Adolescent Brain and Cognitive Development (ABCD) National Longitudinal Study NIDA, NIAAA, NCI, NICHD

Ten year longitudinal study of 10,000 children from age 10 to 20 years to assess effects of drugs on individual brain development trajectories

Nora D. Volkow, M.D.
Director

NIH National Institute on Drug Abuse

Adolescent Brain and Cognitive Development (ABCD) National Longitudinal Study

NIDA
NIAAA
NCI
NICHD

- **Expert panel workshop** to develop recommendations on best large-scale designs and measures to assess developmental effects of substance exposure (beginning prior to exposure) during childhood through adolescence (in human subjects) – **May 27-28, 2014**

- A **Request For Information** to get input on proposed study design/measures **July-August 2014**

Revised design based on input from RFI to be presented for further discussion at **satellite symposium at SfN**.

FOA to be released early in 2015

Members of Expert Panel

Louise Arseneault, Ph.D.
King's College London
Institute of Psychiatry

Frank M. Biro, M.D.
University of Cincinnati
Cincinnati Children's Hospital
Medical Center

BJ Casey, Ph.D.
Weill Cornell Medical College
Cornell University

Linda Chang, M.D.
John A. Burns School of Medicine
University of Hawai'i

Michael E. Charness, M.D.
VA Boston Healthcare System
U.S. Department of Veterans Affairs

Raquel Gur, M.D., Ph.D.
Perelman School of Medicine
University of Pennsylvania

Rolf Loeber, Ph.D.
School of Medicine
University of Pittsburgh

Robin J. Mermelstein, Ph.D.
Institute for Health Research
and Policy
University of Illinois at Chicago

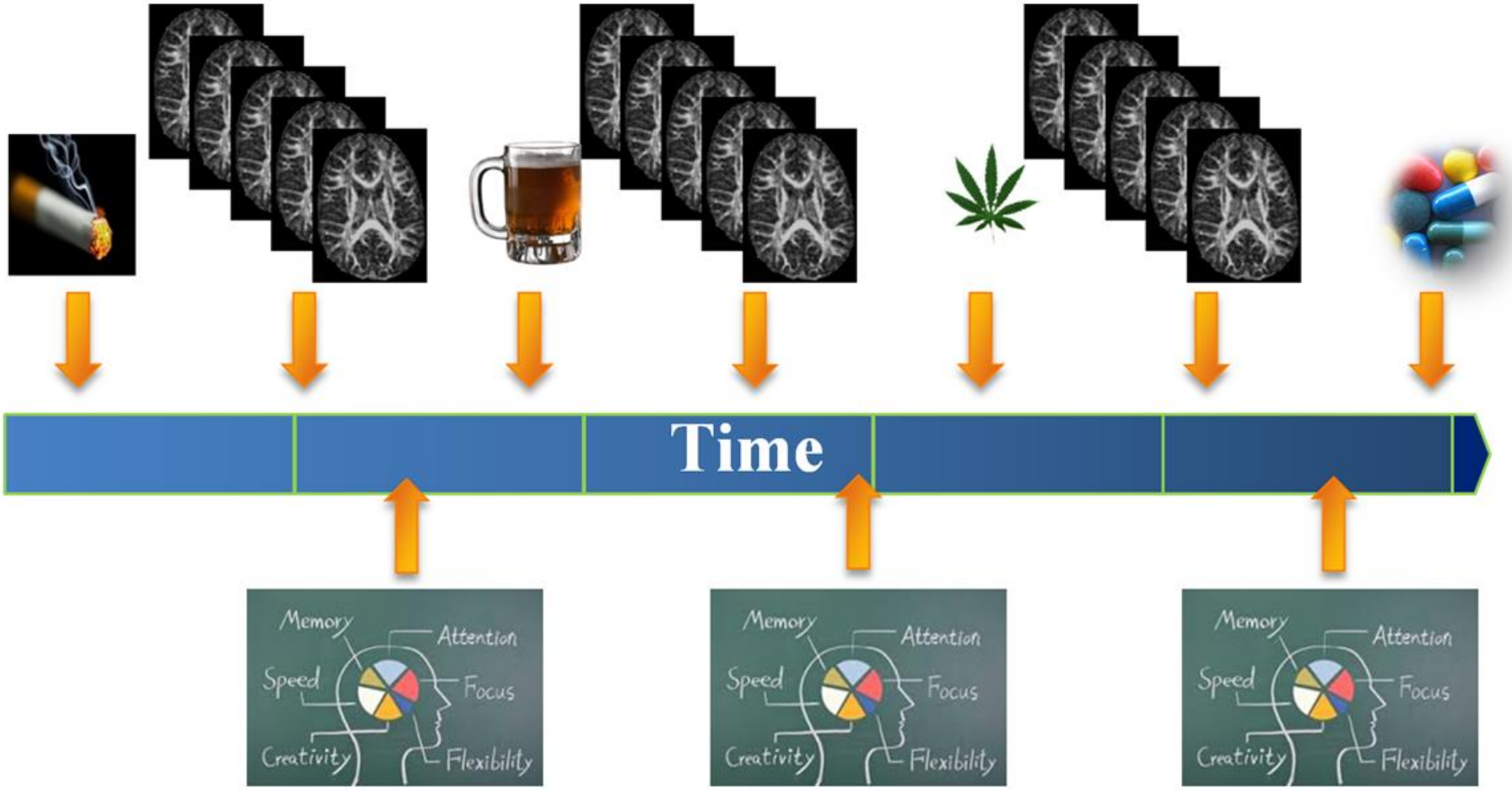
Adolf Pfefferbaum, M.D.
Center for Health Sciences
SRI International

For more information on the expert panel meeting, visit:
http://addictionresearch.nih.gov/summary-expert-panel-meeting

Central Research Questions:

- What is the impact of diverse patterns of use of marijuana, alcohol, nicotine and other substances on the structure and function of the developing brain, as revealed by brain imaging?
- What are the consequences of substance use on physical health, psychosocial development, information processing, learning, memory, academic achievement, motivation, emotional regulation, and other behaviors?
- How does drug use affect the expression of psychopathology, including substance use disorders, and how does the emergence of psychopathology influence drug use?
- What factors (prenatal exposure, genetic, epigenetic, neurobiological, psychosocial, family history) influence drug use and its consequences during development?
- In what way does use of each substance contribute to the use of others (gateway interactions)?

Prospective cohort study of ~10,000 youth beginning ~ ages 9-10



Measures

Substance use, Cognition, Emotion, Mental Health, Physical health, Executive Function, General Intelligence, Environment, Biospecimens: Genetics, Epigenetics