Epidemiology of Drug Abuse

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NIDA’s Role In Assessing Drug Abuse In Populations

1. Support Surveys and Studies
2. Support Individual Investigators – emerging; established
3. Focus on specific populations
Priority Areas for NIDA

- Prevention Research
  Children and Adolescents
  Genetics
  Comorbidity
  Development

- Treatment Interventions
  (New Targets & New Strategies)

- HIV/AIDS Research

[Diagram showing interconnections between Drug Abuse and HIV/AIDS]
DESPR’s Organization and Mission

DESPR promotes epidemiology, services and prevention research to understand and address the range of problems related to drug abuse, in order to improve public health.
DESPR’s Major Research Themes

1. **THEORIES.** What new theoretical approaches can inform our research?

2. **INTERACTIONS.** What intrapersonal and environmental factors interact with each other and with genetic factors across development?

3. **BLENDING.** How can we blend science and services to measurably impact public health outcomes?
Epidemiologic Triangle

- Host
- Environment
- Agent/Vector

Drug Abuse

Time/history
Broader Conceptualizations of Differences Across Groups...

- A multivariate causal framework is essential to understand disparities, considering differences between groups, different drugs, and differential potential for drug-related harm.
- More explicit explanatory models that explain differential prevalence of drug use and its consequences, focusing on underlying social and economic circumstances.
- Interventions that target population specific issues.
Adapted from Kaplan et al., 2000

Individual/population health

Pathophysiological Pathways

Genetic/constitutional factors

Individual risk factors

Social relationships

Living conditions

Neighborhoods/communities

Institutions

Social and economic policies

Environment

Lifecourse
Theory: Society-Behavior-Biology Nexus

Glass & McAtee, 2006
There is ample motivation for studying the role of the social environment

- Evidence
  - Range of exposures at the community level may be important
- Theory
  - Understanding community level exposures may suggest different approaches to intervention
November 2006 Meeting Objectives

1. Definition of the social environment;
2. Best measures or different elements of the social environment;
3. Methodological challenges, and
4. Leading constructs for drug abuse research.
Exciting New Methodologies

- Spatial Epidemiology
- GIS
- Geomapping
- GIS
- Linking Geography and Epidemiology in DA Research: Geography and Drug Addiction
Symposium on Geography and Drug Addiction

March 8, 2006
Palmer House Hotel
Chicago, IL
Geography and Drug Addiction

- Spatial patterns of drug use and addiction
- Locational analyses of drug addiction treatment and service delivery facilities
- Neighborhood studies of geographic factors (including the built environment) and their interaction with drug addiction treatment or prevention
Geography and Drug Addiction

- Use of GIS in better understanding and responding to drug addiction
- Interaction of other spatially dependent variables with drug addiction, prevention and treatment strategies
Geography and Drug Addiction
THANK YOU!

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Promoting Extraordinary Public Health Research to Eradicate Drug Abuse