

The NIH Pain Consortium 2005

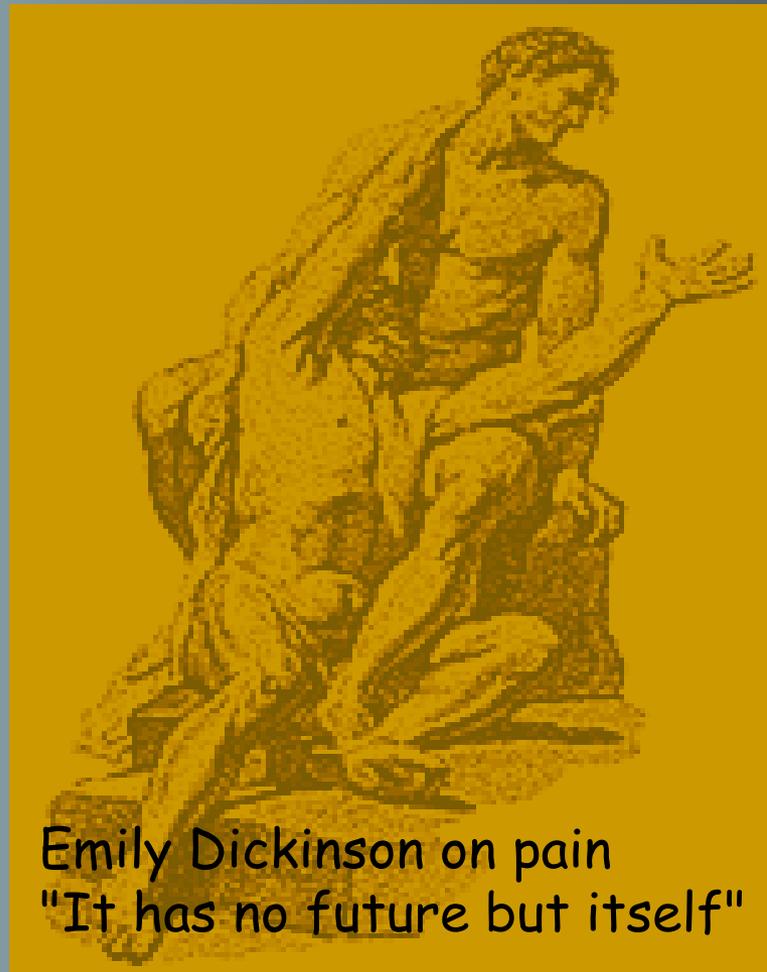
Mission: To enhance pain research and promote collaboration among researchers across the NIH Institutes and Centers that have programs and activities addressing pain

Co-chairs

Dr. Patricia A. Grady, Director, NINR

Dr. Story Landis, Director, NINDS

Dr. Lawrence A. Tabak, Director, NIDCR



Emily Dickinson on pain
"It has no future but itself"

The NIH Pain Consortium



National Institutes
of Health

Mission

<http://painconsortium.nih.gov/>

- *To enhance pain research and promote collaboration among researchers across the NIH Institutes and Centers that have programs and activities addressing pain*

Leadership

- *Dr. Walter Koroshetz, Acting Director NINDS, NIH Pain Consortium Chair*
- *Dr. Josephine Briggs, Director NCCIH*
- *Dr. Patricia A. Grady, Director NINR*
- *Dr. Martha Somerman, Director NIDCR*
- *Dr. Nora Volkow, Director NIDA*

Staff: Office of Pain Policy

- *Dr. Linda Porter, Pain Policy Advisor*
- *Dr. Cheryse Sankar and Dr. Khara Ramos, Pain Policy Analysts*

NIH Pain Consortium Members 2005

National Cancer Institute

National Institute on Aging

National Institute on Alcohol Abuse and Alcoholism

National Institute of Arthritis and Musculoskeletal and Skin Diseases

National Institute of Biomedical Imaging and Bioengineering

National Institute of Child Health and Human Development

National Institute of Dental and Craniofacial Research

National Institute for Deafness and Communicative Disorders

National Institute on Drug Abuse

National Institute of General Medical Sciences

National Institute of Mental Health

National Institute of Neurological Disorders and Stroke

National Institute of Nursing Research

National Center for Research Resources

National Center for Complementary and Alternative Medicine

John E. Fogarty International Center

Warren Grant Magnuson Clinical Center

Office of Behavioral and Social Sciences Research

Office of Rare Diseases

Office of Research for Women's Health

Office of Technology Transfer

The NIH Pain Consortium



National Institutes
of Health

Membership

National Cancer Institute

National Eye Institute

National Institute on Aging

National Institute on Alcohol Abuse and Alcoholism

National Institute of Arthritis and Musculoskeletal and Skin
Diseases

National Institute of Biomedical Imaging and Bioengineering

National Institute of Child Health and Human Development

National Institute on Deafness and Other Communication
Disorders

National Institute of Dental and Craniofacial Research

National Institute of Diabetes and Digestive and Kidney
Disorders

National Institute on Drug Abuse

National Institute of General Medical Sciences

National Institute of Mental Health

National Institute of Minority Health and Disparities

National Institute of Neurological Disorders and Stroke

National Institute of Nursing Research

National Heart Lung and Blood Institute

National Center for Advancing Translational Science

National Center for Complementary & Integrative Health

John E. Fogarty International Center

Warren Grant Magnuson Clinical Center

Office of Science Policy and Analysis

Office of Behavioral and Social Sciences Research

Office of Technology Transfer

Office of Research on Women's Health

Office of Rare Diseases

NIH Funding for Chronic Pain

2002

2003

2004

2005

2006

\$173

\$199*

\$222*

\$228*+

\$233*+

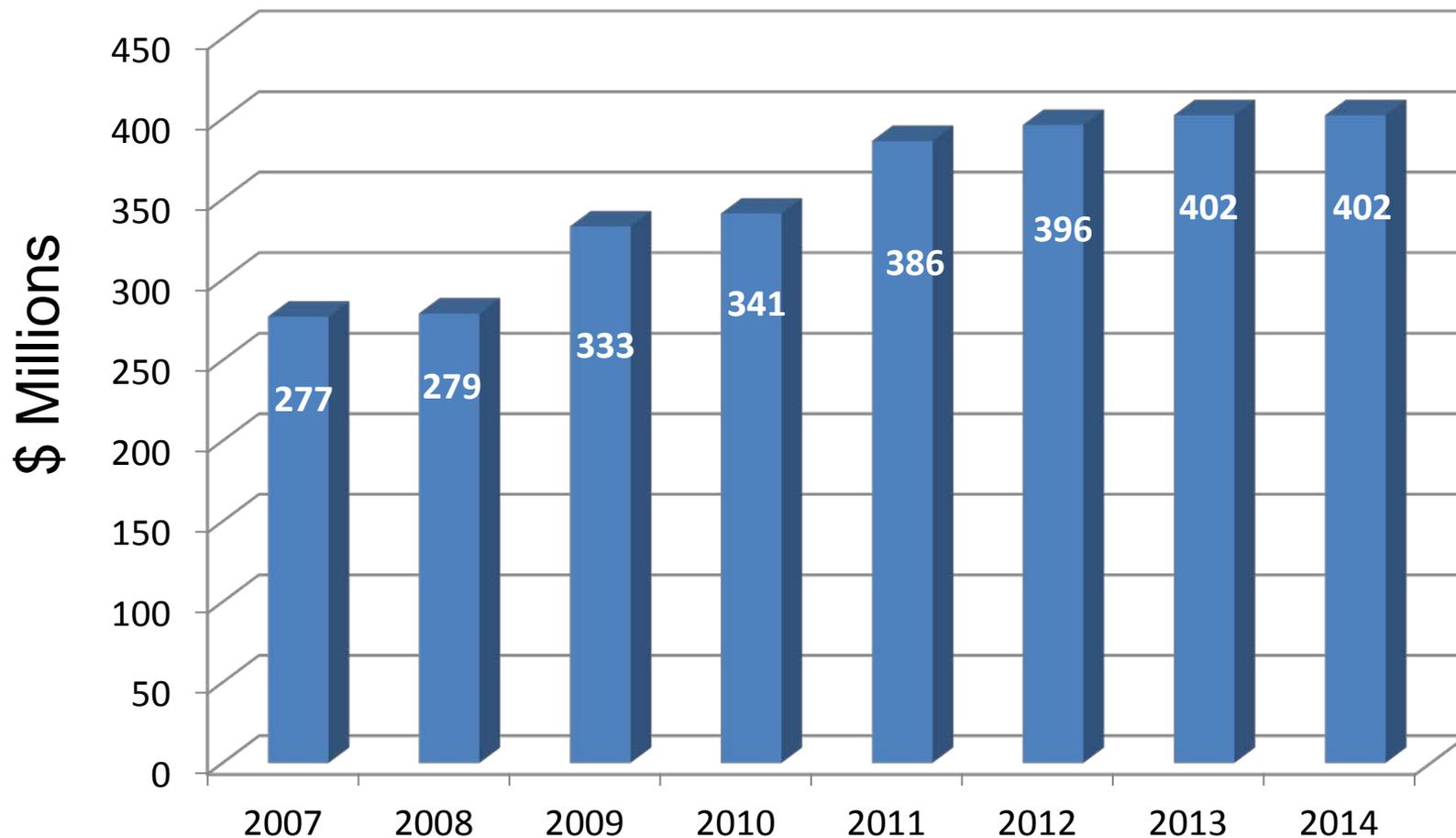
*millions

+estimates

The NIH Pain Consortium

expanding pain research

Chronic pain research funding



NIH Pain Consortium 2005 Current Strategies

Future Mechanisms & Needs for Shared Resources

- tap Roadmap support for pain research
- tap Blueprint support for pain research
- develop collaborative
 - initiatives
 - workshops
 - research resources

Focused work group efforts

- Website
- Traveling "Pain Road Show"
- Symposium on NIH Pain Research
- Sharing of Resources/Portfolios



Goals: develop methods and best practices to enable participation of health care systems in clinical research, which is essential to strengthen the relevance of research results to health practice. The overall goal is to strengthen the national capacity to implement cost-effective large-scale research studies that engage health care delivery organizations as research partners.

Awards:

Lynn DeBar, Ph.D. , Kaiser Permanente Center for Health Research

Collaborative Care for Chronic Pain in Primary Care is a large mixed-methods, pragmatic, cluster-randomized clinical trial conducted in 3 regions of Kaiser Permanente health systems: Northwest, Georgia, and Hawaii. It evaluates integration of multidisciplinary services within the primary care environment compared with usual care. It combines several treatment approaches, including physical therapy and psychological interventions. Patients take a more active role in managing their pain, and primary care providers receive additional support and guidance in treating patients with chronic pain.

Jeffrey Jarvik, M.D., M.P.H., University of Washington

Lumber Image Reporting with Epidemiology is a large pragmatic, cluster-randomized controlled trial testing the effectiveness of inserting epidemiologic benchmarks into lumbar spine imaging reports. The goal is to reduce subsequent tests and treatments, including cross-sectional imaging, opioid prescriptions, spinal injections, or surgery. The trial has potential to demonstrate feasibility of randomly assigning clinics within large health systems to receive a clinical decision support-type intervention and the feasibility of passively collecting outcomes data up to 2 years after enrollment using robust electronic medical record systems available at each health system

Grand Challenge: the Transition from Acute to Chronic Neuropathic Pain A Funding Opportunity supported by the NIH Pain Consortium

Goals:

The goal of the Grand Challenge initiative is to facilitate research collaborations between pain and non-pain scientists with expertise in neuroplasticity to study biological mechanisms underlying the transition from acute to chronic neuropathic pain. Expertise, tools, and knowledge from the field of neural plasticity will bring new insights and approaches to elucidate the maladaptive changes associated with chronic pain.

Awards

[9 Multi-PI R01 grants](#) focused on understanding the maladaptive neurobiological changes that occur during the transition from acute to neuropathic pain.

[Competitive revisions](#) that propose a collaborative, one year pilot study or a new specific aim associated with an active NIH grant. These initial studies are expected to lead to long term collaborations focused on the transition from acute to chronic neuropathic pain

NIH Pain Consortium 2005 Current Strategies

Future Needs & Mechanisms for Shared Resources

- Roadmap support
- Blueprint support
- **develop collaborative**
 - workshops
 - initiatives
 - **research resources**

Focused work group efforts

- Website
- Traveling "Pain Road Show"
- Symposium on NIH Pain Research
- Sharing of Resources/Portfolios



The NIH Pain Consortium Workshops

Pathways to Prevention:

September 29–30, 2014

The Role of Opioids in the Treatment of Chronic Pain

https://prevention.nih.gov/docs/programs/p2p/ODPPainPanelStatementFinal_10-02-14.pdf

Chair: Susan Maier, Deputy Director, Office of Research on Women's Health, NIH

Objectives of the Office of Disease Prevention Workshop:

- Assess long-term effectiveness and risks of opioids for treating chronic pain
- Assess effects of opioid management strategies on addiction, abuse, misuse, pain, and quality of life
- Assess effectiveness of risk mitigation strategies
- Recommend research priorities

Conclusions

- Insufficient data on drug characteristics, risk prediction of adverse outcomes, and dosing and tapering strategies to guide clinical use of opioids for chronic pain
- Barriers to evidence based patient-centered, multidisciplinary care: inadequate training and reimbursement to provide care and inadequate access to care

The NIH Pain Consortium Workshops

Pathways to Prevention:

September 29–30, 2014

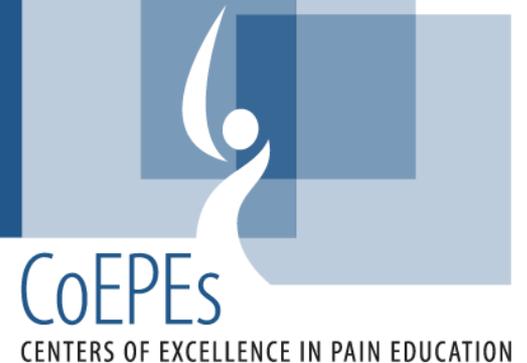
The Role of Opioids in the Treatment of Chronic Pain

Research Recommendations:

- 1) Which types of pain, specific diseases, and patients are most likely to benefit and incur harm from opioids.
- 2) Develop and evaluate multidisciplinary pain interventions, including cost-benefit analyses and identification of barriers to dissemination.
- 3) Develop and validate research measurement tools for identification of patient risk and outcomes (including benefit and harm) related to long-term opioid use.
- 4) Health systems should incorporate decision support for pain management in their eHRs and facilitate export of clinical data for research to determine which patients benefit or are harmed by opioid use.
- 5) Researchers on the effectiveness and harm of opioids should consider alternative trial designs
- 6) Study risk-identification and mitigation strategies, including drug monitoring.
- 7) Quality improvement needed to facilitate evidence-based decision-making at every step of the clinical decision process.
- 8) In the absence of definitive evidence, clinicians and health care systems should follow current guidelines by professional societies about which patients and which types of pain should be treated with opioids, and about how best to monitor patients and mitigate risk.
 - 1) Harmonization of guidelines of professional organizations is needed to facilitate their implementation more consistently in clinical care.

The NIH Pain Consortium Initiatives

NIH Pain Consortium Centers of Excellence in Pain Education



NIH funded Centers of Excellence in Pain Education to develop, evaluate, and distribute pain management curriculum resources to enhance and improve how health care professionals are taught about pain and the treatment of pain.

The Pain Consortium awarded contracts to 12 Centers of Excellence for Pain Education

- Goal is to develop web based curriculum tools for health professional schools: medicine, dentistry, nursing, pharmacy http://painconsortium.nih.gov/NIH_Pain_Programs/CoEPES.html
- The tools developed must be implemented at the award site, and will be available through our public website for anyone to use
- Primary focus in on case-based scenarios

<http://palladianpartners.com/edna/>

E-Learning Module on Chronic Low Back Pain in an Older Adult: Evidence of Impact on Medical Student OSCE Performance: Debra K. Weiner, M.D., Natalia E. Morone, M.D., M.S., Heiko Spallek, DMD, PhD, Jordan F. Karp, M.D., Michael Schneider, PhD, D.C., Carol Washburn, Ed.D., Michael P. Dziabiak, MLIS, D. Michael Elnicki, M.D. on behalf of the University of Pittsburgh Center of Excellence in Pain Education. Journal of the American Geriatrics Society Feb 2014

The NIH Pain Consortium Initiatives

NIH Pain Consortium Centers of Excellence in Pain Education



University of Washington, Seattle
Johns Hopkins University, Baltimore
University of Pennsylvania Perelman
School of Medicine, Philadelphia
Southern Illinois University, Edwardsville;
University of Rochester, N.Y.
University of New Mexico, Albuquerque

Harvard School of Dental Medicine,
Boston;
University of Alabama at Birmingham;
Thomas Jefferson University School of
Medicine, Philadelphia;
University of California, San Francisco;
University of Maryland, Baltimore;
University of Pittsburgh

NIH Pain Consortium

Shared Funding Initiatives



Up-to-Date Listing of PAIN funding opportunities

http://painconsortium.nih.gov/Funding_Opps/highlighted-initiatives.html

Mechanisms, Models, Measurement, & Management in Pain Research (R01, R21, R03) ([PA-13-117,8,9](#))

Developing the Therapeutic Potential of the Endocannabinoid System for Pain Treatment ([PA-15-188](#))

Competitive Revision Applications for Research on Complementary Approaches to Symptom

Management in Military and Veteran Populations (R01) ([PA-13-075](#))

Clinical Evaluation of Adjuncts to Opioid Therapies for the Treatment of Chronic Pain (R01) ([PAR-14-225](#))

Pain in Aging (R01, R21, R03) ([PA 13-058](#), [PA 013-059](#), [PA 13-060](#))

Mechanistic Studies of Pain and Alcohol Dependence (R01) ([PA-15-026](#))

Biomechanisms of Peripheral Nerve Damage by Anti-Cancer Therapy (R01, R21) ([PA-12-082](#), [PA-12-083](#))

Research on Chronic Overlapping Pain Conditions (R01, R21) ([PA-14-244](#), [PA-14-243](#))

Mechanistic Studies of Pain and Alcohol Dependence (R01, R21) ([PA-11-267](#), [PA-11-268](#))

Neurobiology of Migraine (R01, R21) ([PA-14-068](#), [PA-14-069](#))



Chronic Low Back Research Task Force

Chairs: Richard Deyo and Samuel Dworkin

Purpose

Clinical research on chronic low-back pain suffers from inconsistent terminology, case definitions, and outcome measures.

Goals

Creation of consistent standards for terminology, classification, data collection, and outcome assessment, to bring greater consistency to, and ultimately advance the state of clinical research on a challenging and complex problem

Outcome

- Definition of chronic LBP
- Sub-classification scheme for cLBP by impact & prognosis
- Minimum dataset (based on NINDS Common Data Elements)
 - http://painconsortium.nih.gov/NIH_Pain_Programs/Task_Force/cLBP_RTf_MinimalDataset.pdf

Report of the NIH Task Force on Research Standards for Chronic Low Back Pain
The Journal of Pain, April 28, 2014: pp 1-17, online at www.jpain.org and www.sciencedirect.com

The NIH Pain Consortium & Stanford University Pain Registry

<http://snapl.stanford.edu/choir-current-status/>

- partnership the NIH Pain Consortium and Stanford
- open source centralized registry for tracking self-reported outcomes of chronic pain sufferers over time
- data definitions and standards are being developed in conjunction with the NIH-funded Patient Reported Outcomes Measurement Information System
- the Executive Committee will make decisions on data definitions and data sharing policies
- data are free and accessible to investigators for outcomes and comparative effectiveness research and point-of-care decision making

NIH Pain Consortium 2005 Current Strategies

Future Needs & Mechanisms for Shared Resources

- Roadmap support
- Blueprint support
- develop collaborative
 - initiatives
 - workshops
 - research resources

Focused efforts

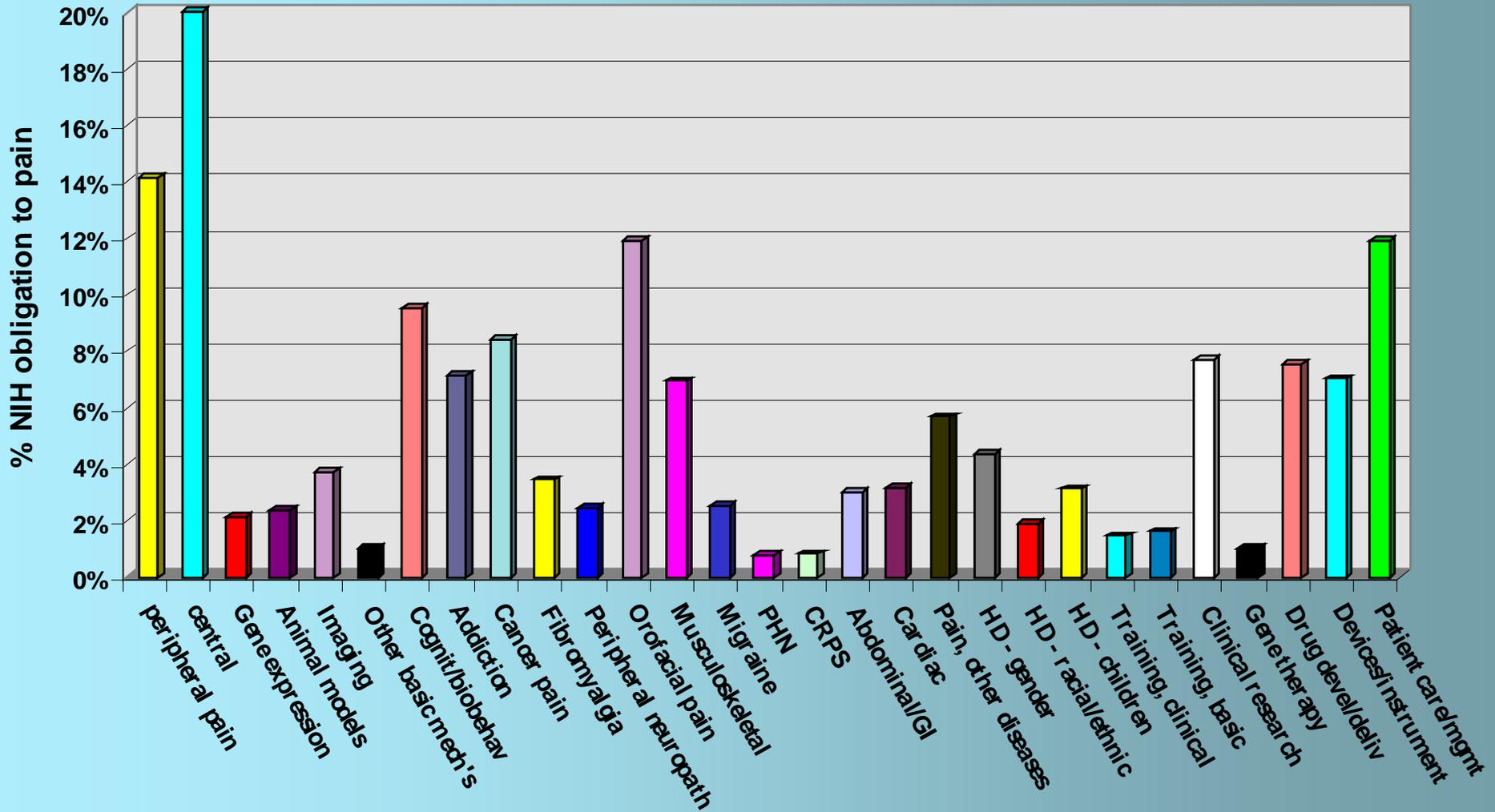
- Website
- Traveling "Pain Road Show"
- Annual Symposium on NIH Pain Research
- Sharing of Resources/Portfolios



Pain-related Funding Opps
 NIH Pain Programs,
 Workshops, PC Listserv &
 More

Painconsortium.nih.gov

NIH Obligations for Pain Research FY 2002



INTERAGENCY PAIN RESEARCH PORTFOLIO

The Interagency Pain Research Portfolio database provides information on pain research and training activities supported by the Federal Government. The participating agencies – AHRQ, CDC, DoD, FDA, NIH, and VA – are represented on the Interagency Pain Research Coordinating Committee (IPRCC), a Federal advisory committee to enhance pain research efforts and promote collaboration across the government.



ADVANCED SEARCH

To perform an advanced search of the IPRP database using multiple fields, such as theme, project number, and/or principal investigator, click the link above.



IPRP ONTOLOGY

Click on the link above to learn about the grant classification system – the overarching themes and the Tier 1 and 2 categories.



DATA CONTRIBUTORS

To view a list of the agencies that contributed data, click on the link above.



REPORTS

Click on the link above to access and review the publicly available reports associated with the IPRP database.

IPRP QUICK SEARCH

Select a Theme:

Choose some options

Funding Agency:

Choose some options

Funding Year:

Choose some options

or

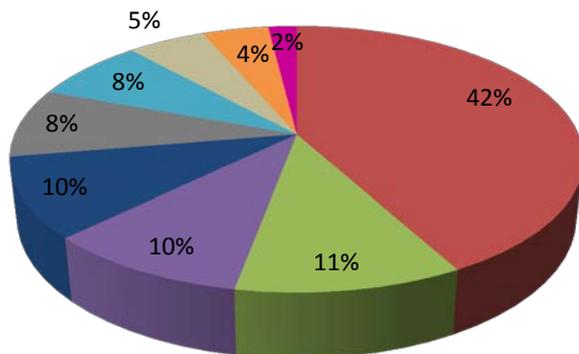
Search Keyword:

Choose some options



Search Now

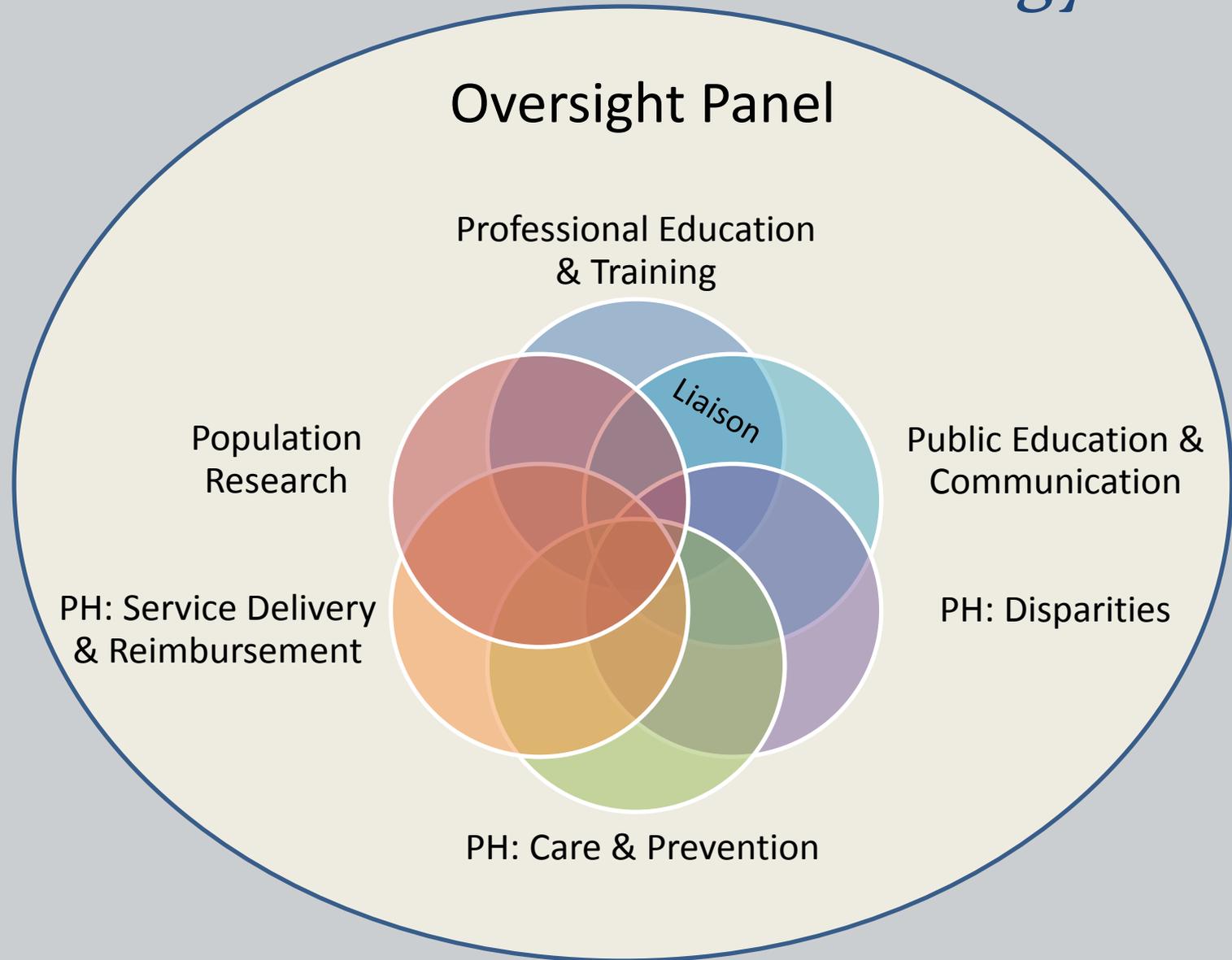
2011 Pain Research Portfolio Percent of Grants by Theme



- Pain Mechanisms, 42%
- Basic to Clinical, 11%
- Disparities, 10%
- Training & Education, 10%
- Tools & Instruments, 8%
- Risk Factors & Causes, 8%
- Surveillance & Human Trials, 5%
- Overlapping Conditions, 4%
- Use of Services, Treatments & Interventions, 2%

<http://paindatabase.nih.gov/>

The National Pain Strategy



Federal Pain Research Strategy

The CONTINUUM of PAIN: *the characterization of pain as a temporal process, beginning with an acute stage, which may progress to a chronic state of variable duration. Chronic pain may start early after injury or surgery, because of an individual's susceptibility, through mechanisms activated in the acute setting.*

PREVENTION
OF ACUTE &
CHRONIC PAIN

ACUTE PAIN &
ACUTE PAIN
MANAGEMENT

TRANSITION
FROM ACUTE TO
CHRONIC PAIN

CHRONIC PAIN
& CHRONIC PAIN
MANAGEMENT

DISPARITIES

WHAT HAPPENS AND
TO WHOM?

WHY AND HOW
DOES IT HAPPEN?

HOW TO MANAGE?

BASIC
SCIENCE

CLINICAL
SCIENCE

UNDERSTAND
MECHANISMS

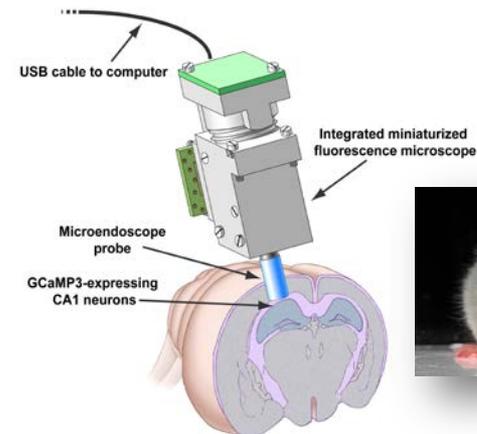
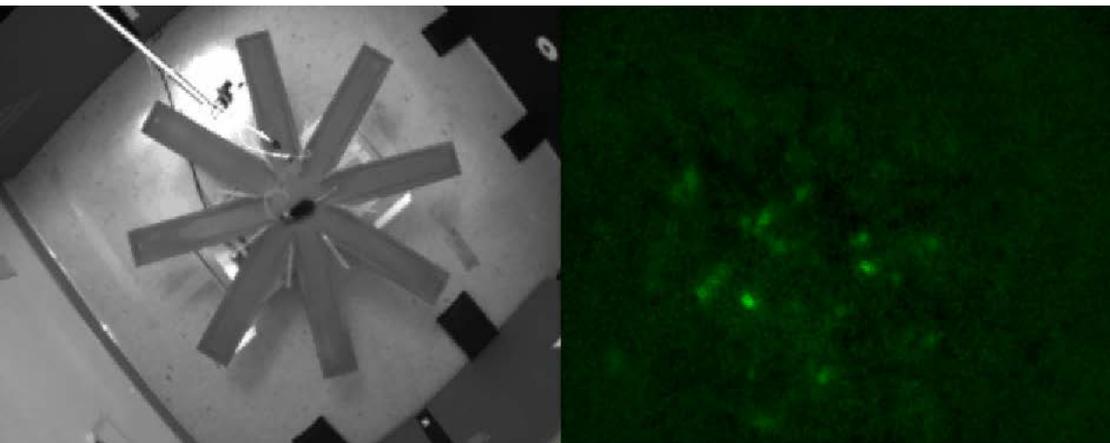
TRANSLATE/
TREAT

The BRAIN InitiativeSM

**BRAIN = Brain Research through Advancing
Innovative Neurotechnologies**

WHY??

Develop new technologies to measure how areas of the brain interact and change – in real time – when we perform activities, think, feel and learn



The BRAIN InitiativeSM

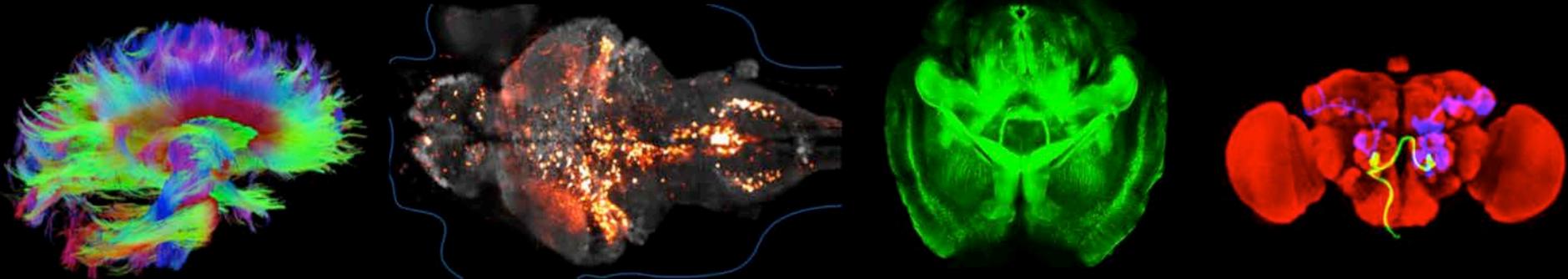
BRAIN 2025 *A SCIENTIFIC VISION*

Brain Research through Advancing Innovative
Neurotechnologies (BRAIN) Working Group
Report to the Advisory Committee to the
Director, NIH

June 5, 2014



- A focus on circuits and networks
- Tools to measure the fluctuating electrical and chemical patterns within circuits
- Understand how all of this helps generate our unique perceptions and actions



The BRAIN InitiativeSM

What Does It Mean for Pain Research?

- Tool development that allows us to “listen in” to the electrical signals that form the language of the brain has the potential to revolutionize our understanding of pain networks.
- Potential to enhance our understanding of how neural circuits in the brain “learn” to recover after injury, and what goes wrong at the circuit level to result in chronic pain.
- Progress in pain treatments is now impeded by lack of neurotechnologies that can measure neural circuit activity related to pain.



Annual NIH Pain Consortium Symposia (2006-2014)

- 9) Biological and psychological factors contributing to chronic pain
- 8) Integrated self-management strategies for chronic pain
- 7) Advancing pain therapies
- 6) Mechanisms and management of overlapping chronic pain and associated conditions
- 5) Moving towards personalized pain management through development of tools for individualized pain management
- 4) Genetics of Pain
- 3) Moving basic discoveries to the clinic and clinical findings to the laboratory
- 2) Advances in pain research: Generalized pain conditions.
- 1) Genetics and pain



National Institutes
of Health





10th NIH Pain Consortium Symposium Advances in Pain Research

Looking Back and to the Future:

brain imaging
neural-glial mechanisms
genetics and epigenetics
novel therapy development
cognitive and emotional influences



The NIH Pain Consortium: Office of Pain Policy

- The Office of Pain Policy (OPP), within the Office of the Director at NINDS, plans, develops, and implements the [NIH Pain Consortium](#) activities and programs in collaboration with Pain Consortium members and under the direction of the PC Executive Committee. OPP also manages and coordinates the activities of the [Interagency Pain Research Coordinating Committee](#) (IPRCC). These activities are based on the charges of the IPRCC as a federally-mandated advisory committee, and includes development of the National Pain Strategy.
- Office of Pain Policy Staff:
 - **Linda Porter, PhD** - Director, Office of Pain Policy
 - **Cheryse Sankar, PhD** - Health Science Policy Analyst
 - **Khara Ramos, PhD** - Senior Science Policy Analyst
 - **Mark Pitcher, PhD** - Visiting Fellow, National Center for Complementary and Integrative Health