

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

Nora D. Volkow, M.D.

Director, National Institute on Drug Abuse May 7, 2024

## Pay Level Increases for Pre- and Postdoctoral Scholars

- NIH will increase annual pay levels over the next 5 years for predoctoral and postdoctoral scholars at NIH-funded institutions recipients of the Ruth L. Kirschstein National Research Service Awards (NRSA).
- Applies to >17,000 research trainees
  - Predoctoral scholars: ~4% increase, bringing it to \$28,224
  - Postdoctoral scholars: ~8% increase with pay starting at \$61,008 and adjusted based on years of experience.
  - For eligible recipients: \$500 increase for childcare and \$200 for trainingrelated expenses. This is the largest year-over-year update since 2017.

# Establishing a Research Network in Primary Care Settings



# NIH Common Fund Program to Support Clinical Research in Primary Care Settings

**Problem**: The health of the U.S. population is declining. Decline is steepest among the underserved and underrepresented.

### Goals:

- Establish a primary care-focused clinical research network that is disease-agnostic,
   facilitating clinical research in mission areas across all ICs
- o Integrate innovative research with routine clinical care in real-world settings
- Create a foundation for sustained engagement with communities underrepresented in clinical research

Anticipated Budget: OD funds \$5M in FY24, \$25M in FY25; anticipate ramp up of ~\$50-100M/year after assessing feasibility and budget requirements

Timeline: Gather Feedback in Spring 2024 → Quick Launch in 2024 → Expand in 2025 and Beyond



## 10<sup>th</sup> Annual BRAIN Initiative Conference

### **Register Soon!**

June 16, 2024: Early career researcher evening networking event

June 17 – June 18, 2024: Plenary talks, posters, symposia sessions, and more

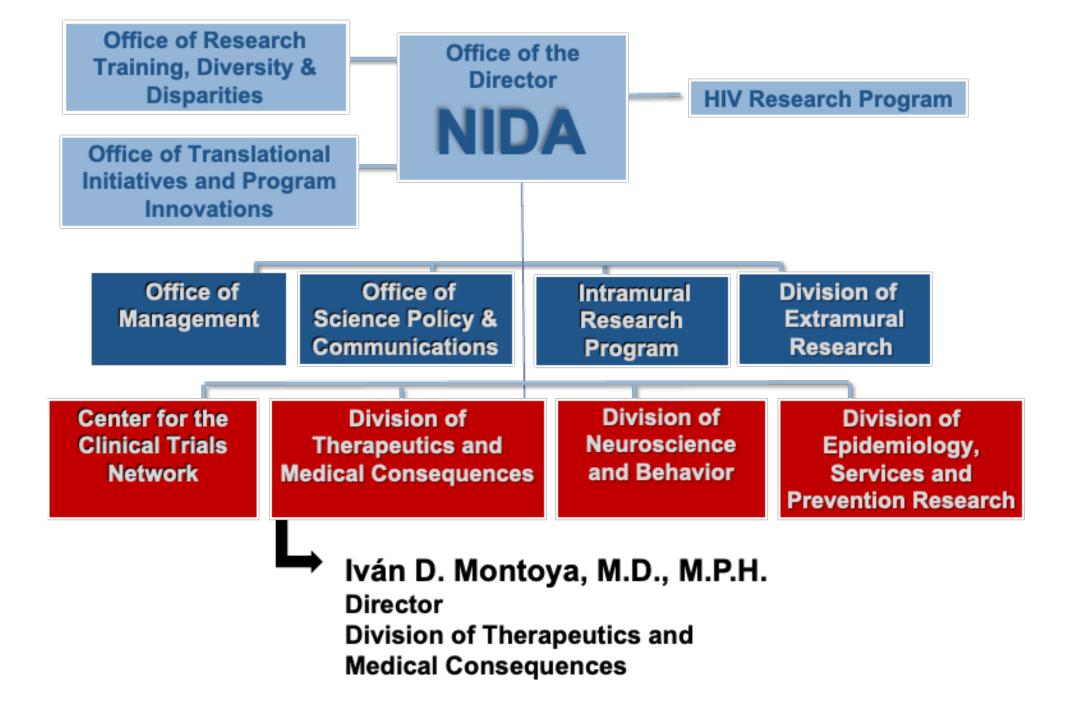
#### A forum for:

- sharing exciting scientific developments
- discussing potential new directions
- identifying areas for collaboration & research coordination



# NIDA BUDGET (All dollars are in thousands)

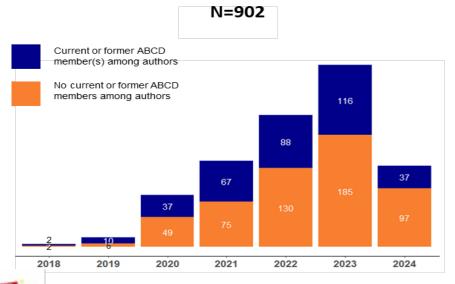
	FY 2022 Final	FY 2023 Enacted	FY 2024 President's Budget	
Base	\$1,250,828	\$1,308,070	\$1,308,070	
HEAL	\$345,295	\$355,295	\$355,295	
Total	\$1,596,123	\$1,663,365	\$1,663,365	



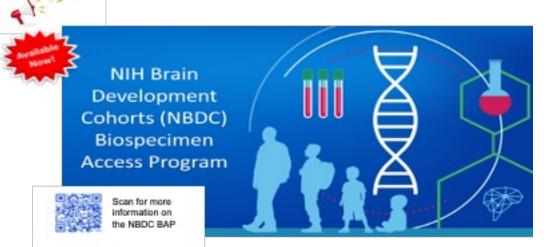
## **Adolescent Brain Cognitive Development Study**

Current visit – 6 & 7-year follow-ups (youth ages 15-18), 96% retained (as of 4/18/24)

**Empirical Publications by ABCD Membership** 

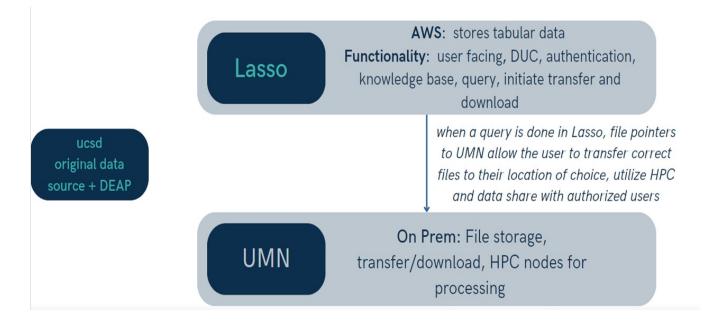


60% by Non-ABCD scientists

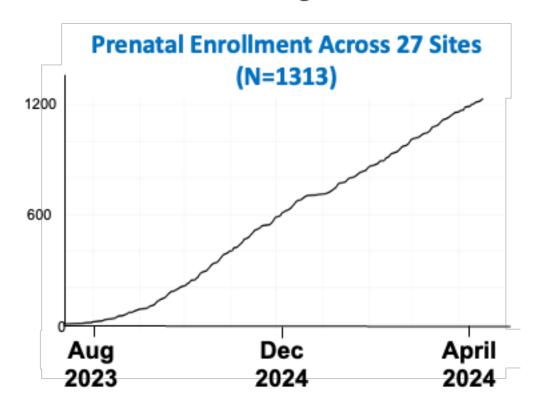


Summer 2024 NIH Brain Development Cohorts Data Sharing Platform

- Optimized for large datasets, including neuroimaging and genomics data
- Provides scalable data ingestion, integrated data analytics, customized user experience
- Provides homogenous solution for harmonizing with planned data from the HBCD Study

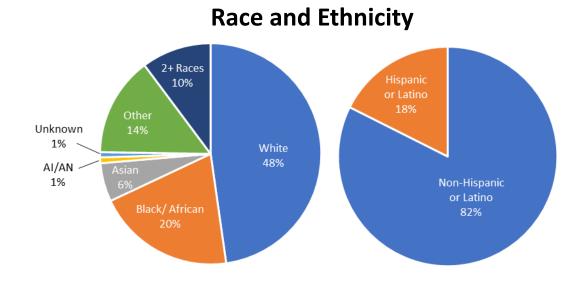


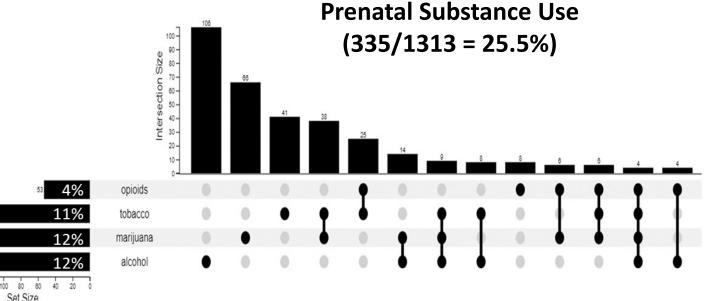
## **HEAL**thy Brain and Child Development Study



### **Data Release Timeline**

Summer/Fall 2024 – Freeze data Fall/Winter 2024 – Beta Release End of 2024/Early 2025 – Full Release





# 2022-2023: Provisional\* Drug Overdose Deaths 12-months ending in select months

_		ALL DRUGS	HEROIN	NAT & SEMI SYNTHETIC	METHADONE	SYNTHETIC OPIOIDS (illicit fentanyl)	COCAINE	OTHER PSYCHO- STIMULANTS (meth.)
	11/2022*	110,063	6,198	12,197	3,426	75,418	27,991	35,001
	5/2023*	113,127	5,170	11,695	3,514	78,947	30,346	37,141
	11/2023*	109,527	4,249	10,448	3,396	76,303	30,326	36,836
	Percent Change 11/22-11/23	-0.49%	-31.45%	-14.34%	-0.88%	1.17%	8.34%	5.24%

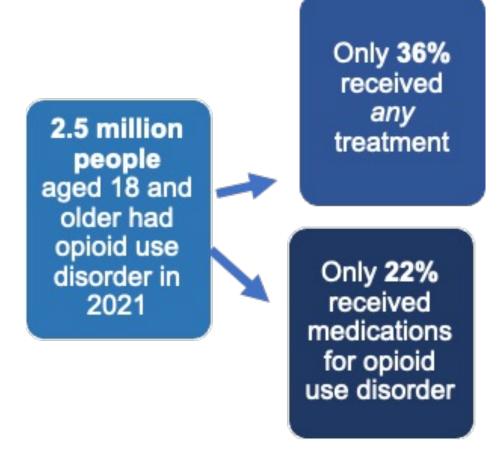
<sup>\*</sup>NCHS Provisional drug-involved overdose death counts are <u>PREDICTED VALUES</u>, 12 months ending in select months. The numbers for 2022 differ from final data in slide 1 because provisional data includes all deaths that occurred in the US including foreign residents. Final data through 2022 on slide 1 is limited to deaths in U.S. residents. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm



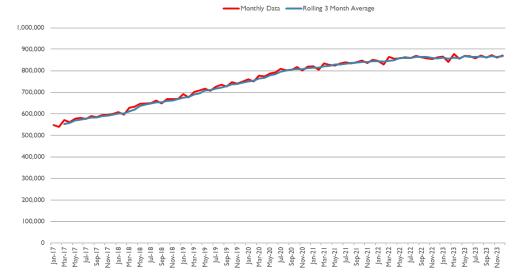
Research Letter | Substance Use and Addiction

Use of Medication for Opioid Use Disorder Among Adults With Past-Year Opioid Use Disorder in the US, 2021

Christopher M. Jones, PharmD, DrPH, MPH; Beth Han, MD, PhD, MPH; Grant T. Baldwin, PhD, MPH; Emily B. Einstein, PhD; Wilson M. Compton, MD, MPE

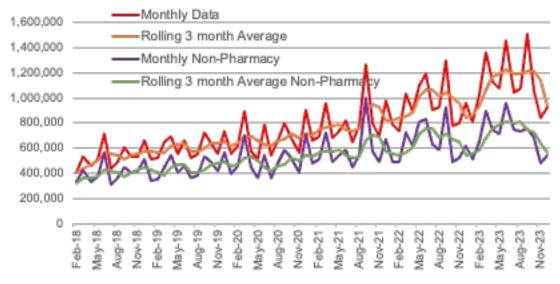


### **Unique Patients Receiving Buprenorphine**



Source: IQVIA Total Patient Tracker. March 7, 2024. TPT measures prescriptions dispensed through retail

#### **Naloxone Units Sold**



IQVIA National Sales Perspectives. March 6, 2024.



## **NIDA Clinical Trials Network**

## Effectiveness of treatments in diverse clinical settings and populations

- Emergency Department initiated MOUD
- Primary Care for Screening and OUD Treatment
- Integrating HIV and OUD care
- Spokes and Hub Model
- Pharmacy Delivery of MOUD
- Mobile Delivery of MOUD
- Telehealth for OUD treatment and care



The healthcare system represents the most impactful infrastructure to prevent and treat substance use disorders including interventions to address the overdose crisis.



### Bridging the Research-Practice Gap

### **Building the Evidence Base**

- 83 Research protocols
  - 13 Multisite clinical trials
    - >23,000 participants
  - 14 Small grant awards
  - 14 Modeling + mapping studies
  - 6 National surveys
  - 6 Diversity supplements
- 140 counties across 38 states
- 165+ publications
- Coordination with ONDCP, BJA, BJS, SAMHSA, BOP

### **Building Capacity**

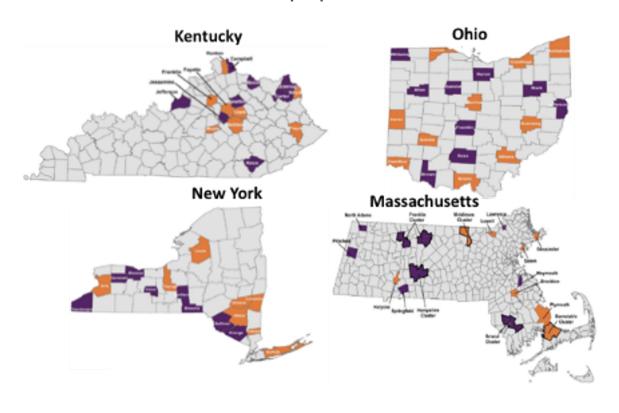
- LEAP R25 Training Program
  - 71 practitioner & ESI
- Online course catalog
  - 50+ courses
  - 6,500+ enrolled
  - 15,000+ podcast downloads
- Dozens of webinars & research translation products for diverse audiences
- Technical assistance platform
  - 93 engagements across the country



## **HEALing Communities Study**

#### 67 Communities:

- Implemented in 4 states
- Total population >10 million



Empower communities with data and support to partner with healthcare, justice, and State leaders to address overdose crisis

**Goal:** Reduce overdose deaths

### **Secondary Outcomes:**

- Increase naloxone distribution
- Increase access/utilization of MOUD
- Decrease high risk opioid prescribing

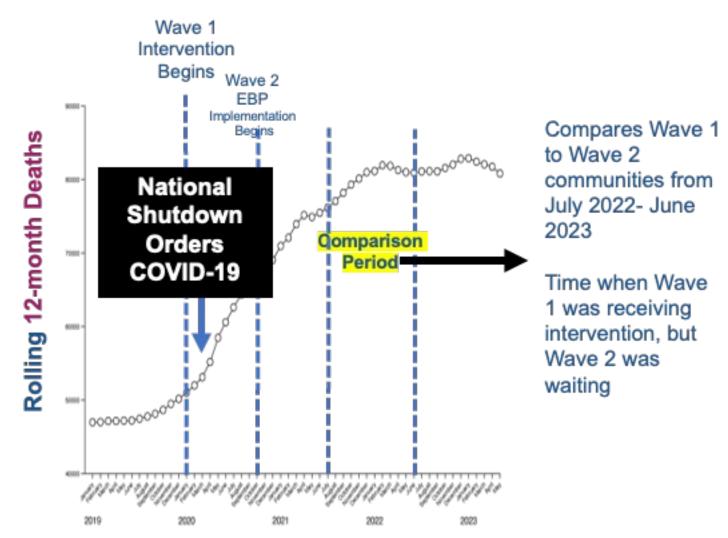




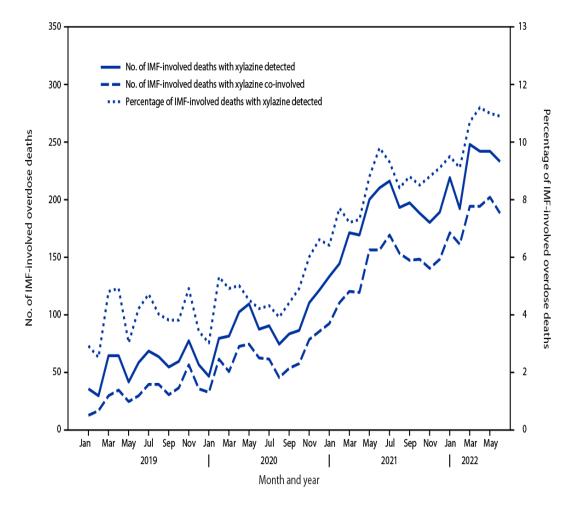
### Conclusions

- 9% reduction opioid OD deaths (NS)
- 37% reduction opioid + psychostimulant (excluding cocaine) deaths
- 525 total OD deaths averted W1
- Factors impacting results:
  - Increase in poly drug use
  - Increase of fentanyl
  - COVID
  - Limited time period from implementation of EBPs to see benefit in overdose death

## **Opioid Overdose Deaths and HCS Milestones**



## **Xylazine**





#### Annals of Emergency Medicine

Available online 16 March 2024



Toxicology/Review Article

National Institute on Drug Abuse Clinical Trials Network Meeting Report: Managing Patients Exposed to Xylazine-Adulterated Opioids in Emergency, Hospital and Addiction Care Settings

Jeanmarie Perrone MD <sup>a</sup> A Machel Haroz MD <sup>b</sup>, Joseph D'Orazio MD <sup>b</sup>, Giacomo Gianotti DVM, DVSc <sup>c</sup>, Jennifer Love MD <sup>d</sup>, Matthew Salzman MD <sup>e</sup>, Margaret Lowenstein MD, MSHP <sup>f</sup>, Ashish Thakrar MD <sup>g</sup>, Stephanie Klipp RN, CARN <sup>h</sup>, Lisa Rae MD <sup>i</sup>, Megan K. Reed PhD, MPH <sup>j</sup>, Edward Sisco PhD <sup>k</sup>, Rachel Wightman MD <sup>l</sup> Lewis S. Nelson MD, MBA <sup>m</sup>

### **Identified research areas:**

- fentanyl-xylazine overdose,
- xylazine dependence and withdrawal,
- xylazine-associated dermal manifestations,
- xylazine surveillance and detection in clinical and nonclinical settings.

## **FTS Update**

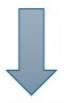


U.S. Department of Health & Human Services

### **Overdose Prevention Strategy**

Facilitate evidence-based use of Fentanyl Testing Strips (FTS) and drug checking utilization in community and clinical settings

Because the presence of fentanyl mixed with other types of drugs poses a significant risk of accidental overdose and is often hard to detect, NIDA Lead Agencies: NIH, FDA





June 10, 2023

SPECIALTIES ♥ TOPICS ♥ MULTIMEDIA ♥ CURRENT ISSUE ♥ LEARNING/CME ♥ AUTHOR CENTER PUBLICATIONS ♥

PERSPECTIVE

f X in □

#### Testing for Fentanyl — Urgent Need for Practice-Relevant and Public Health Research

Authors: Nora D. Volkow, M.D., Robert M. Califf, M.D., Marta Sokolowska, Ph.D., Lawrence A. Tabak, D.D.S., Ph.D., and Wilson M. Compton, M.D., M.P.E. Author Info & Affiliations

Published June 10, 2023 | N Engl J Med 2023;388:2214-2217 | DOI: 10.1056/NEJMp2302857



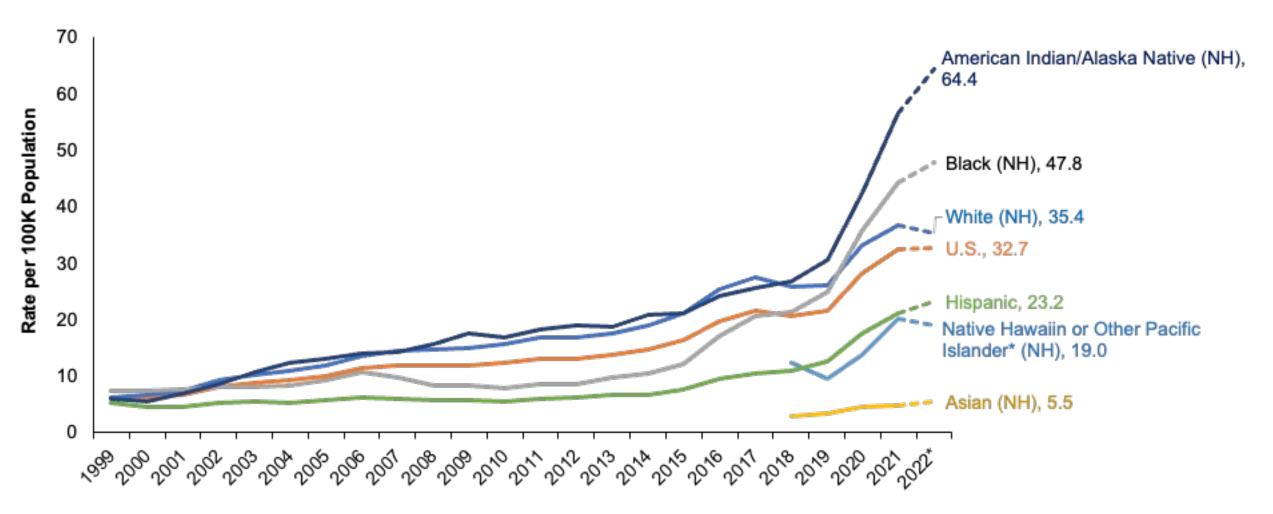
- A Lateral Flow Assay for Rapid Saliva Fentanyl Detection (sFENTANYL) (PI: Uddin; PO: Dan Kostov, OTIPI)
- Rapid, Instrument-free and High Sensitivity Over-the-counter
   Urine Fentanyl Testing (PI: Xia; PO: Dan Kostov, OTIPI)





- FDA Breakthrough Device Designation: Oct 25, 2023
- > FDA 510(k) approval: March 28, 2024

## **Drug Overdose Death Rates by Race/Ethnicity**



NCHS, National Vital Statistics System. Estimates for 2022 are based on provisional data.

## **N-CREW**

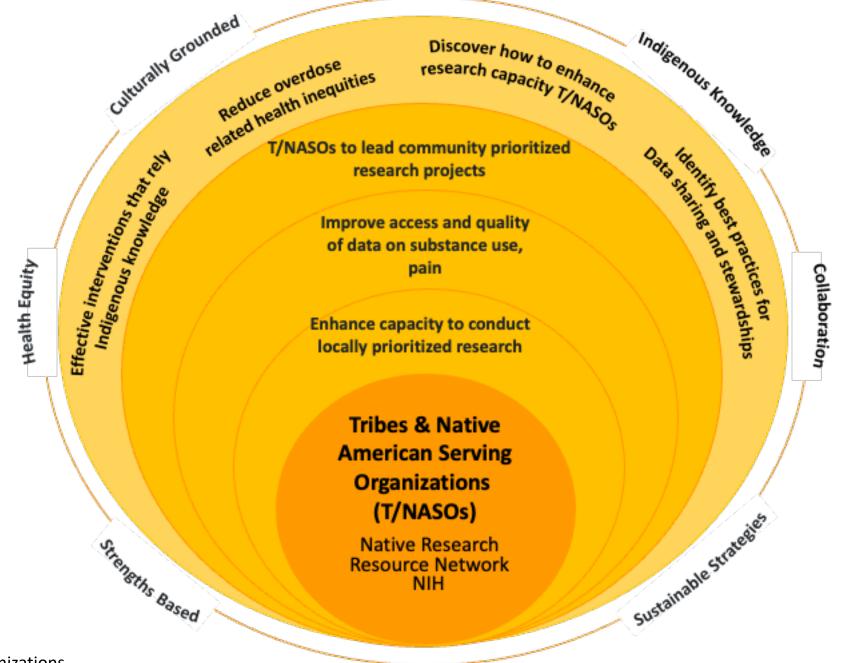
**Phase I** Development and Planning

FY24-25 \$~25 million

- ROA OTA 23-007: T/NASOs plan, develop, pilot, and/or implement research and/or data improvement projects.
- ROA OTA 23-008: T/NASOs and Ally Organizations form a Native Research Resource Network (NRRN) to provide training, resources and program coordination.

Phase II will build on Phase I FY26-30 \$~240 million

Contact: NCREW@NIH.GOV



T/NASOs: Tribes and Native American Serving Organizations



FY 2023

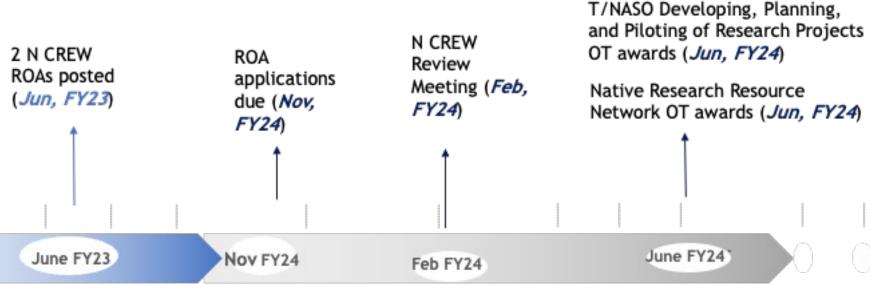
# Native Collective Research Effort to Enhance Wellness (N CREW)

Addressing Overdose, Substance Use & Pain



### **Timeline: OT Components**

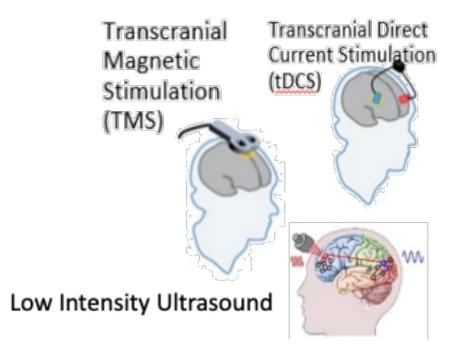
FY 2024



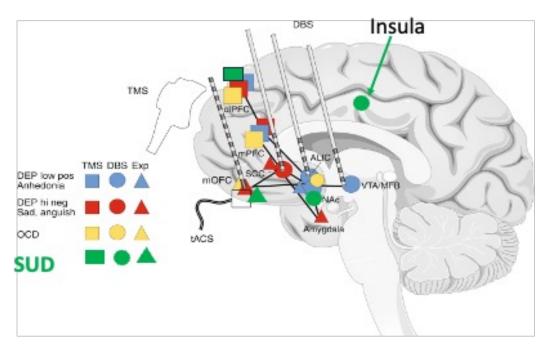
## **Therapeutics For Polysubstances**

- Overdose reversal agents from polysubstance use
- Pharmacological and biological agents for polysubstance use
- Device-based therapeutics for polysubstance use

#### Non Invasive Neuromodulation Techniques

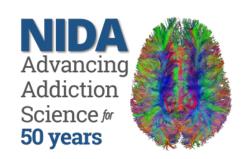


### Typical Neuromodulation Targets in OCD, depression, SUD



## Challenges to Current Overdose Epidemic

- Consequences of Fentanyl and Polysubstance misuse
  - Treatment (initiation and retention)
  - Overdoses
  - Long term Outcomes
- Addressing hard-to-reach and underserved populations
  - American Indians/Alaskan Natives
  - Black Americans
  - Rural
  - Homeless
  - Pregnant Women
- Addressing challenges associated with pain and psychiatric co-morbidities
- Novel harm reduction approaches
- Monitoring changing Drug landscapes
  - Xylazine
- Prevention across the lifespan
- SDOH



### College on Problems of Drug Dependence Friends of the National Institute on Drug Abuse Senator Tim Kaine (VA)

50th Anniversary of the

### **National Institute on Drug Abuse**

Tuesday, May 14, 2024 4:00-6:00 pm Kennedy Caucus Room 325 Russell Senate Office Building



Nora Volkow, MD Director National Institute on Drug Abuse



Jeremy M. Byard CARE@Arthur Street Hotel



Sandra Comer, PhD Columbia University Medical Center



Gail D'Onofrio, MD, MS Yale School of Medicine



Hansel Tookes, MD, MPH University of Miami Miller School of Medicine

### **Retiring Council Members**



Anna Rose Childress, Ph.D. Dennis Deer, Ph.D. University of Pennsylvania



Cook County Government, IL M.D.



Shelley Greenfield, Harvard Medical



Andrey Ostrovsky, M.D. **Social Innovation Ventures** 



Travis Rieder, Ph.D. Johns Hopkins University



Rajita Sinha, Ph.D. Yale University



Melissa Walls, Ph.D. Johns Hopkins University

### **Incoming Council Members**



Deborah Chassler M.S. Boston University



Regina LaBelle, J.D. Georgetown University



Cristiane Duarte, Ph.D. Columbia University



Angela Laird, Ph.D. Florida International University

## Thank you!