Presentation to the NIH Scientific Management Review Board
September 24, 2009

Linda J. Porrino
Department of Physiology and Pharmacology
Wake Forest University School of Medicine
CPDD is the largest organization devoted to research on substance abuse. Also serves as an interface with academic, government, and industrial organizations with the goal of advancing research, treatment and prevention.

Over 700 members

Annual meeting attended by 1500 participants

Represent researchers in chemistry, genetics, pharmacology, clinical pharmacology, treatment, prevention, epidemiology, policy

Represent those who study illegal drugs, prescription drugs, legal drugs
Other Qualifications

- Chair, Department of Physiology and Pharmacology
  - Centers from both NIDA and NIAAA
  - 23 researchers who have funding from one or both institutes
- Investigator with current research support from both institutes
Relapse

- Desire or need to obtain a drug months or years after last use. Often accompanied by feelings of craving.
- Arguably the most debilitating long-term effect of addiction to drugs of abuse.
- Animal models of reinstatement - return to drug use precipitated by exposure to:
  - Environmental stimuli or cue-induced
  - Pharmacological stimuli or drug-induced
  - Stress or stress-induced
Circuits

- Nicotine
- Alcohol
- Marijuana
- Cocaine
## Pharmacological Interventions

<table>
<thead>
<tr>
<th>System</th>
<th>Drug</th>
<th>Alcohol</th>
<th>Stimulants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid</td>
<td>Naltrexone</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>GABA</td>
<td>Topirimate</td>
<td>✔️✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>Baclofen</td>
<td>✔️✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Glutamate</td>
<td>mGluR2/3 agonist</td>
<td>✔️✔️</td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>mGluR5 antagonist</td>
<td>✔️✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Cannabinoid</td>
<td>CB1 antagonist</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
Dependent Drug Users: Abnormal Behavior and Brain Function

- Controls
- Heavy Marijuana
- Alcohol Dependent

* p < .05
Is the merger of NIAAA and NIDA a good idea?

**Pros**
- Similarities of the basic science and genetics
- Encourage research on interactions - key for treatment
- Impact on our understanding of the trajectory of drug use
- Greater impact of a single larger institute

**Cons**
- Budget limitations could reduce research on any drug
- Reduce impact of treatment and prevention for any drug from either portfolio
- Less money for research