

Epidemiology of Drug Abuse

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National Institute on Drug Abuse

Association of American Geographers

Boston

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Biology/Genes

Environment



DRUG



Neurobiology

Behavior

Addiction



NIDA's Role In Assessing Drug Abuse In Populations

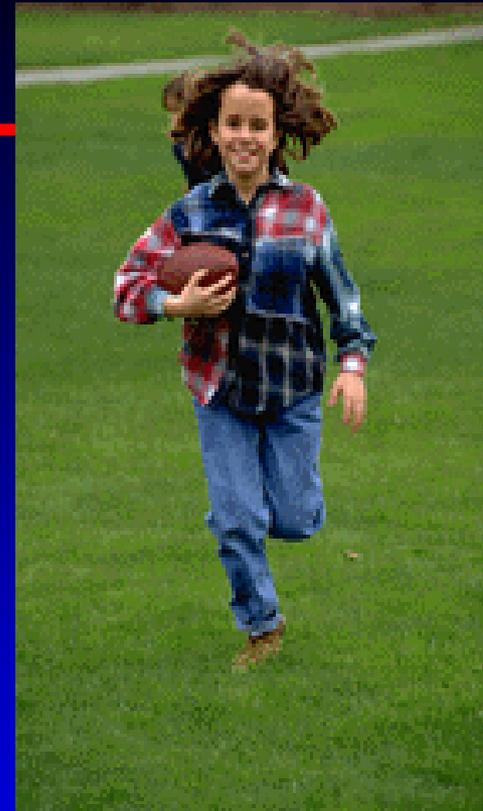
1. Support Surveys and Studies
2. Support Individual Investigators –
emerging; established
3. Focus on specific populations

Priority Areas for NIDA

- Prevention Research
 - Children and Adolescents
 - Genetics
 - Comorbidity
 - Development

- Treatment Interventions
(New Targets & New Strategies)

- HIV/AIDS Research





National Institute on Drug Abuse



NIDA

Office of the Director
Nora D. Volkow, MD
Director
Timothy P. Condon, Ph.D.
Deputy Director
Mary Affeldt
Associate Director
for Management

Special Populations Office
Lula Beatty, Ph.D.

AIDS Research Program
Jacques Normand, Ph.D.

EEO

Office of Extramural Affairs
Teresa Levitin, PhD

Office of Planning & Resource Management
Mary Affeldt

Office of Science Policy & Communications
Timothy Condon, PhD

Center for the Clinical Trials Network
Betty Tai, PhD

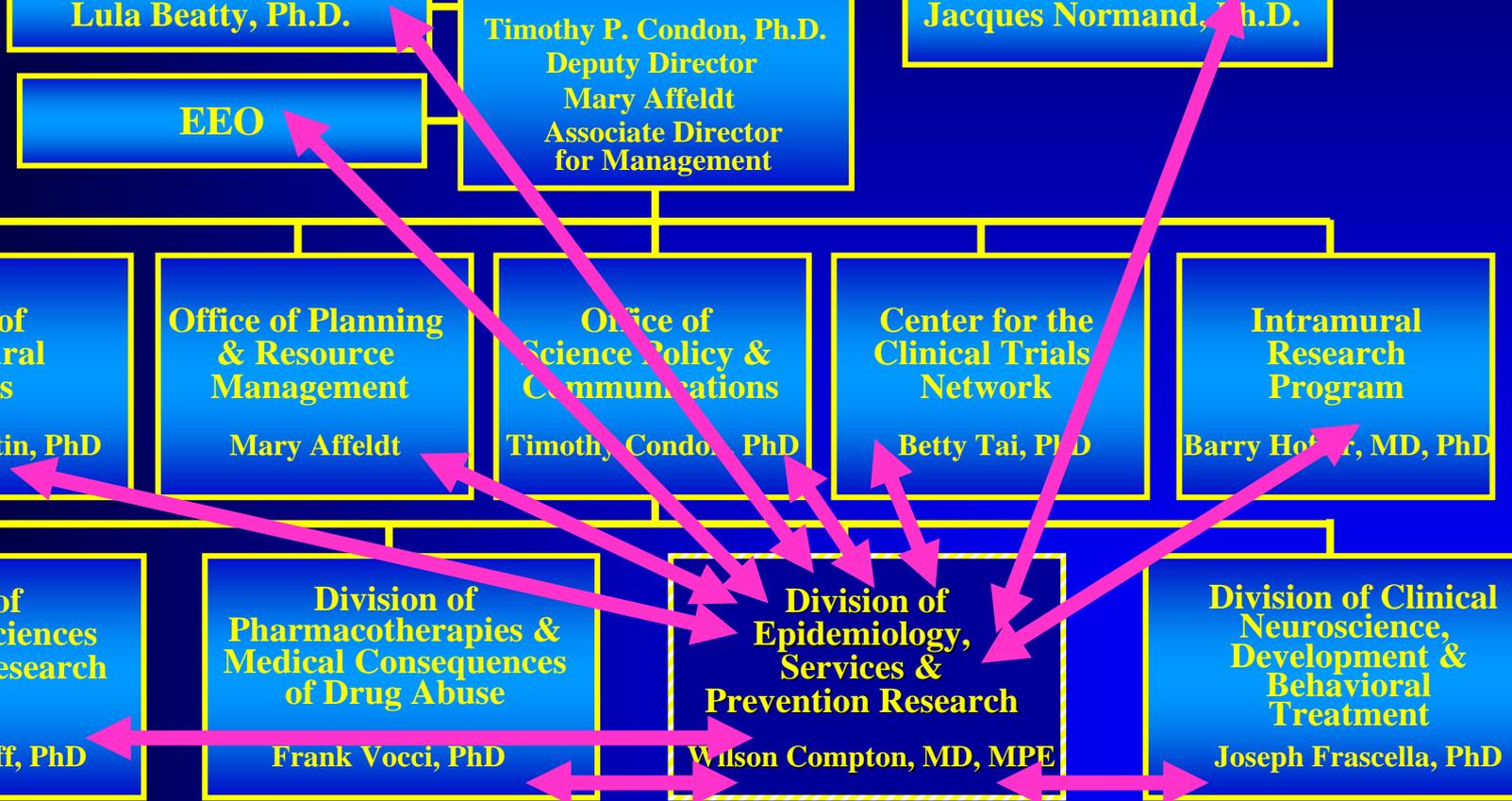
Intramural Research Program
Barry Holtzman, MD, PhD

Division of Basic Neurosciences & Behavior Research
David Shurtleff, PhD

Division of Pharmacotherapies & Medical Consequences of Drug Abuse
Frank Vocci, PhD

Division of Epidemiology, Services & Prevention Research
Wilson Compton, MD, MPE

Division of Clinical Neuroscience, Development & Behavioral Treatment
Joseph Frascella, PhD



DESPR's Organization and Mission

EPIDEMIOLOGY RESEARCH BRANCH

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.

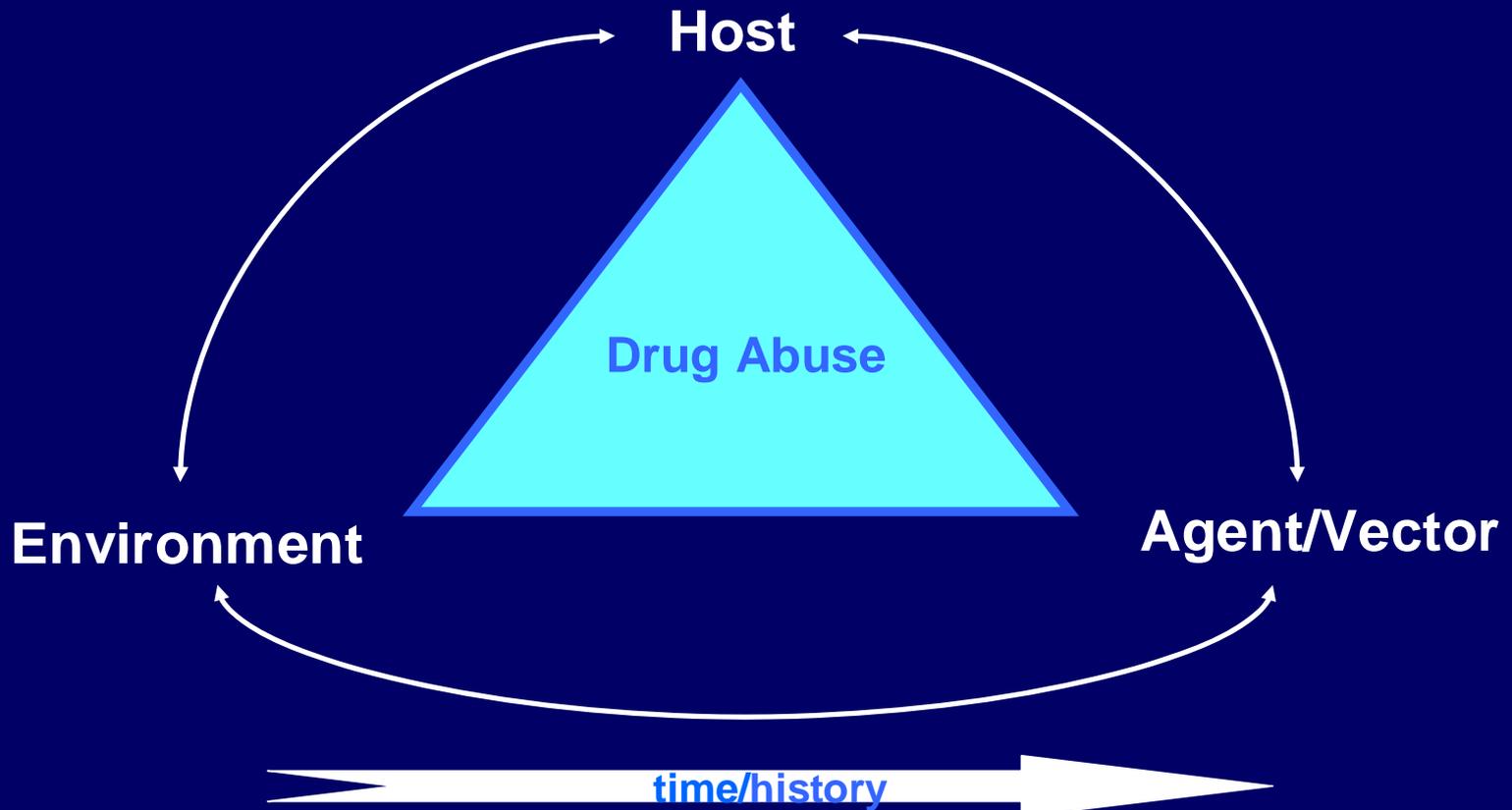
PREVENTION RESEARCH BRANCH

SERVICES RESEARCH BRANCH

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





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

Epidemiology Research Program Areas

Emergent & Current Drug Abuse Trends

Genetic Liability & Phenotypic Heterogeneity

Psychopathology: Vulnerability & Co-morbidity

Adolescence & Transition to Adulthood

Family Process & Early Risk

Health & Medical Consequences

Drug Markets and Behavior Economics

Social & Behavioral Consequences of Street Drugs

Social Epidemiology

Lifecourse

Social and economic policies

Institutions

Neighborhoods/communities

Living conditions

Social relationships

Individual risk factors

Genetic/constitutional factors

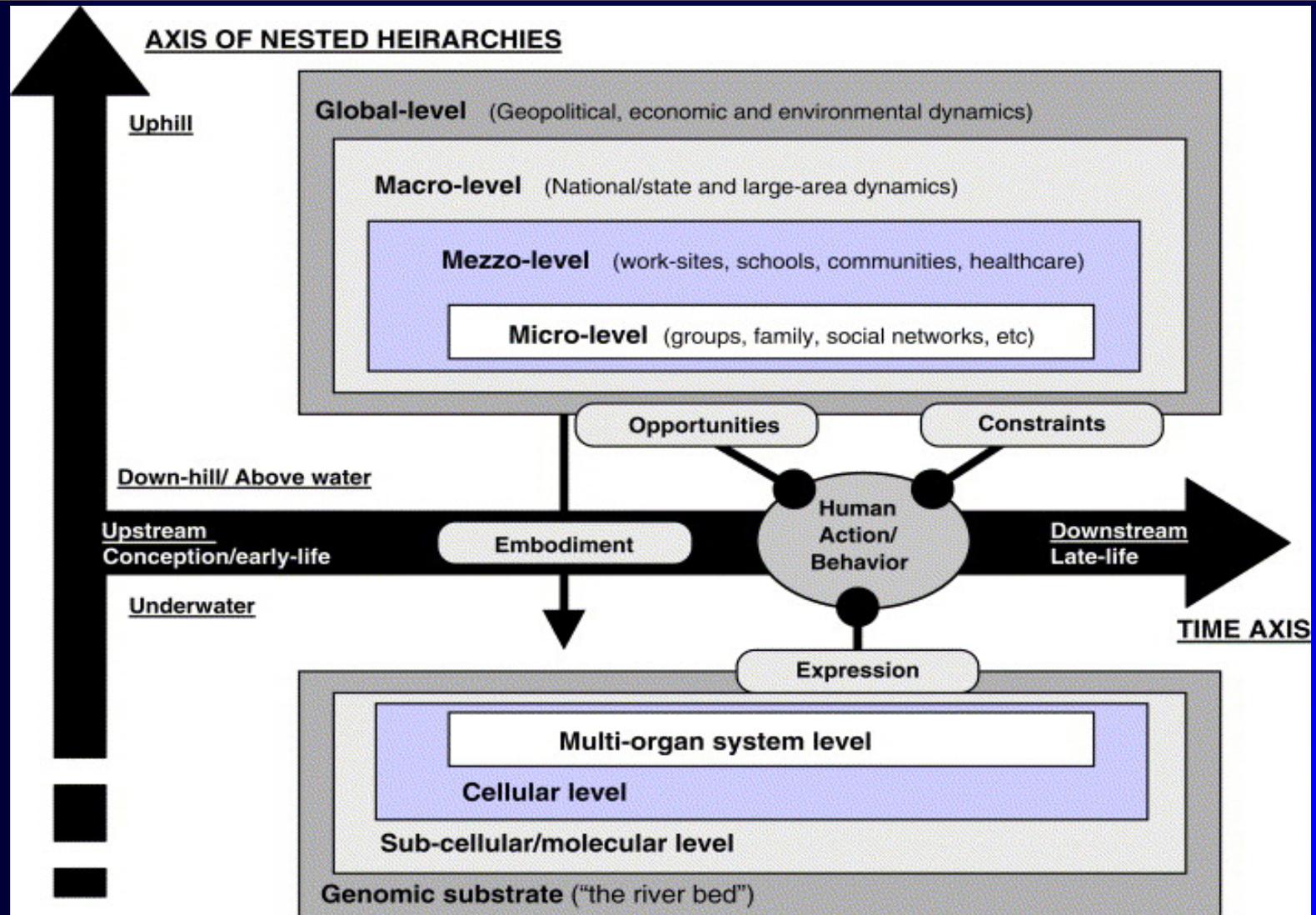
Pathophysiological Pathways

**Individual/population
health**

Environment

Adapted from Kaplan et al., 2000

Theory: Society-Behavior-Biology Nexus

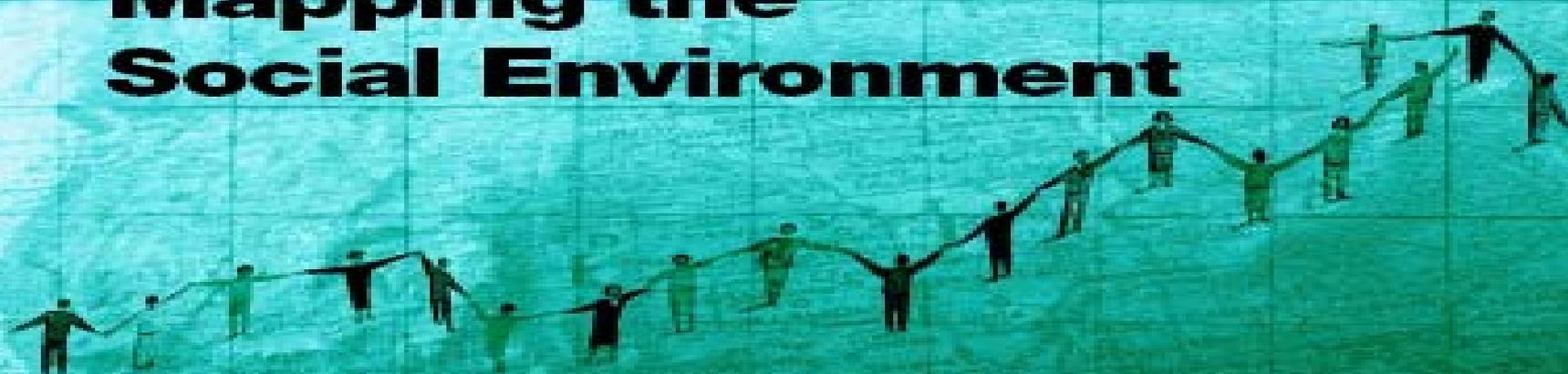


There is ample motivation for studying the role of the social environment

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

Epidemiology Research Branch Presents

Mapping the Social Environment



November 1-2, 2006

Bethesda Marriott
5151 Pooks Hill Road • Bethesda, MD

Program Book

Division of Epidemiology, Services and Prevention Research



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.

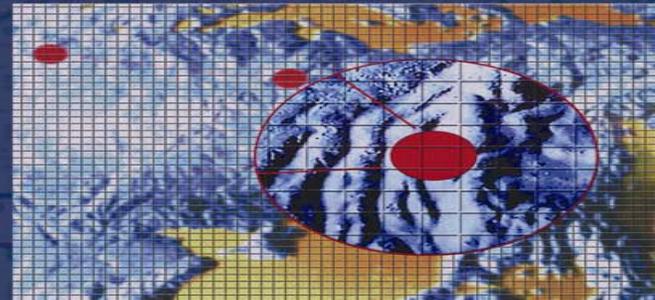
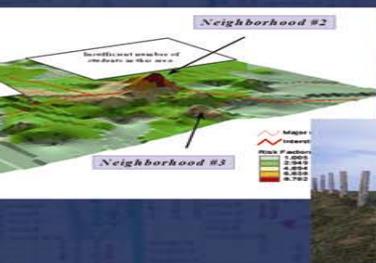
Exciting New Methodologies

- 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



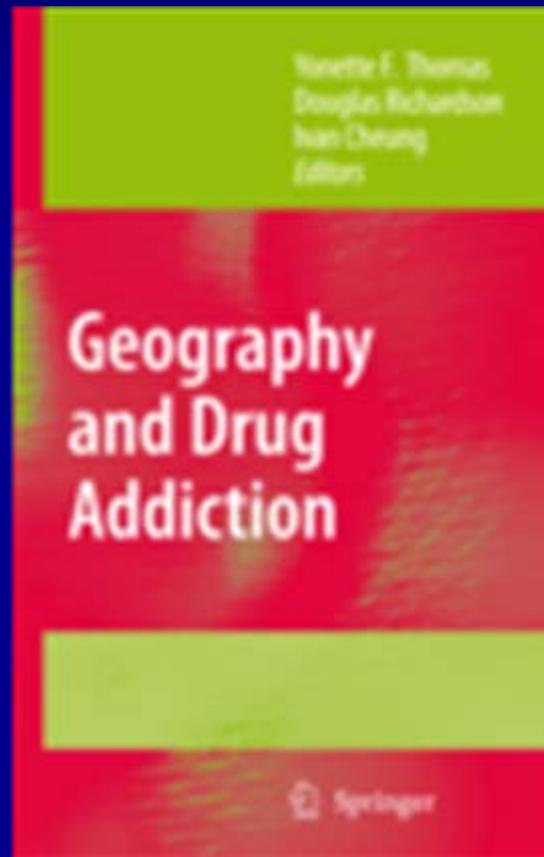
Geography and Drug Addiction

- 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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Division of Epidemiology, Services and Prevention Research



*Promoting Extraordinary Public Health
Research to Eradicate Drug Abuse*