NIDA AND FOGARTY INTERNATIONAL CENTER POSTER PRESENTATIONS

2010 NIDA INTERNATIONAL FORUM

Scottsdale, Arizona • June 11–15, 2010

NIDA International Program

NIDA INTERNATIONAL PROGRAM

Mission Address the global impact of addiction on public health by:

- Taking advantage of unique opportunities to advance scientific knowledge through research.
- Building research capacity internationally.
- Sharing NIDA-supported research findings with scientists, treatment providers, and policymakers.

INTERNATIONAL.DRUGABUSE.GOV

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Support Research

Sources of NIDA support for non-U.S. scientists:

- Domestic grants with a foreign component (require a partner at a U.S. institution)
- Direct foreign grants

Program Announcements (PAs) and **Requests for Applications (RFAs)** solicit applications to conduct research on specific topics, such as the **International Research Collaboration on Drug Abuse and Addiction Research PA**:

- R01: PA-09-020
- R21: PA-09-021
- R03: PA-09-022

International Research Priorities

- Linkages between HIV/AIDS and drug abuse
- Adolescent and prenatal tobacco exposure
- Methamphetamine
- Inhalants
- Drugged driving

Share Resources Online

The NIDA International Program Web resources offer robust communications, research collaboration, and training tools, including:

- NIDA International Virtual Collaboratory **www.nivc.perpich.com**
- Drug Abuse Research Training Courses **www.drugabuseresearchtraining.org**
- NIDA International Forum Abstract Database **www.international.drugabuse.gov/Forum_Abstracts**
- International Drug, Alcohol, and Tobacco (IDAT) Research Community **www.idatresearch.com**
- Methadone Maintenance Research Web Guide and Tutorial **www.international.drugabuse.gov/methadone**
- International Programme in Addiction Studies Master's Degree **www.adelaide.edu.au/addiction**
- Publishing Addiction Research Internationally, developed by the International Society of Addiction Journal Editors **www.PARINT.org**
- Virtual Seminars
  - NIDA Division Directors' International Priorities
  - Volatile Substance Abuse

  www.international.drugabuse.gov/collaboration/training.html

Build Research Capacity

NIDA International Program fellowships provide research training and professional development opportunities for scientists at every stage of their careers:

- **Predoctoral Training**
  - Fogarty International Clinical Research Scholars (FICRS) Program
- **Postdoctoral Training**
  - INVEST Drug Abuse Research Fellowships
  - INVEST/Clinical Trials Network (CTN) Drug Abuse Research Fellowships
  - International AIDS Society/NIDA Research Fellowships in HIV and Drug Use
  - Fogarty International Clinical Research Fellows (FICRF) Program
- **Midcareer Training**
  - NIDA Hubert H. Humphrey Drug Abuse Research Fellowships
- **Senior Researcher Opportunities**
  - Distinguished International Scientist Collaboration Award (DISCA)
  - Distinguished International Scientist Collaboration Award for U.S. Citizens and Permanent Residents (USDISCA)
  - International AIDS Society/NIDA Research Fellowships in HIV and Drug Use

Find NIDA International Fellowship Alumni
international.drugabuse.gov/research/fellowships worldwide map.html

Contact

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AIDS RESEARCH PROGRAM (ARP)

Mission Develop an innovative and multidisciplinary HIV/AIDS research portfolio that addresses drug use and abuse as they relate to HIV/AIDS.

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Background

Substance abuse and addiction continue to fuel the spread of HIV/AIDS worldwide. The Joint United Nations Programme on HIV/AIDS (UNAIDS) reports that in 2008:

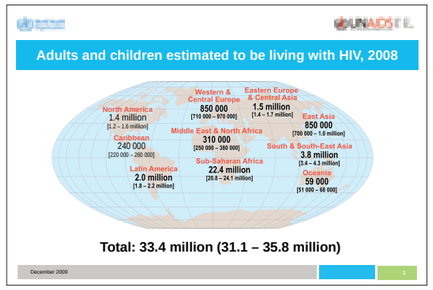
- An estimated 33.4 million people were living with HIV/AIDS.
- Approximately 2.7 million people were newly infected.
- Approximately 2.0 million people died because of AIDS.

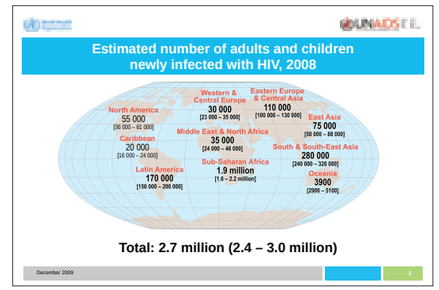
At-Risk Populations

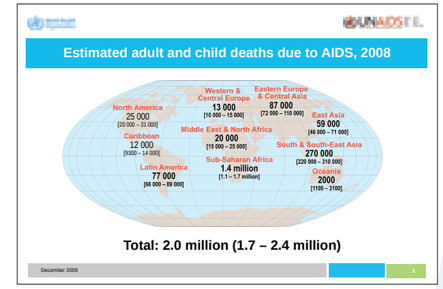
Injection drug users, men who have sex with men, sex workers, prisoners, and mobile workers are at higher risk of HIV infection, but UNAIDS reports that support for prevention programs for these groups is quite low, even in concentrated epidemics (UNAIDS, 2008).

The role of injection drug use (IDU) in HIV transmission was recognized early in the epidemic. The number of AIDS cases associated with IDU has declined where science-based prevention interventions are implemented to reduce sharing of needles and drug paraphernalia and to engage out-of-treatment injection drug users in treatment; however, drug-related transmission of HIV also includes:

- Sexual transmission among injection drug users or their non-injecting sex partners
- Perinatal transmission
- High-risk sexual behavior associated with non-injection drug use, such as stimulant use







International Funding Priorities

- How can cross-border and regional research inform us about cultural factors, immigration, and social networks that affect HIV transmission?
- How can we optimize the benefits of drug treatment and access to highly active antiretroviral therapy (HAART) to reduce HIV transmission and reduce morbidities and mortality among people who use drugs?
- Can interventions (e.g., opioid substitution therapy) that have been efficacious in one country be more readily tested in other countries in the region?
- How can implementation research tailor the integration of various prevention modalities to specific geographical areas?
- Can we predict outbreaks of HIV in countries with relatively low prevalence and incidence?
- How do patterns of migration, relocation, and socioeconomic and cultural adjustments in new country settings affect drug use and the spread of HIV?

Contact

www.drugabuse.gov/about/organization/arp

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CHILD AND ADOLESCENT WORKGROUP RESEARCH PROGRAM (CAWG)

Mission Advance the science of drug abuse and addiction as it pertains to infants, children, adolescents, young adults, and their families and communities through the promotion and dissemination of NIDA child and adolescent research.

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Child and Adolescent Research at NIDA

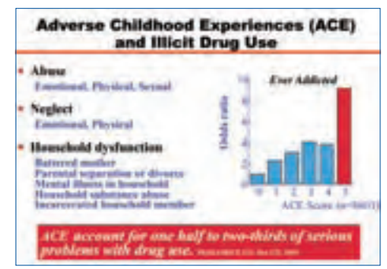
Child and adolescent research continues to be a priority at NIDA. Areas of particular interest include:

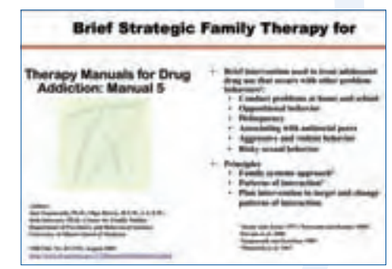
- **Prenatal Drug Exposure** and the brain and behavioral development of infants, children, adolescents, and young adults
- **Epidemiology of Youth Drug Abuse,** including abuse of prescription drugs
- **Etiology of Drug Abuse,** including neurobiological, genetic, behavioral, and environmental factors
- **Drug Abuse Prevention,** including school, community, and family interventions
- **Drug Abuse Treatment,** including behavioral and pharmacotherapy, for adolescents, pregnant women, and parents
- **Prevention and Treatment Services Research** for youth and their families, including youth in the criminal justice system
- **HIV/AIDS, Drug Abuse, and Development,** including HIV prevention and treatment for youth, developmental outcomes of HIV/AIDS, and development of HIV-related risk behaviors
- **Consequences of Drug Abuse During Adolescence,** including brain and behavioral development
- **Gender Differences and Issues** across all aspects of child and adolescent drug abuse research
- **Developmental Neuroscience**
- **Genetics of Drug Abuse**
- **Environment and Development**

Research Support

Research on children and adolescents is supported throughout NIDA, including in the following areas:

- Division of Basic Neuroscience and Behavioral Research
- Division of Clinical Neuroscience and Behavioral Research
- Division of Epidemiology, Services, and Prevention Research
- Division of Pharmacotherapies and Medical Consequences of Drug Abuse
- Clinical Trials Network
- Office of Science Policy and Communications
- Intramural Research Program





Contact

www.drugabuse.gov/about/organization/icaw/icaw.html

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CENTER FOR THE CLINICAL TRIALS NETWORK (CTN)

Mission Improve the quality of drug abuse treatment through a unique partnership among NIDA, community treatment providers, and academic research leaders who cooperatively develop, validate, refine, and deliver new treatment options to patients in community-level clinical practice.

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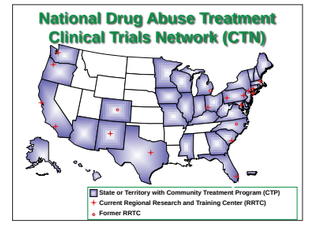
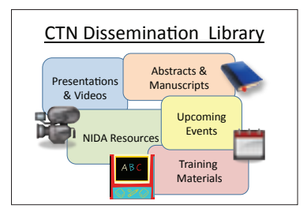
Research Objectives

Through CTN, treatment researchers and community-based service providers conduct studies of behavioral, pharmacological, and integrated behavioral and pharmacological treatment interventions in rigorous, multisite clinical trials to determine effectiveness across a broad range of community-based treatment settings and diversified patient populations. The CTN framework ensures that these research results are transferred to providers and patients.

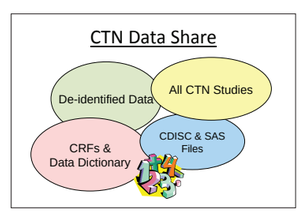


Research Dissemination

The **CTN Dissemination Library (ctndisseminationlibrary.org)** is a digital repository of free resources that provides CTN members and the public with a single point of access to research findings, training manuals, presentations, and other materials.



The **CTN Data Share (ctndatashare.org)** is a free electronic environment that promotes new research and encourages further analyses by distributing data from completed clinical trials to registered investigators. Data on this site have been completely de-identified to protect the privacy of individual research participants. As of April 2010, nearly 530 datasets from 22 trials have been downloaded by researchers, students, and consumers from 9 countries.



INVEST/CTN Drug Abuse Research Fellowship

- Non-U.S. scientists receive 1 year of postdoctoral research training.
- Work with a mentor affiliated with a CTN Regional Research and Training Center.
- Conduct research in any aspect of the CTN research agenda while preparing for longer-term collaboration.
- Main eligibility criteria include:
  - An earned doctoral degree in medicine, public health, or biomedical, behavioral, or social sciences
  - Minimum 2 years of postdoctoral research experience
  - Proficiency in written and spoken English
  - Eligibility for the J-1 visa to enter the United States

Application Deadline: September 1

Successful Collaborations

- Five fellowships completed since October 2008:
  - Amit Chakrabarti (India), Mentor: Dr. Roger Weiss, McLean Hospital, Belmont, Massachusetts
  - Hanhui Chen (China), Mentor: Dr. Walter Ling, University of California, Los Angeles
  - Leonardo R. Estacio, Jr. (Philippines), Mentor: Dr. Dennis Donovan, University of Washington, Seattle
  - Mario A. Zapata (Colombia), Mentor: Dr. Michael Robbins, University of Miami, Florida
  - Gvantsa Piralishvili (Georgia), Mentor: Dr. George Woody, University of Pennsylvania
- Three fellowships awarded in 2009:
  - Suzanne Nielsen (Australia), Mentor: Dr. Walter Ling, University of California, Los Angeles
  - Meera Vaswani (India), Mentor: Dr. Wade Berrettini, University of Pennsylvania
  - Felipe Vallejo Reyes (Chile), Mentor: Dr. Eugene Somoza, University of Cincinnati, Ohio

Learn more at **international.drugabuse.gov/research/fellowships_investCTN.html.**

Contact

drugabuse.gov/CTN

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DIVISION OF BASIC NEUROSCIENCE AND BEHAVIORAL RESEARCH (DBNBR)

Mission Support basic research on the causes and consequences of drug abuse and addiction, thus providing the scientific foundation for the development and enhancement of prevention efforts and treatment approaches to drug abuse and addiction.

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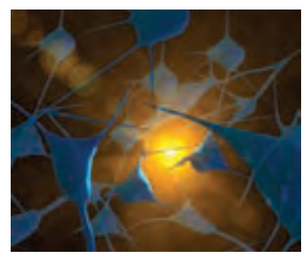
Research Focus

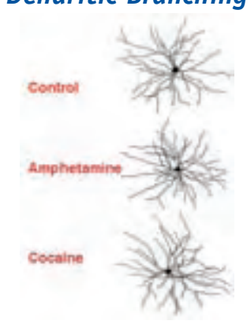
DBNBR supports research on:

- The neurobiological and behavioral effects of drugs of abuse
- Vulnerability to addiction
- Regulation of the mechanisms of neurotransmission under normal, drug-exposed, and drug-withdrawn conditions
- Multidisciplinary analyses at the levels of the single cell, protein, or circuit
- Chemistry and physiological systems affected by drugs of abuse
- The complex interrelationship between drug abuse and HIV/AIDS progression and transmission

DBNBR also supports research training and career development for biomedical and behavioral investigators.



Psychostimulants Increase Dendritic Branching



Organization

The division has four components:

- Behavioral and Cognitive Science Research Branch
- Chemistry and Physiological Systems Research Branch
- Functional Neuroscience Research Branch
- Genetics and Molecular Neurobiology Research Branch

DBNBR administers the NIDA Drug Supply Program, which provides researchers with chemicals and research probes that are either unavailable, difficult to obtain, or expensive. The program also analyzes researchers' experimental samples.

Research Priorities

- Models of addiction
- Drug-induced neuroplasticity
- Pain and analgesia
- Vulnerability to drug abuse
- Developmental effects
- Neuropsychopharmacology of drugs of abuse
- Genetic, epigenetic, and environmental influences on drug addiction
- Neuroimmune relationships, including studies of HIV and AIDS related to neural or infectivity processes
- Innovative chemical design of new entities and probes
- Development of innovative analytical methods and data integration
- Systems biology
- Comorbidity
- Sex differences

Contact

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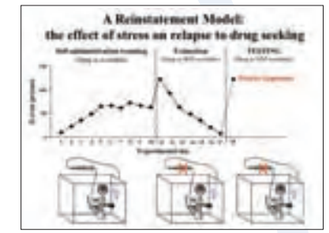
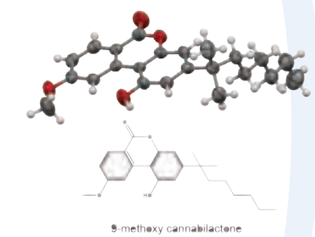
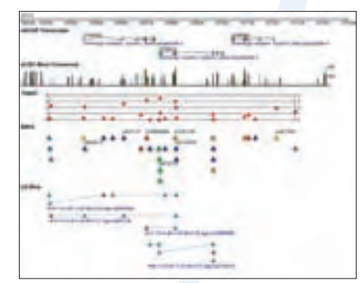
Highlighted data







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DIVISION OF CLINICAL NEUROSCIENCE AND BEHAVIORAL RESEARCH (DCNBR)

Mission

Provide a translational approach to drug abuse within a clinical research context to advance our understanding of the brain, behavior, and health.

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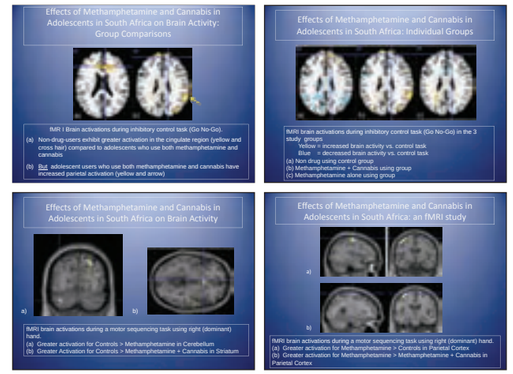
Goals

DCNBR conceptualizes drug abuse as a human developmental neurobiological disorder and promotes high-caliber research to identify the key developmental, genetic, social, and brain mechanisms associated with drug abuse, and to translate resultant findings into therapeutic interventions that decrease the extent and burden of drug abuse. DCNBR actively fosters collaboration and translation across its three branches:

- Behavioral and Brain Development Branch (BBDB)
- Clinical Neuroscience Branch (CNB)
- Behavioral and Integrative Treatment Branch (BITB)

International Research Projects

BBDB supports research on prenatal exposure to drugs of abuse in Canada, New Zealand, England, and South Korea. The branch also supports research on HIV/AIDS and maternal drug and alcohol use in South Africa. CNB supports research on cognitive dysfunction in Bulgaria and Russia and brain imaging training for researchers from China, South Korea, Ireland, and South Africa. BITB supports research on integrated behavioral and pharmacological treatment in Ukraine; primary care drug screening in the Czech Republic; treatment provider training in South Africa; adaptation of cognitive-behavioral therapy in Trinidad and Tobago; the community reinforcement approach plus vouchers in Spain; and buprenorphine maintenance treatment in Malaysia.



Carey P., Suliman S., Ferrett H., Burnett Michael, Silveri M., Gruber S., Olson D., Yurgelun Todd D., Brain Changes with Cannabis and Methamphetamine in Adolescents, submitted. Supported by R21DA021422 for collaboration between McLean Hospital, Massachusetts (D. Yurgelun Todd, P.I.) and University of Stellenbosch, South Africa (P. Carey, P.I.).

International Funding Priorities

- Health and development of drug- and HIV/AIDS-exposed children and youth
- Training for non-U.S. investigators in state-of-the-art methods in clinical and cognitive neuroscience
- Research targeting unique populations or expertise not available in the United States to advance understanding of the clinical neuroscience and behavior of drug addiction
- Research using unique technologies, populations, or expertise not available in the United States to develop and/or test behavioral and/or HIV risk reduction interventions
- Studies focused on improving adherence to HIV treatment among different cultures or populations
- Studies to disseminate behavioral interventions internationally via distance learning, new technologies, or other methodological paradigms

Contact

drugabuse.gov/about/organization/DCNBR

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DIVISION OF EPIDEMIOLOGY, SERVICES AND PREVENTION RESEARCH (DESPR)

Mission Promote epidemiology, services, and prevention research to understand and address the range of problems related to drug abuse to improve public health. The division's vision is to support extraordinary public health research to end drug abuse.

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Major Research Themes

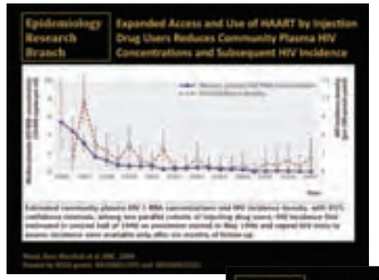
- **Theories:** What new theoretical approaches can inform our research?
- **Interactions:** What intrapersonal and environmental factors interact with each other and with genetic factors across development?
- **Blending:** How can we blend science and services to measurably affect public health outcomes?

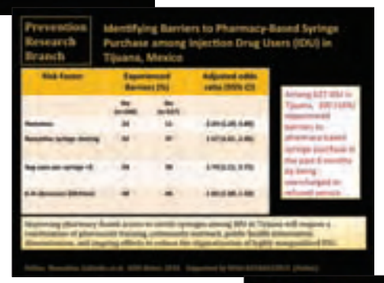
International Focus

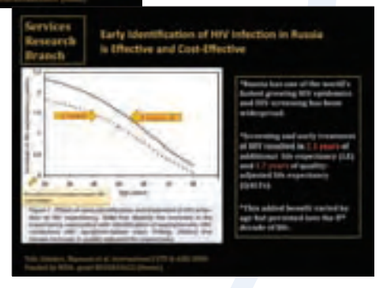
DESPR supports a variety of research projects on drug abuse and related health correlates and outcomes—including HIV/AIDS, viral hepatitis, tuberculosis, and other sexually transmitted diseases—around the world. The division's international research portfolio includes studies in Russia, Kazakhstan, Ukraine, Bulgaria, Norway, China, Taiwan, India, Vietnam, Thailand, South Africa, Uganda, Kenya, Malawi, Argentina, Brazil, El Salvador, Ecuador, Peru, Canada, and Mexico, as well as along the U.S.-Mexico border. In addition, DESPR collaborates with the National Hispanic Science Network to facilitate research on the epidemiology of drug abuse in Latin America and with the Fogarty International Center at NIH to support research on drug abuse by promising international scientists.

International Funding Priorities

- Understand the etiology and epidemiology of drug abuse and co-occurring behavioral, social, psychiatric, and physical health problems, including HIV/AIDS and other infectious diseases.
- Improve the quality of the drug abuse treatment system through research on financing, technology, and workforce.
- Develop effective, high-quality preventive interventions through research on individual and environmental factors, community-based participation, and the relationship of drug abuse prevention to HIV prevention.
- Develop and improve the quality, reach, and effectiveness of prevention and treatment services for drug abuse and its correlates and outcomes.







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DIVISION OF PHARMACOTHERAPIES AND MEDICAL CONSEQUENCES OF DRUG ABUSE (DPMCDA)

Mission Use science as a vehicle for improving the management of drug addiction and its medical consequences, with an emphasis on the identification, evaluation, and development of new pharmacological and immunological therapeutic agents.

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Goals

DPMCDA is a congressionally mandated program tasked with developing medications that are safe and effective treatments for drug addictions. Division activities include all phases of the discovery and development process, including support of preclinical investigations; Phases I, II, and III clinical trials; and regulatory activities. DPMCDA also supports research on the medical consequences of drug abuse.

Strategies

The Division partners with academia, other Government agencies—such as the U.S. Department of Veterans Affairs—the biotechnology community, and pharmaceutical companies. Collaborations among national and international investigators are encouraged. Peer-reviewed grants, contracts, and cooperative agreements support these efforts.

Nicotine and Tobacco

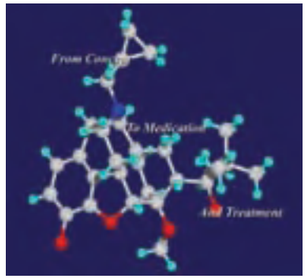
Tobacco use is currently the leading risk factor for preventable morbidity and mortality. Pharmacotherapies for tobacco dependence are critical in reversing this epidemic. Current areas of research include:

- Nicotine vaccines
- Nicotinic receptor-targeted medications
- Non-nicotinic receptor-targeted medications (e.g., kappa opioid antagonists)
- Pharmacogenetic-based approaches

Cannabis

Reducing and preventing cannabis addiction, particularly among adolescents, is a public health priority. Increased understanding of cannabis' mechanism of action and the endogenous cannabinoid system is facilitating the development of medications for cannabis addiction. Current areas of research include:

- Cannabinoid receptor agonists and antagonists
- Non-cannabinoid receptor-based medications



Opioids

DPMCDA has played a key role in the U.S. Food and Drug Administration (FDA) approval of medications to treat opioid addiction: LAAM, naltrexone, buprenorphine, and buprenorphine/naloxone. DPMCDA supports studies to evaluate new or improved formulations of these marketed medications, as well as to evaluate their use in special populations, such as children, adolescents, and pregnant women. Current areas of research include:

- Long-acting formulations of buprenorphine and naltrexone
- New opioid agonists and antagonists targeting specific receptor subtypes
- Alpha-2 adrenergic receptor agonists
- Vaccines

Cocaine and Methamphetamine

FDA has not yet approved a medication to treat cocaine or methamphetamine addiction. DPMCDA currently supports basic and clinical research at multiple targets, including:

- Vaccines
- GABA-mimetics
- D3 receptor agonists and antagonists
- Glutamate modulators (e.g., mGluR5 antagonists)
- CRF-1 antagonists
- Orexin receptor antagonists
- Enzymatic therapies (e.g., cocaine esterases)
- Muscarinic M5 agonists and antagonists
- VMAT-2 inhibitors (methamphetamine)

Medical Consequences of Drug Abuse

The purpose of this program is to identify, understand, prevent, and treat the medical and health consequences of drug addiction, including co-occurring infections (e.g., HIV, hepatitis, sexually transmitted infections, tuberculosis) and cardiovascular, respiratory, hepatic, renal, and nutritional complications.

Contact

www.drugabuse.gov/about/organization/DPMCDA

Ivan D. Montoya, M.D., M.P.H., imontoya@mail.nih.gov

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NATIONAL INSTITUTES OF HEALTH

JOHN E. FOGARTY INTERNATIONAL CENTER

FOR ADVANCED STUDY IN THE HEALTH SCIENCES

Mission Reduce disparities in global health through international cooperation in research and research training, emphasizing low- and middle-income countries.

FOGARTY

Goals

Fogarty serves as a bridge between NIH and the greater global health community—facilitating exchanges among investigators, providing training opportunities, and underwriting promising research initiatives in low- and middle-income countries. Fogarty's "Strategic Plan: 2008–2012" adopted five goals:

- Address the growing epidemic of chronic, noncommunicable diseases.
- Bridge the implementation research training gap.
- Develop human capital in the developing world.
- Foster a sustainable research environment in low- and middle-income countries.
- Build strategic alliances and funding partnerships.

Training Researchers Around the World

The Fogarty Division of International Training and Research administers research grants, training grants, and fellowship programs at sites in more than 100 countries. Fogarty programs that build the research pipeline are anchored to peer-reviewed research grants and designed to be collaborative, long term, and flexible. Nearly one-quarter of Fogarty awards are made directly to robust research institutions in the developing world. The remaining grants support scientists at U.S. institutions who collaborate with colleagues abroad. About one-third of Fogarty's grants focus on scientific discovery, and two-thirds support research training.

Fogarty–NIDA Grants

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For updates on Fogarty programs, go to **www.fic.nih.gov/programs.** NIDA participates in the following Fogarty programs:

Research Grants

- Global Health Research Initiative Program (GRIP)—Behavioral/Social Sciences R01: PAR-07-328; and Basic/Biomedical Sciences R01: PAR-07-329
- Brain Disorders in the Developing World (BRAIN)—R01: PAR-08-112; and R21: PAR-08-113
- Fogarty International Research Collaboration Award (FIRCA)—Behavioral/Social Sciences (FIRCA-BSS) R03: PAR-08-223; and Basic/Biomedical (FIRCA-BB) R03: PAR-08-222
- Collaborative HIV/AIDS Studies in the Middle East and North Africa—R21: PAR-08-153

Research Training Grants

- AIDS International Training and Research Program (AITRP) Awards—PAR-07-348
- International Clinical, Operational, and Health Services Research Training Award for AIDS and TB (ICOHRTA AIDS/TB)—PAR-08-155

Research Training Fellowships (www.fogartyscholars.org)

- Fogarty International Clinical Research Scholars (FICRS) Program for Predoctoral Training
- Fogarty International Clinical Research Postdoctoral Fellows (FICRF) Program

Contact

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INTRAMURAL RESEARCH PROGRAM (IRP)

International Interests

Promote international collaborative research that facilitates the elucidation of brain mechanisms underlying drug addiction and relapse, chronic pain, and the development of new treatment modalities. IRP also provides pre- and postdoctoral training for foreign investigators and collaborative research experience for senior foreign investigators in state-of-the-art techniques at the molecular, neurobiological, preclinical, and clinical levels.

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IRP branches seek the following from international partners:

Behavioral Neuroscience Research Branch

- Highly potent and selective receptor agonists, partial agonists, and antagonists for receptor subtypes thought to affect addictive processes
- New approaches to assess interactions between neurotransmitter-neuromodulator systems, receptors, and receptor heteromers
- New cannabinoid compounds that selectively modulate the actions of endogenous cannabinoid systems, with potential beneficial effects for the treatment of psychiatric disorders or drug dependence

Molecular Neuropsychiatry Research Branch

- Well-characterized samples from drug-dependent individuals and matched-control individuals

Chemical Biology Research Branch

- Collaborations on *in vivo* or *in vitro* studies of novel opioids, CRH receptor antagonists, and agonists or antagonists that are involved in drug abuse

Clinical Pharmacology and Therapeutics Research Branch

- Collaborators able to translate questionnaires into their native language and administer them to samples of drug users of various ages from a variety of locations
- Reports of experiences with withdrawal and coping techniques
- Controlled drug administration studies in humans
- *In utero* drug exposure of licit pharmacotherapies and illicit drugs
- Biological monitoring in treatment studies
- Studies of driving under the influence, workplace drug testing, and anti-doping
- Alternative routes of cannabinoid agonist delivery
- Cannabinoid antagonist administration studies

Cellular Neurobiology Research Branch

- Tissue lipid profiling
- Generation of transgenic mice
- Sigma-1 receptor function
- *In vitro* cellular models for testing drug effects
- Differentiated human neurons from embryonic stem cells
- Single-cell electrophysiology using slice and *in vitro* preparations

Medications Discovery Research Branch

- Selective receptor agonists, partial agonists, and antagonists with affinity for targets involved in drug abuse
- Collaborative opportunities to use these novel tools in models of drug abuse that will contribute to the understanding of the molecular basis of cocaine addiction and provide new strategies for drug design

Molecular Neurobiology Research Branch

- Well-characterized samples from substance-dependent individuals who are successful versus unsuccessful in quitting
- Well-characterized substance-dependent and matched-control individuals
- Well-characterized samples from individuals with individual differences in regional brain volumes and/or activation patterns and mnemonic systems
- Collaborations in characterizing knockout mice with related phenotypes

Neuroimaging Research Branch

- Development and application of novel cognitive task probes to better understand the neurobiology of human drug abuse
- Collaboration on novel MRI and fMRI pulse sequence developments and data analysis strategies
- Application of preclinical animal models to novel systems-level imaging investigations of drug dependence
- New MR-contrast agents to reveal cellular and molecular information about the brain

Contact

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SPECIAL POPULATIONS OFFICE (SPO)

Mission Coordinate NIDA's health disparities research, concentrating especially on areas where there are significant gaps in knowledge or clear disparities in prevention and treatment. Promote research on drug abuse in minority populations and the participation of underrepresented scientists in drug abuse research.

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Programs

SPO conducts limited international activities, working primarily through the following efforts:

- Research Supplements To Promote Diversity in Health-Related Research ("Diversity Supplements")
- Special Populations Research Development Seminar Series
- Grant writing and development assistance
- Diversity-Promoting Institutions Drug Abuse Research Program
- Recruitment and Training Program for Underrepresented Populations (Intramural Research Program)
- Summer Research With NIDA
- Historically Black Colleges and Universities Initiative
- Health Disparities Committee
- African American Initiative Committee
- Researchers and scholars expert work groups

National Hispanic Science Network (NHSN)

SPO helped launch NHSN and serves as the primary NIDA liaison to the group, which is dedicated to improving the health of Hispanics by increasing the amount and quality of interdisciplinary translational research on drug abuse and fostering the development of Hispanic scientists in drug abuse research. The International Research Collaboration Subcommittee works to include international scientists, students, and perspectives in NHSN conferences and the Summer Research Training Institute for students and new investigators. The International Subcommittee participates in REDLA (RED Latino Americana de Investigadores en Drogas), whose mission is to advance drug epidemiology and other research while addressing specific needs in Latin America.

NATIONAL HISPANIC SCIENCE NETWORK ON DRUG ABUSE

Latin America Initiative

SPO works closely with the International Program to assist NIDA to help identify other Federal partners working in Latin America and to coordinate activities between NHSN and the Latin America Initiative. Through the initiative, NIDA works to stimulate the creation of regional networks to enhance surveillance and research conducted in Latin American countries. To build research capacity in the region, training programs focus on secondary data analysis and clinical trials management.

Contact

drugabuse.gov/about/organization/spo/spohome.html

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WOMEN AND SEX/GENDER DIFFERENCES RESEARCH PROGRAM

Mission Promote the conduct, translation, and dissemination of research on issues specific to women and on sex/gender differences in all areas of drug abuse research, both human and animal.

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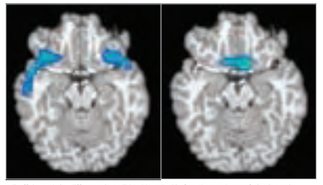
Background

Historically, participants in NIH-funded research were almost exclusively males, and as a result, little data existed on females. Fortunately, this situation has been changing in recent years, and NIDA has played an active role in effecting this change. NIDA actively promotes drug abuse research focusing on the study of female-based aspects of drug abuse and on sex/gender differences in all areas of drug abuse research, both human and animal. This research strategy permits identification of outcomes that vary by sex/gender and that ultimately can translate into better prevention and treatment outcomes for both men and women.

Goals

Incorporating sex/gender-based research perspectives and methodologies can inform and advance the science of drug abuse research. Growing numbers of studies are reporting gender-specific research outcomes and, in some cases, these outcomes are opposite for males and females. From basic studies of molecular genetics and neurotransmitters to studies of etiology, epidemiology, and prevention and treatment interventions, the scientific and clinical importance of studying factors specific to women and analyzing data separately for males and females is becoming more and more evident.



Adinoff, B., et al. Sex differences in medial and lateral orbitofrontal cortex hypoperfusion in cocaine-dependent men and women. Gender Medicine 3(3):206-222, 2006.

Research Interests

The growing numbers of drug abuse studies reporting male-female differences point to many aspects of drug abuse for which male-female differences likely exist but are yet to be explored—especially in cases where male-only preclinical research is the dominant paradigm. In all areas of drug abuse research, studies containing sex/gender-based hypotheses and analyses of outcomes separately for males and females are essential to improving our understanding of the biological and environmental mechanisms of the etiology and consequences of drug abuse and addiction. To encourage this research as well as research on topics specific to females, NIDA and the National Institute on Alcohol Abuse and Alcoholism have issued three Program Announcements calling for grant applications on "Women and Sex/Gender Differences in Drug and Alcohol Abuse/Dependence": PA-07-329, PA-07-330, and PA-07-331.

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