve access to care and quality of care for OUD ($11.9M in FY2018 funding)
- **Dissemination Efforts (supplements):** Clinical and research training opportunities ($5M in FY2018 funding)

**Budget (FY 2018):** $29,000,000

**Total Proposed Budget (FY2018-FY2023):** $381,900,000
Justice Community Opioid Innovation Network

**Purpose:** To establish a network of research investigators to rapidly conduct studies to improve access to treatment and quality care within local and state justice systems to address the opioid crisis.

**Aims in FY 2018:***

- **National Survey (supplement):** Snapshot of current state of treatment delivery within justice system ($2M in FY2018 funding)
- **Coordinating Center (supplement):** Coordination and data harmonization infrastructure ($1M in FY2018)
- **Clinical Research Studies (supplements):** Studies on effectiveness and implementation of new medications, interventions, and technologies in justice settings ($2M in FY2018 funding)
- **Methodology Studies (supplements):** Explore innovative methods to leverage existing data sources and identify innovative approaches and methods to maximize impact ($0.5M in FY2018 funding)

**Budget (FY 2018):** $5,750,000

**Total Proposed Budget (FY2018-FY2023):** $208,500,000
Medications Development

**Purpose:** Accelerate the research that is currently underway in NIDA’s Medications Development Program.

**Aims in FY 2018:** Fund a total of 15-20 new research studies leading to about 15 Investigational New Drug Applications and 5 New Drug Applications.

**Focus areas:**
1. Stronger, longer-acting formulations of antagonists to counteract overdose from high-potency opioids ($10M in FY2018 funding)
2. New formulations of existing medications to improve treatment compliance and/or reduce diversion ($20M in FY2018 funding)
3. Exploring new targets ($15M in FY2018 funding)
4. Interventions against respiratory depression induced by opioids alone or in combination with other substances ($10M in FY2018 funding)
5. Immunotherapies (vaccines and monoclonal antibodies) to prevent relapse by stimulating the body to generate antibodies that bind to opioids or using highly efficient anti-drug antibodies to neutralize the drug while still in the bloodstream ($15M in FY2018 funding)

**Budget (FY 2018):** $70,250,000

**Total Proposed Budget (FY2018-FY2023):** $424M