



Child Psychiatry Research

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National Institute
of Mental Health

Disclosure

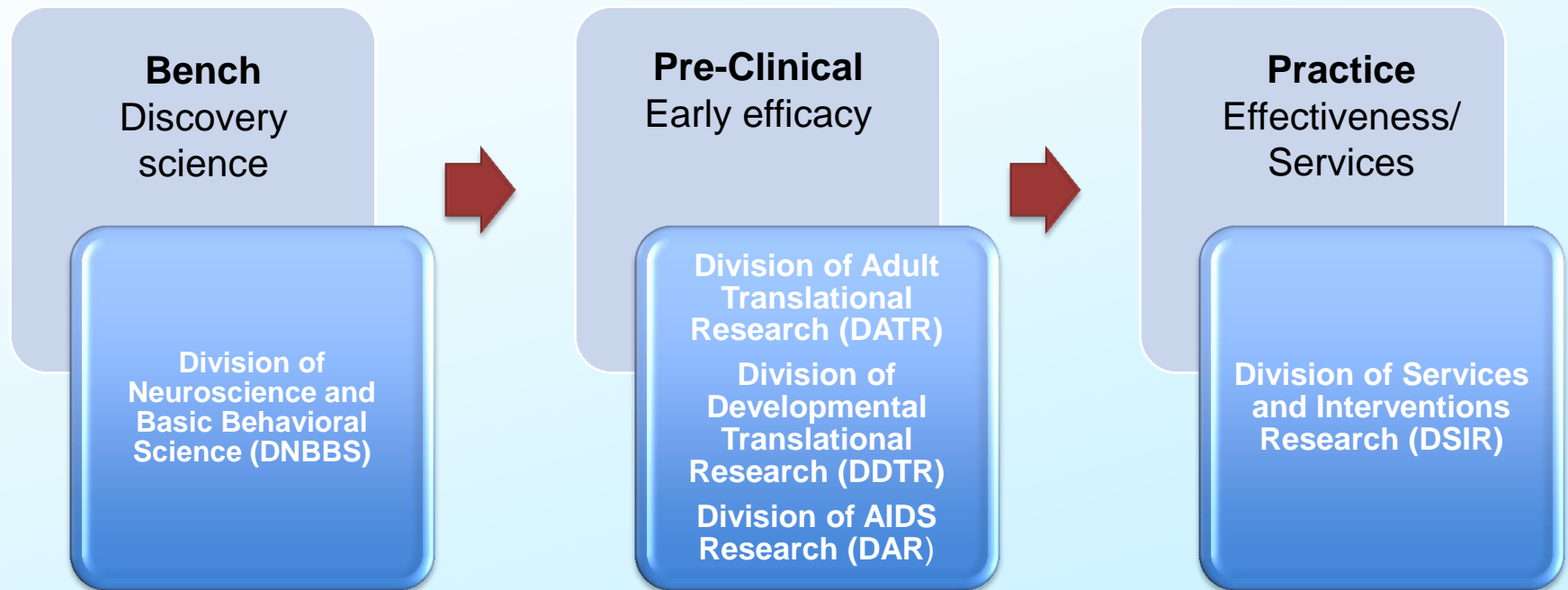
- I have no financial relationships with pharmaceutical companies
- I work at the NIMH/NIH, but the views here presented should not be construed as official statements of the NIMH/NIH



NIMH Strategic Plan

- Strategic Objective 1: Promote discovery in the brain and behavioral sciences to fuel research on the causes of mental disorders.
- Strategic Objective 2: Chart mental illness trajectories to determine when, where, and how to intervene
- Strategic Objective 3: Develop new and better interventions that incorporate the diverse needs and circumstances of people with mental illnesses
- Strategic Objective 4: Strengthen the public health impact of NIMH supported research

NIMH Extramural Division Structure



Current thinking of mental disorders

- Mental disorders are brain disorders
- Mental disorders are developmental disorders
 - prominence of early life research of mental health
 - high relevance of child psychiatry research

Emphasis on:

- Understanding the pathogenesis and mechanisms of psychopathology
- Targeting domains of brain function relevant to psychopathology across parallel units of analysis (genes, molecules, cells, circuits, behavior, etc.)
- Innovative treatment development using experimental medicine methods:
 - Pathogenesis-derived target
 - Documentation of target engagement
 - Dose-response relationship
 - Proof-of-concept studies for efficacy signal

Research Domain Criteria (RDoC)

v. 3.3, 01/15/2012	DRAFT RESEARCH DOMAIN CRITERIA MATRIX							
	----- UNITS OF ANALYSIS -----							
DOMAINS/CONSTRUCTS	Genes	Molecules	Cells	Circuits	Physiology	Behavior	Self-Reports	Paradigms
Negative Valence Systems								
Acute threat ("fear")								
Potential threat ("anxiety")								
Sustained threat								
Loss								
Frustrative nonreward								
Positive Valence Systems								
Approach motivation								
Initial responsiveness to reward								
Sustained responsiveness to reward								
Reward learning								
Habit								
Cognitive Systems								
Attention								
Perception								
Working memory								
Declarative memory								
Language behavior								
Cognitive (effortful) control								
Systems for Social Processes								
Facial expression identification								
Affiliation/Separation								
Self & Other								
Social dominance								
Arousal/Regulatory Systems								
Arousal & regulation (multiple)								
Resting state activity								



An RDoC funding initiative:

- RFA-MH-14-050, “Dimensional Approaches to Research Classification in Psychiatric Disorders” (R01)

“... develop innovative ways of understanding mental disorders in clinical studies on the basis of experimental research criteria rather than traditional diagnostic categories”

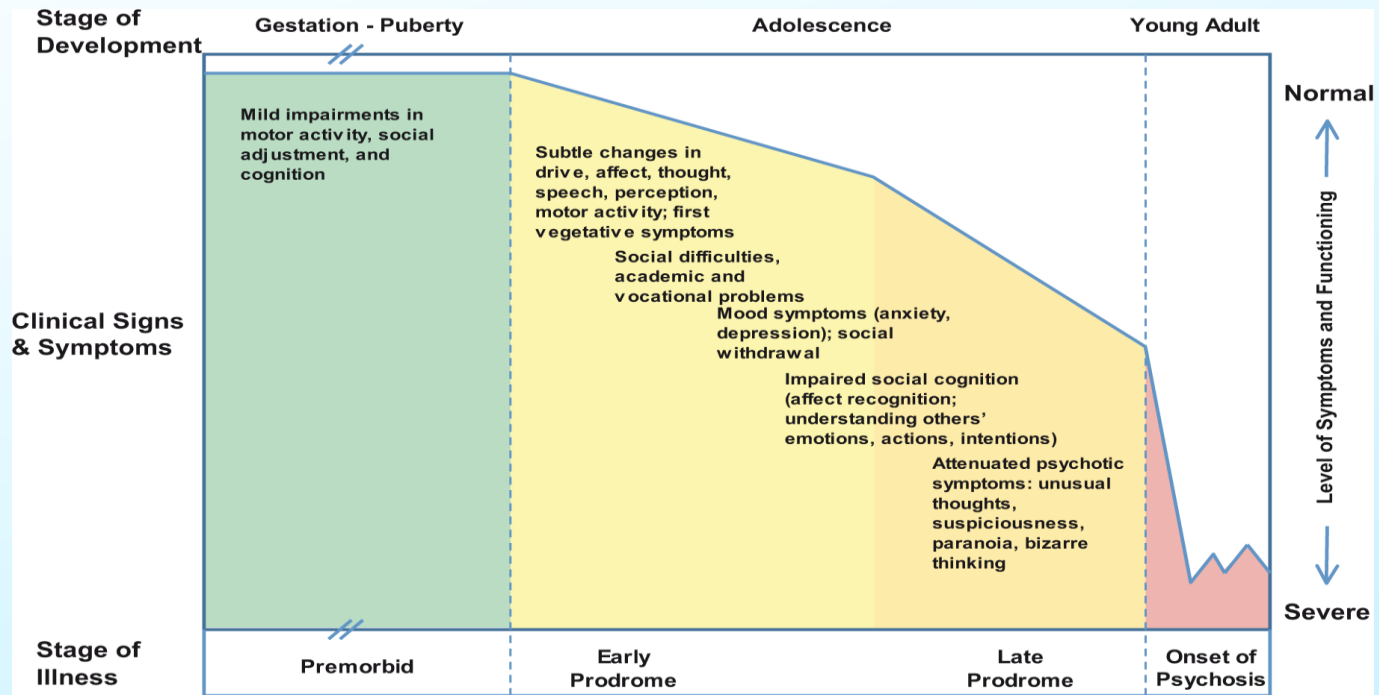
Letters of intent due by May 27, 2013

Applications due by June 27, 2013

Some areas of interest:

- Early psychosis
- Suicide prevention
- Autism
- Eating disorders

Schizophrenia: a developmental disorder



AR Addington J, Heinsen R. 2012.
Annu. Rev. Clin. Psychol. 8:269–89



- PAR-13-187: Reducing the Duration of Untreated Psychosis in the United States (R01)
- “...test reproducible strategies for substantially reducing duration of untreated psychosis among persons with first episode psychosis”
- Issued: April 10, 2013

- RFA-MH-14-070, “Pediatric Suicide Prevention in Emergency Departments” (U01)

“... developing and determining, prospectively, the sensitivity and specificity of approaches to screening and stratifying youth (under age 18) who are at risk for suicide”

Letters of intent by September 18, 2013

Applications due by October 18, 2013

- RFP - *New Experimental Medicine Studies: Fast-Fail Trials in Autism Spectrum Disorders (FAST-AS)*.

For early treatment development in autism

(just funded)

- RFA-MH-14-030, “Advancing Eating Disorders Research Through Dimensional Studies of Biology and Behavior” (R01)

“.. Studies that use dimensional constructs to integrate biology (e.g., brain circuits or physiological pathway) and behavior in the service of advancing the understanding of biological mechanisms and developmental trajectories of eating disorders”

Letters of intent by May 11, 2013

Applications due by June 11, 2013

What about multisite clinical trials?

- There are limited resources for large trials
- Only trials whose results can be expected to have significant impact on clinical care or course of illness are of potential interest
- In planning of these trials, one should address if and how the intervention being tested will be disseminated, accepted, and implemented in the community if proven effective
- Preference is given to practical trials conducted in practice setting networks
- Question to address: how will the study be informative if there is no statistical difference?