

Director's Report to the National Advisory Council on Drug Abuse

Nora D. Volkow, M.D.

Director

National Institute on Drug Abuse

February 8, 2022

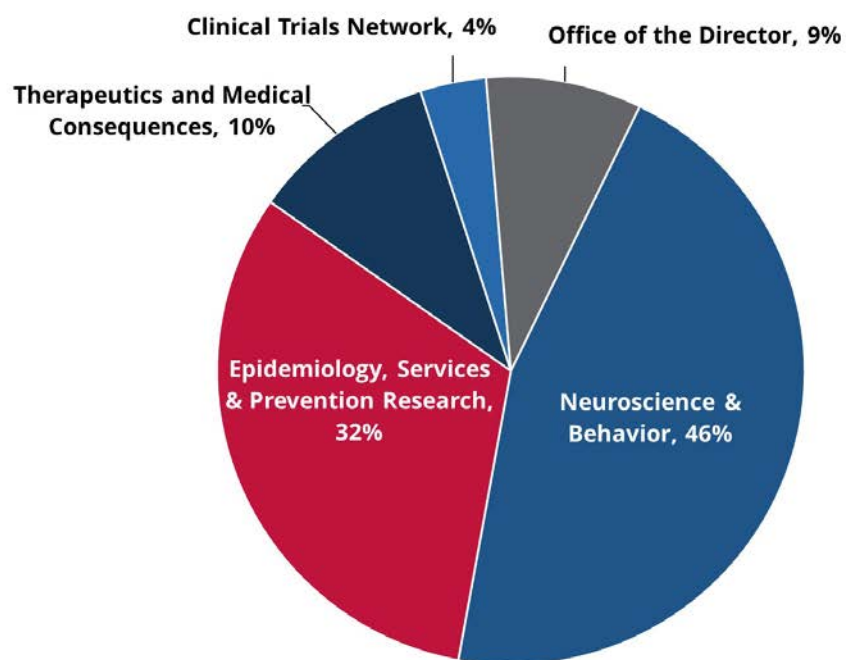
NIDA BUDGET

	FY 2021 Final (\$k)	FY 2022 PB (\$k)	FY 2023 PB (\$k)
Base	\$1,206,321	\$1,447,060	TBD
HEAL	\$269,484*	\$405,443*	
Total	\$1,475,805	\$1,852,503	

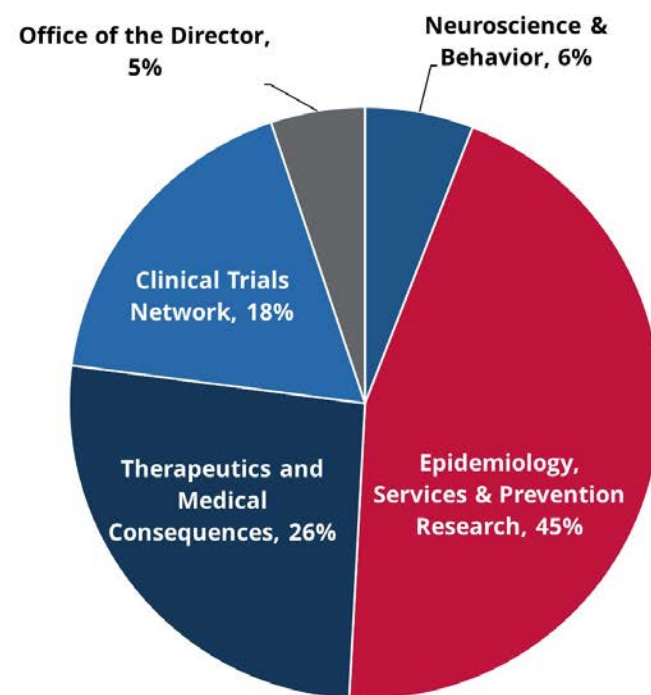
* NIH's total HEAL funding is split evenly between NIDA and NINDS

FY 21 Funding Overview

Non-HEAL Research



HEAL Research*



*Includes all NIDA HEAL projects regardless of funding source



Jack Stein, MSW, Ph.D.
NIDA Chief of Staff
Retired, Dec 31

NIDA

Office of Research
Training, Diversity &
Disparities

Office of Translational
Initiatives and
Program Innovations

Office of the
Director

AIDS Research
Program

International
Program



Office of
Management

Office of
Science Policy &
Communications

Intramural
Research
Program

Division of
Extramural
Research

Center for the
Clinical Trials
Network

Division of
Therapeutics and
Medical Consequences

Division of
Neuroscience
and Behavior

Division of
Epidemiology,
Services and
Prevention Research

Search for
Director, DTMC



Jennifer A. Hobin, Ph.D.
NIDA International
Program now
managed by OSPC

Search for new NIH Leadership?



Francis S. Collins, MD, PhD
Retired as NIH Director



Lawrence Tabak, DDS, PhD
Named Acting Director, NIH



[NIH Strategic Response](#) | [Funding](#) | [Testing](#) | [Treatments and Vaccines](#) | [News and Stories](#)

Finding Effective Treatments for SARS- CoV-2 Variants

[→ LEARN MORE](#)

NIH's COVID-19 Response

Our COVID-19 research response is helping to create safe and accurate tests, treatments, and vaccines.



Treatments and Vaccines

NIH is speeding the development of the most promising vaccines and treatments.



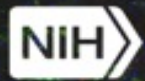
Testing

NIH is working to create and distribute accurate, widely available COVID-19 tests.



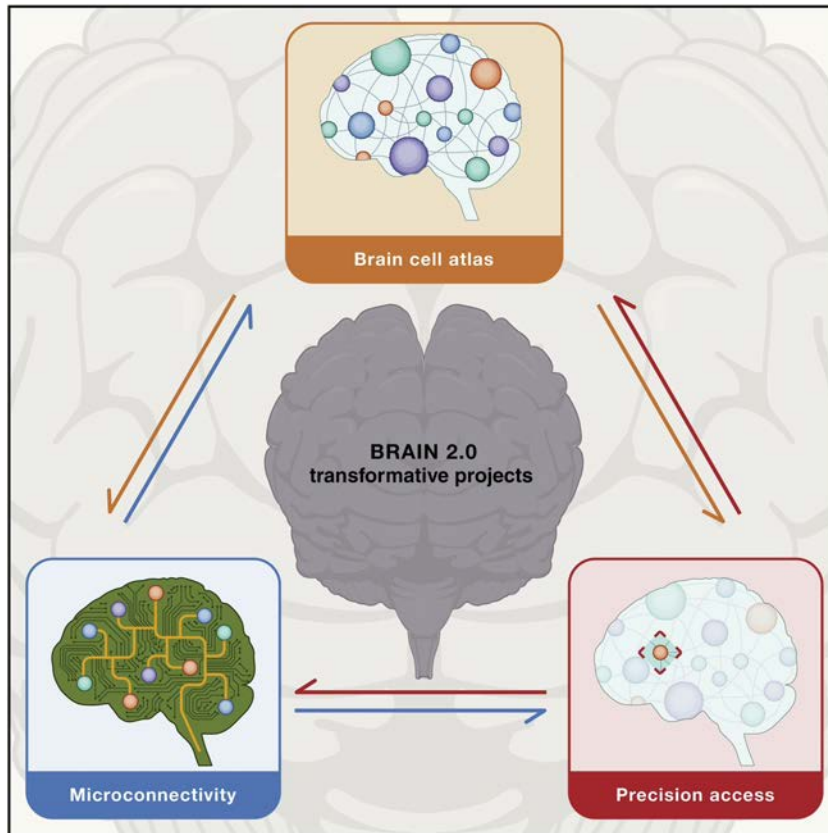
NIH Strategic Response

NIH's crosscutting strategies support research and innovation and ensure accessibility.



The BRAIN Initiative®

BRAIN 2.0: Transforming Neuroscience



CellPress

Cell
Leading Edge

Commentary

BRAIN 2.0: Transforming neuroscience

John Ngai^{1,*}

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*Correspondence: john.ngai@nih.gov

<https://doi.org/10.1016/j.cell.2021.11.037>

The **NIH BRAIN Initiative** is entering a new phase. Three large new projects — a comprehensive **human brain cell atlas**, a whole mammalian brain **microconnectivity map**, and **tools for precision access** to brain cell types — promise to transform neuroscience research and the treatment of human brain disorders.

[Ngai, Cell 2022](#)





The BRAIN Initiative®
Meeting

Open Science, New Tools

Join us **June 21-22, 2022** for the
8th Annual BRAIN Initiative Meeting!

Meeting website with registration and abstract
submission opening soon!

*All those interested in the U.S. BRAIN Initiative are
encouraged to attend and participate.*

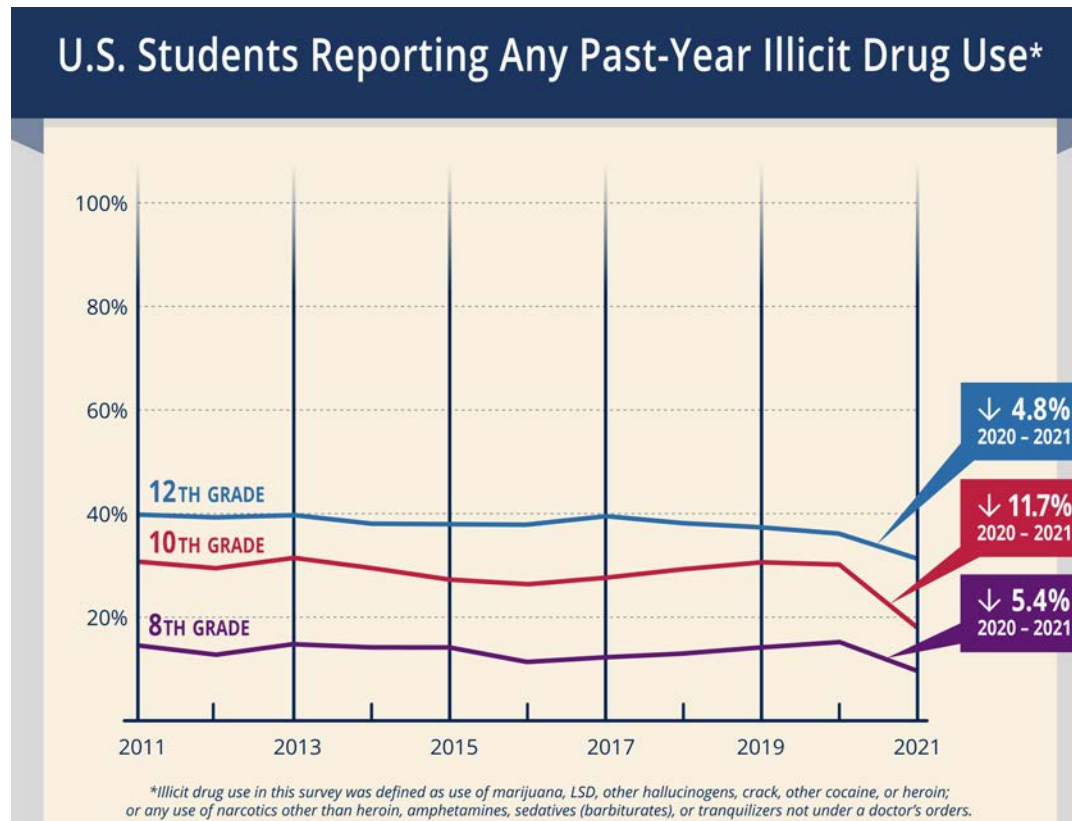
Key Abstract Deadlines

- Symposia Abstract Submissions: ~Feb 25
- Trainee Highlight Awards Abstract Submissions: ~Mar 31
- General Abstract Submissions: ~May 16

<https://braininitiative.nih.gov/news-events/events/8th-annual-brain-initiative-meeting>

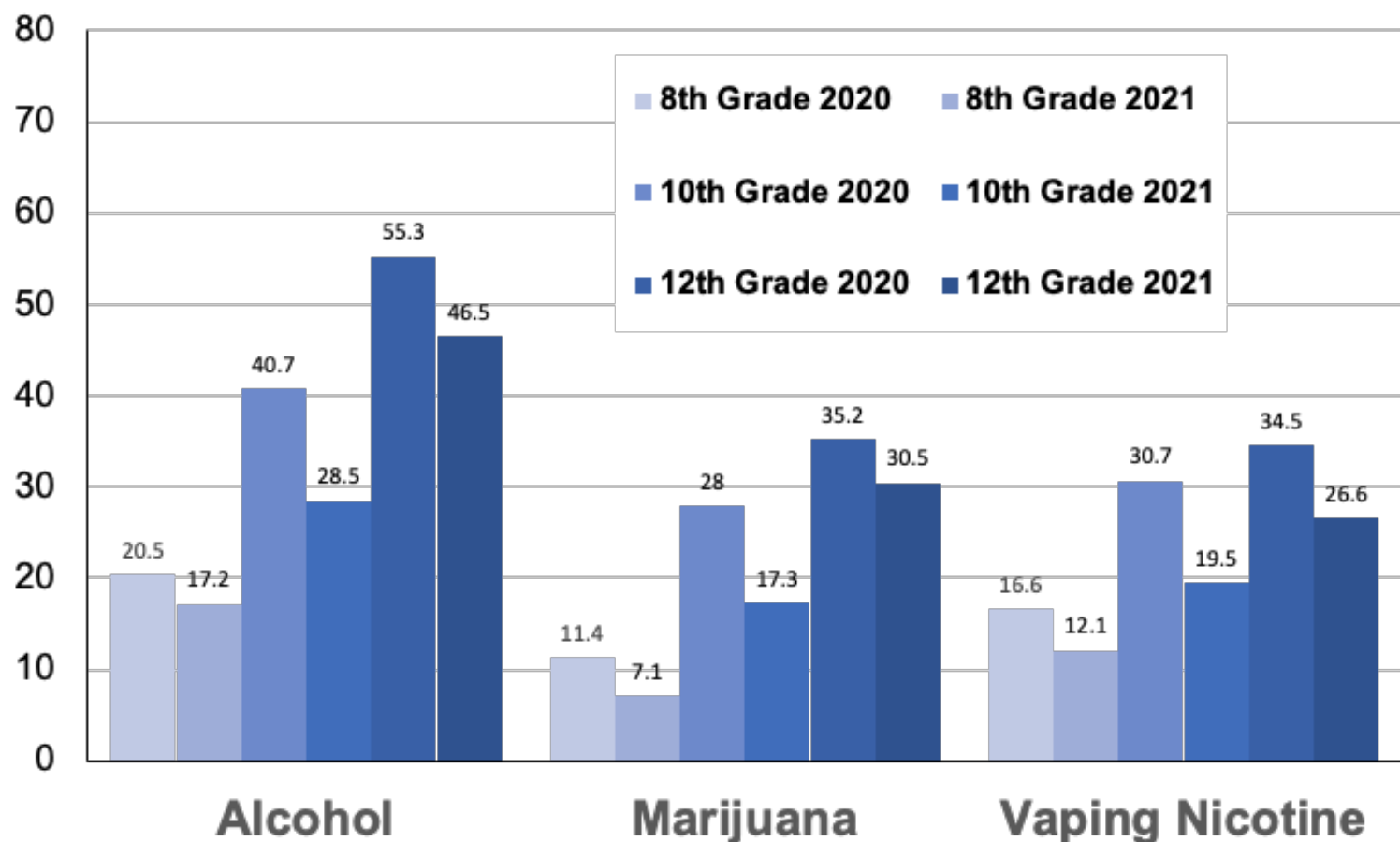


Monitoring the Future Survey 2021



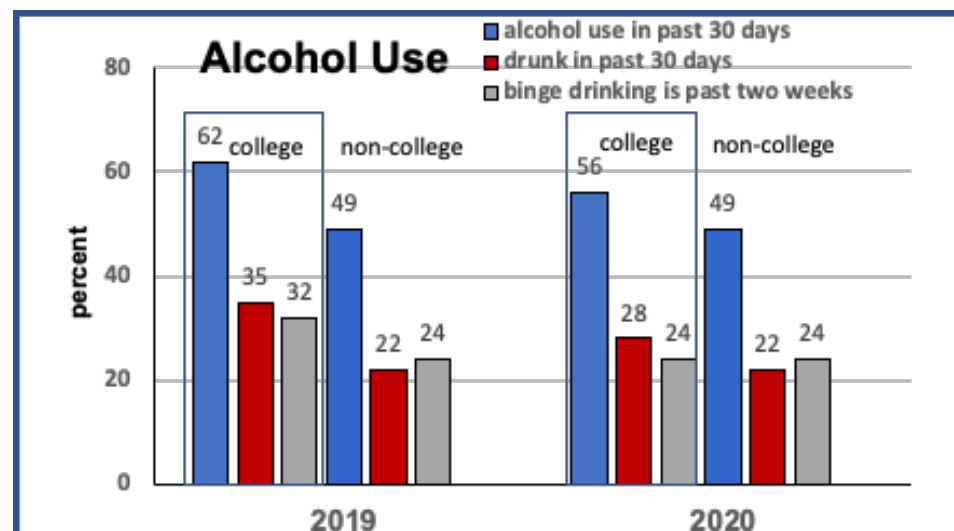
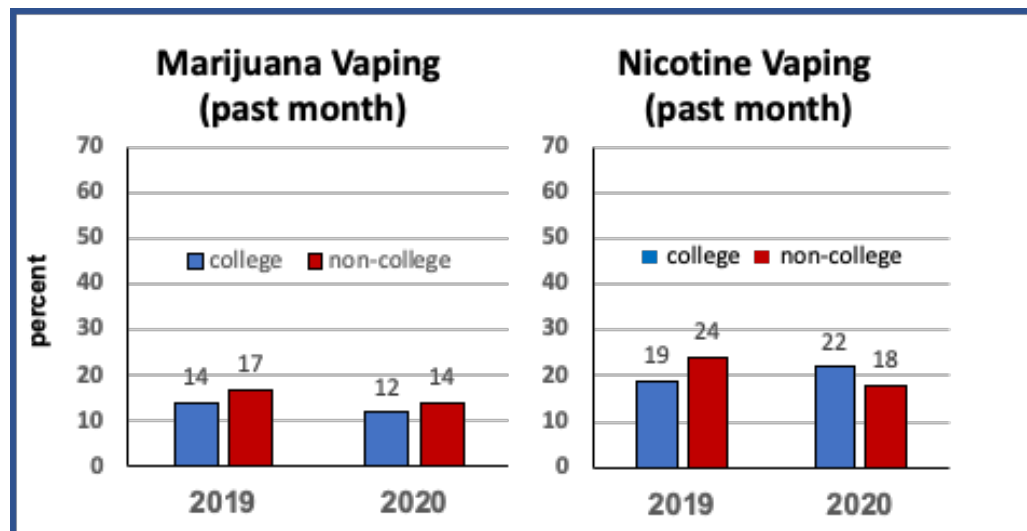
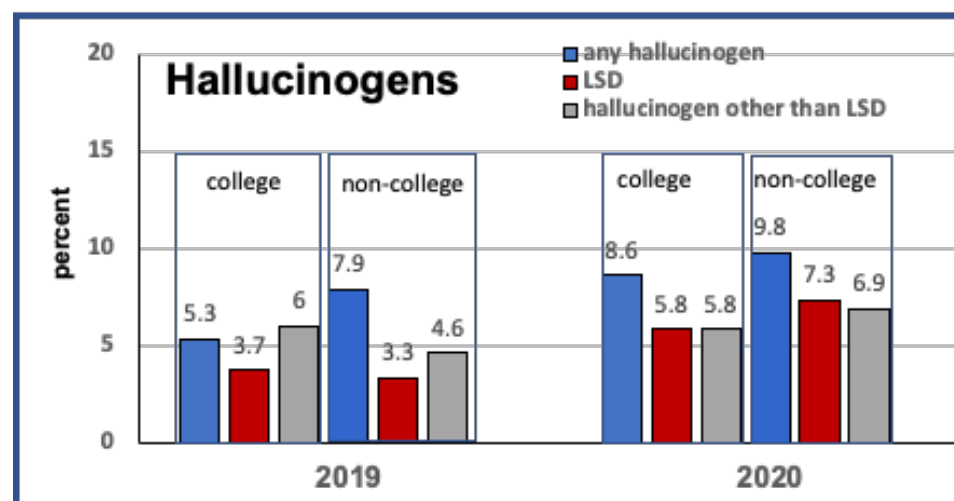
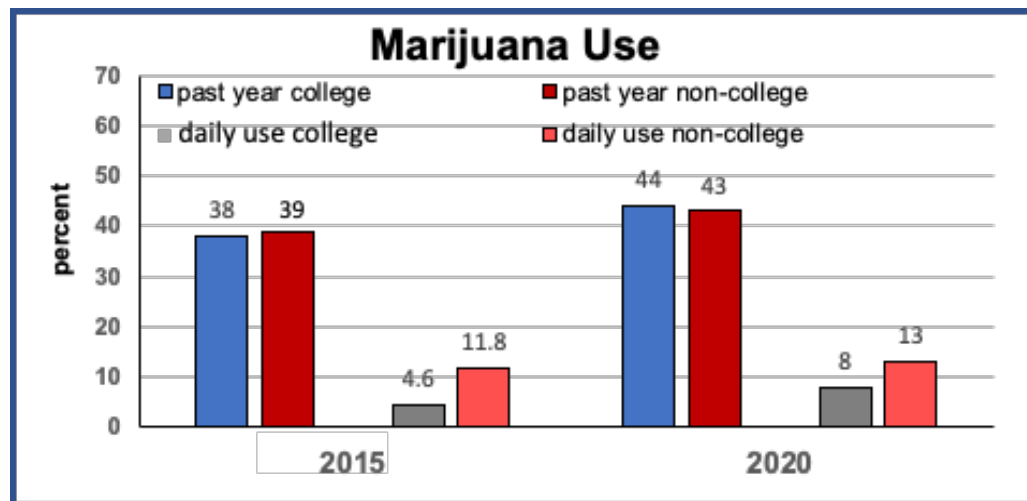
Decreases in use across most substances, including – alcohol, marijuana, and vaped nicotine

Past-Year Alcohol Use, Marijuana Use, and Vaping Nicotine for 2020 and 2021



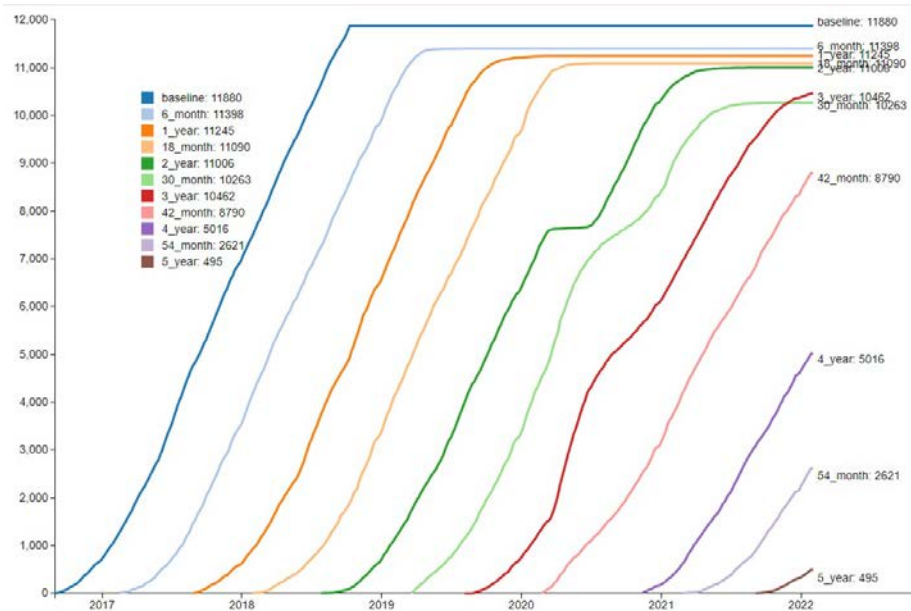
2021 Monitoring the Future Survey.

Drug Use in College Age Adults in 2020 MTF

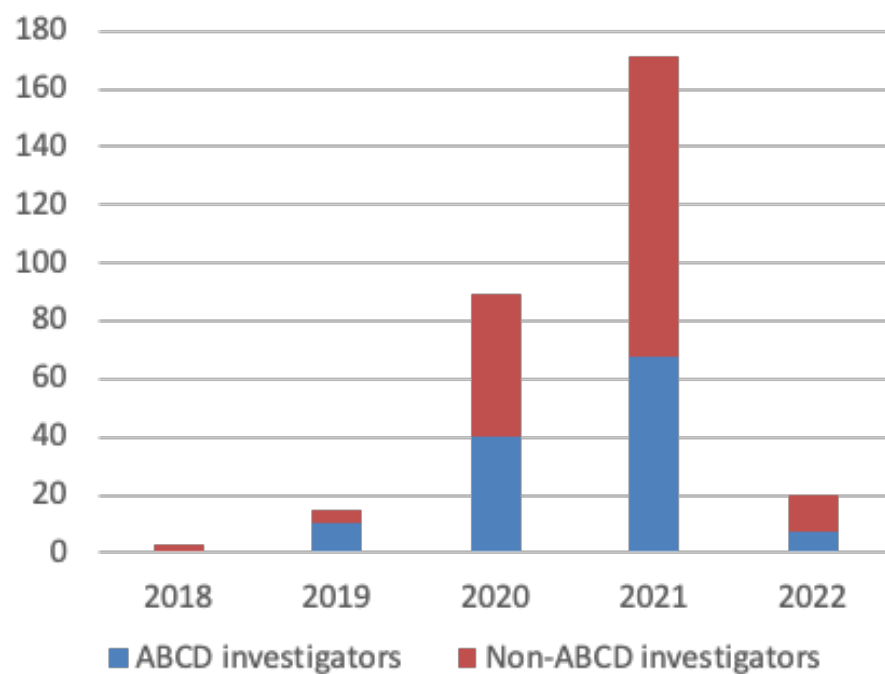


Adolescent Brain Cognitive Development Study

98.2 Percent Retained



Publications



298 publications



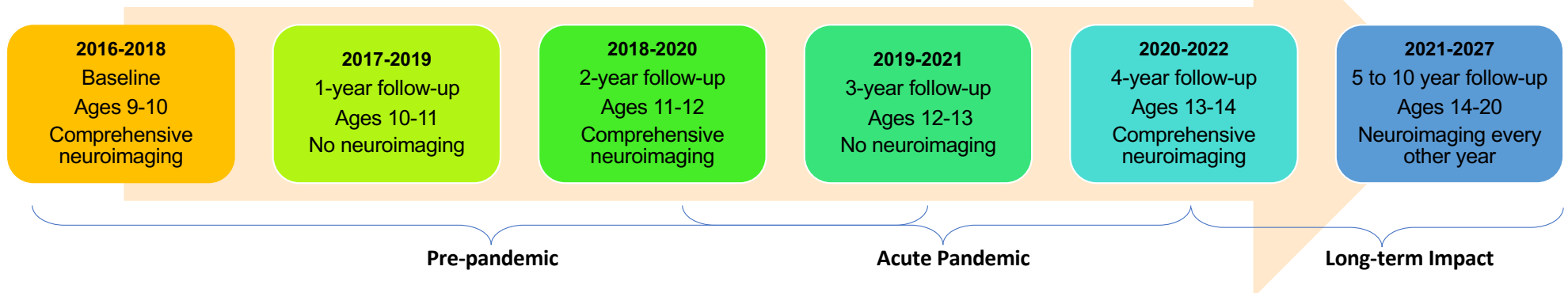
RECOVER
Researching COVID to Enhance Recovery



Adolescent Brain Cognitive DevelopmentSM

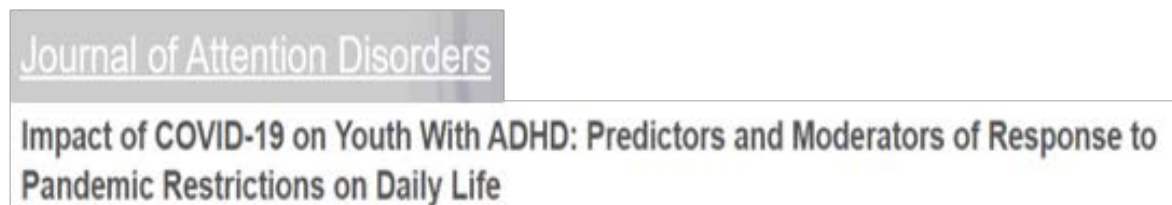
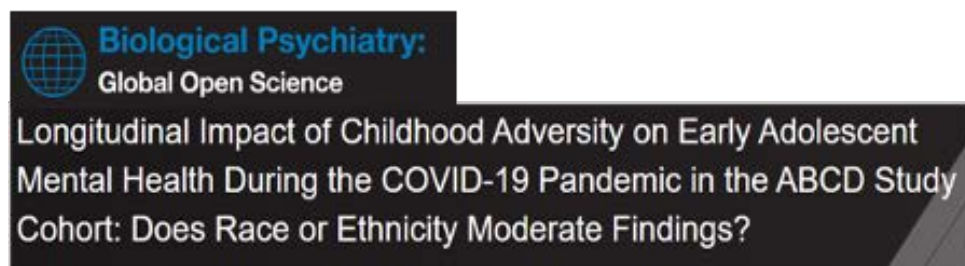
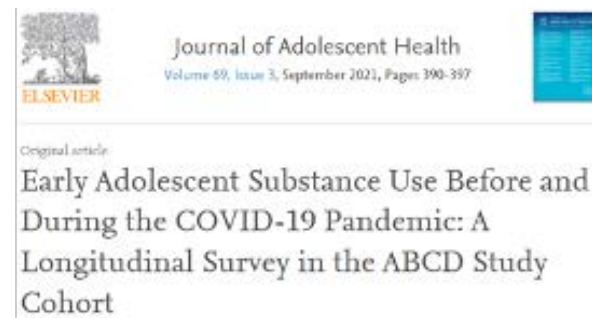
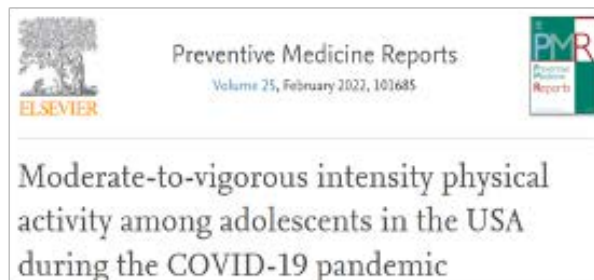
Teen Brains. Today's Science. Brighter Future.

Assessing Impact of COVID-19 including PASC in Adolescents



- COVID antibody testing of youth and caregiver
- Survey participants about COVID/PASC symptoms
 - Infection effects vs general pandemic-related impacts
 - Risk and resilience factors that modify 'infection-related' outcomes
 - In-depth brain, cognitive, and mental health impacts

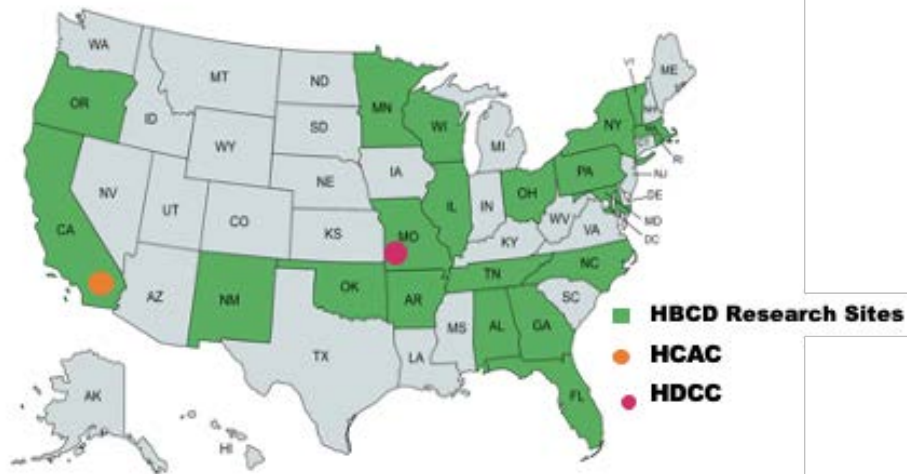
Adolescent Brain Cognitive DevelopmentSM Study Impact of the COVID-19 Pandemic





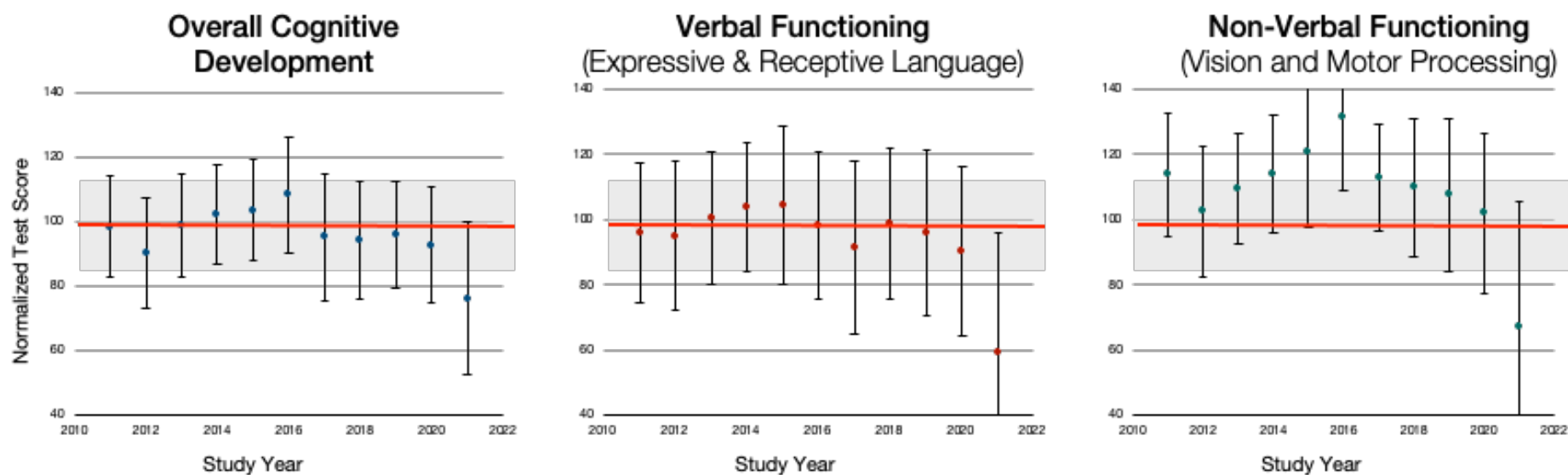
HEALthy Brain and Child Development Study: HBCD

Longitudinal study to understand normative neurodevelopment from birth to 9-10 years and assess impact of in utero exposures to drugs and harmful environments



Impact of Pandemic on Early Childhood

Children born prior to Jan 2019 (pre-pandemic) vs after July 2020 (pandemic) after Control of age and Maternal Education



*2021 measures are significantly lower ($p < 0.001$) than any other year in the past decade.
An average decrease of **33** points across the composite values.

Sean Deoni et al., medRxiv 2021 Aug 11;2021 HB CD

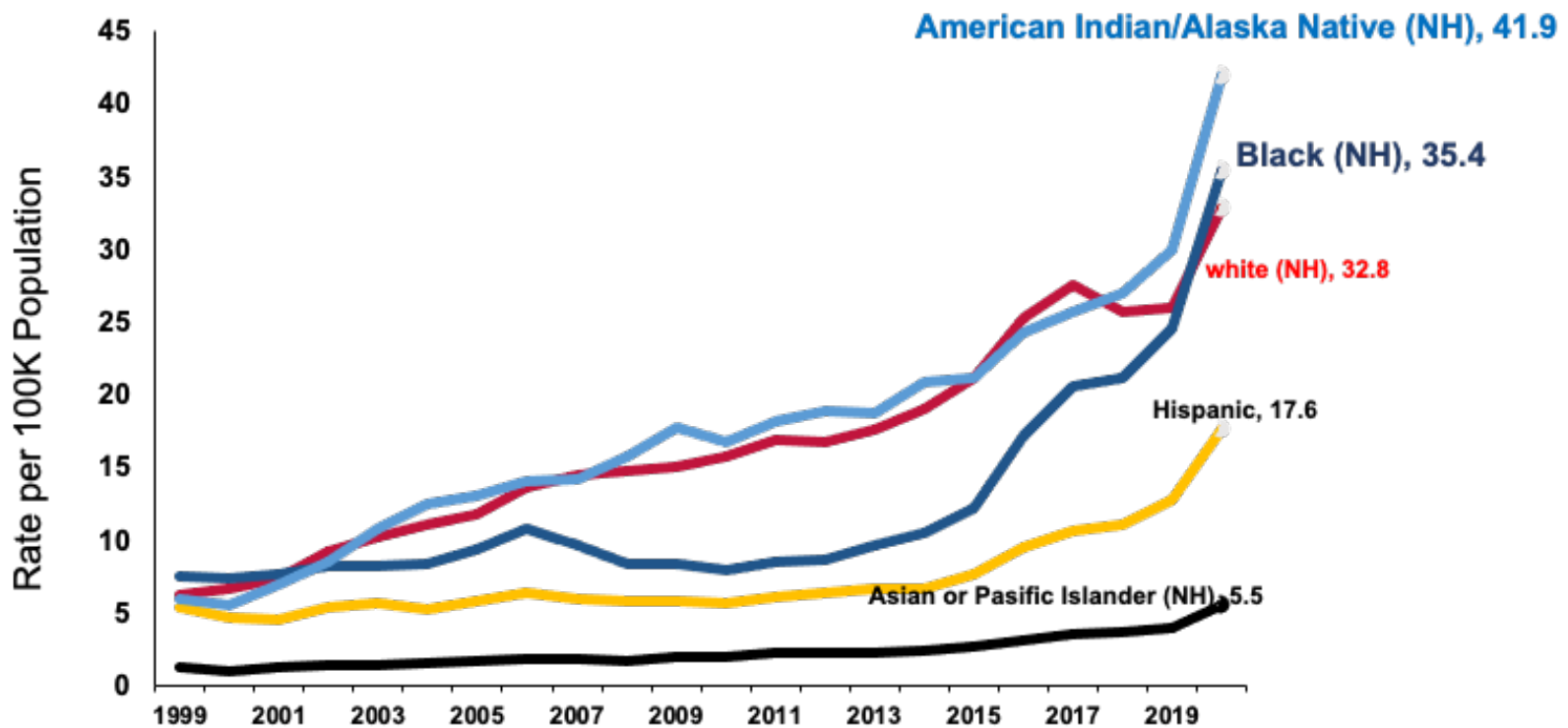


Drug Overdose Deaths* Continue to Increase Into 2021

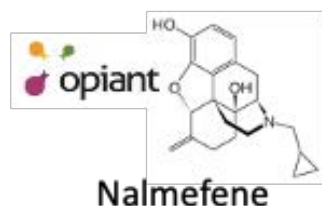
	ALL DRUGS	HEROIN	NAT & SEMI SYNTHETIC	METHADONE	SYNTHETIC OPIOIDS (mainly illicit fentanyl)	COCAINE	OTHER PSYCHO-STIMULANTS (mainly meth)
6/2020*	83,992	14,617	13,090	3,218	48,546	19,398	20,473
12/2020	91,799	13,165	16,416	3,543	56,516	19,447	23,837
6/2021*	101,263	11,054	13,845	3,743	64,977	21,266	29,346
Percent Change 6/20-6/21	20.6%	-24.4%	5.7%	16.3%	33.8%	9.6%	43.3%

*NCHS Provisional drug-involved overdose death counts are PREDICTED VALUES, 12 months ending in select months.
<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

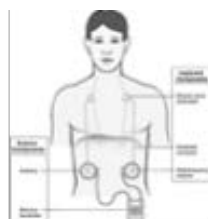
Drug Overdose Death Rates by Race/Ethnicity



Novel Therapeutics OD and OUD



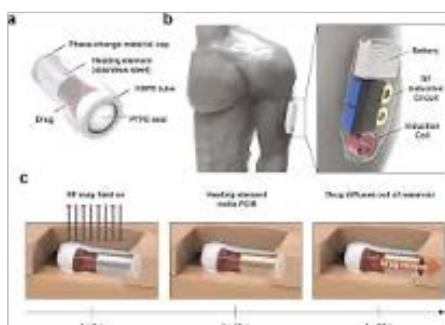
Longer acting MOR antagonists



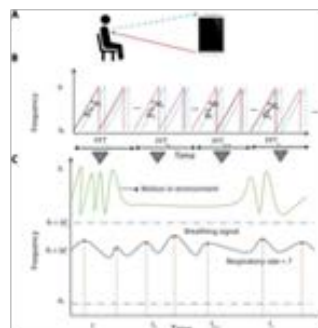
Breathing stimulators



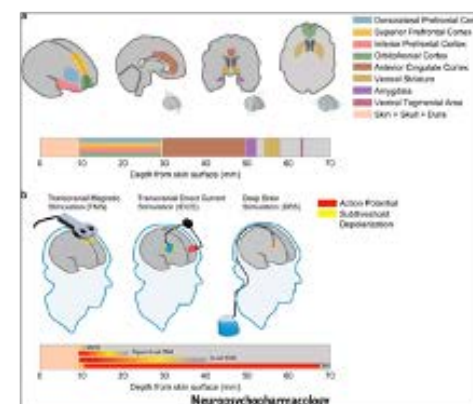
Neuromodulation



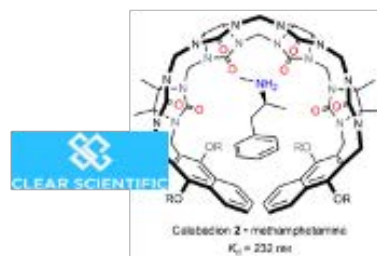
Automatic naloxone autoinjector



Cellphone OD detection

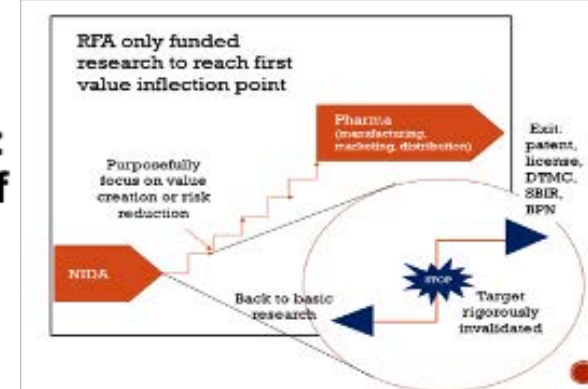


mAntibodies Fentanyl



Sequestrant drugs

VALUE Ladder: Climbing out of Valley of Death



Implementation Science: CTN, JCOIN, HCS, Prevention



[Enhancing the National Drug Abuse Treatment Clinical Trials Network to Address Opioids](#) Expand research conducted by NIDA CTN to address emergent needs presented by the opioid crisis.



[Justice Community Opioid Innovation Network](#) Study quality care for OUD in justice populations. Help create partnerships between local and state justice systems and community-based treatment providers.



[HEALing Communities Study](#) is investigate coordinated approaches for deploying evidence-based strategies to prevent and treat OUD in 67 communities in 4 states.

HEAL- Integrative Management of Chronic Pain and OUD for Whole Recovery (IMPOWR) Network

Treatment Challenges: OUD + Pain

- Lack of evidence-based integrated treatments
- Services for patients with both CP and OUD is fragmented
- Limited resources, expertise, communication



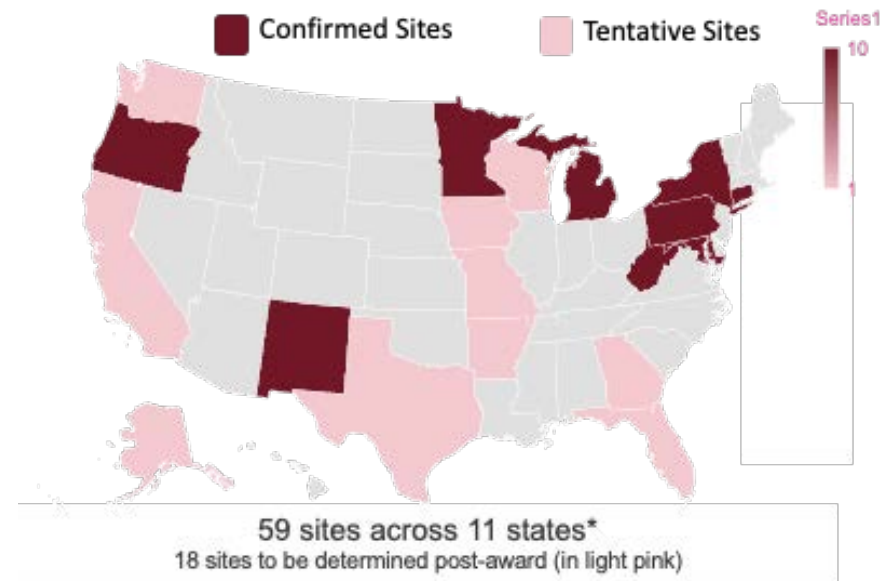
Discover cost-effective interventions that integrate CP + OUD treatment



Determine the best approaches for integrated care delivery for CP + OUD.



Identify barriers and solutions towards implementing these innovations in a sustainable manner.



- 9 Studies OUD Cascade of Care
- 6/9 studies targeting under-served populations
- Partner engagement on every study
- 8 trials emphasize implementation science to maximize reach and sustainability

Prevention Research to Close Evidence Gaps to Improve Screening and Early Interventions for Drug Use in Healthcare settings

New Online

Views **2,654** | Citations **0** | Altmetric **7**

Viewpoint

ONLINE FIRST FREE

January 27, 2022

Closing Evidence Gaps in Clinical Prevention A Report From the National Academies of Sciences, Engineering, and Medicine

Tracy A. Lieu, MD, MPH¹; Alexis Wojtowicz, BA²; Kathleen Stratton, PhD²

» Author Affiliations | Article Information

JAMA. Published online January 27, 2022. doi:10.1001/jama.2022.0849

Editorial
Comment

Related
Articles

For more than 30 years, the US Preventive Services Task Force (USPSTF), supported by the Agency for Healthcare Research and Quality (AHRQ), has published internationally influential recommendations for clinical preventive services. For each topic it reviews, the USPSTF uses a rigorous structured process to assess available and emerging evidence to develop recommendations and issues a letter grade recommendation or an I statement for each. Grades A and B suggest clinicians offer or provide the preventive service, grade C suggests they offer it for select patients, and grade D suggests they not offer the service.¹ Topics receive I statements when the evidence is insufficient to recommend for or against a preventive service.

NIDA Racial Equity Initiative

Workplace

- Fall 2020 Climate Survey conducted; results analyzed by an external contractor to promote trust and objectivity of the results
- Survey provide meaningful baseline data as we continue our internal racial and ethnic equity initiatives.
- Focus groups with NIDA staff will be held this spring to address actionable findings.
- A follow-on survey will be launched in summer 2022.

Workforce

- NIDA Diversity Supplement Program
Annual budget increased \$750K
4 additional supplement apps from predoc & postdocs funded in FY 2021
- 3 supplements to support ESIs in Addiction Science and Related Neuroscience Pilots at NIMHD-RCMI institutions
- 3 NIDA R25 applications to support underrepresented UG, predocs, and postdocs
- 13 research and career development applications funded in FY 2021
- **2 concepts presented later today**

Research Gaps and Opportunities

- 18 supplements in response to REI NOSIs
- Supported 14 projects that characterize impact of racism on substance use outcomes, ameliorate disparities in SUD care, involve culturally tailored interventions, and/or are led by URM scientists
- **5 REI research concepts will be presented later today**
 - A 6th REI concept was presented at the last Council on HIV-related health disparities in minority populations

NIDA communications efforts increase in 2021

- Doubled media outreach with 26 press releases
- 550+ media interactions, 300 interviews with NIDA experts
 - Rates comparable to much larger ICs (NCI, NINDS)
- Four op-eds on criminalization, stigma, harm reduction and ODs generated additional stories, social media conversation
- Most-covered themes: rising OD deaths, COVID and substance use, impact of COVID on adolescents and children
- Increased sharing research (particularly basic/preclinical) on social media



The New York Times *Overdose Deaths Reached Record High as the Pandemic Spread*

More than 100,000 Americans died from drug overdoses in the yearlong period ending in April, government researchers said.

THANK YOU!