



The Federal Pain Research Portfolio Analysis

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National Institute of
Neurological Disorders
and Stroke

NIH > The Interagency Pain Research Coordinating Committee

Federal advisory committee created under the *Affordable Care Act* to coordinate all efforts within the Department of Health and Human Services and other Federal agencies that relate to pain research

- 7 Federal members and 12 non-Federal members
 - Department of Health and Human Services
 - ❖ Agency for Healthcare Research and Quality
 - ❖ Centers for Disease Control and Prevention
 - ❖ Food and Drug Administration
 - ❖ National Institutes of Health
 - Department of Defense
 - Department of Veteran's Affairs
- Coordinated by the NINDS Office of Pain Policy



- Develop a summary of advances in pain care research supported or conducted by the Federal agencies relevant to the diagnosis, prevention, and treatment of pain and diseases and disorders associated with pain.
- *Identify critical gaps in basic and clinical research on the symptoms and causes of pain.*
- *Make recommendations to ensure that the activities of the National Institutes of Health and other Federal agencies are free of unnecessary duplication of effort.*
- Make recommendations on how best to disseminate information on pain care.
- Make recommendations on how to expand partnerships between public entities and private entities to expand collaborative, cross-cutting research.

Portfolio Analysis Rationale

A comprehensive analysis of federally-funded pain research to:

- ❖ Identify critical gaps in pain research
- ❖ Ensure agencies are free of unnecessary duplication of effort
- ❖ Identify opportunities for synergy and collaboration

Portfolio Analysis Process

- Structure from 2003 NIH portfolio analysis
- Data call from IPRCC member Agencies and Departments
 - REPORTER 2011 research projects
- Expert Working Group taxonomy
 - Tier 1: Basic/Translational/Clinical
 - Tier 2: 29 defined topics relevant to pain research
 - Pain Conditions
- Coders assigned grants (1200+)
 - Agency Members
 - NIH Pain Consortium
- Grant assigned (%) to multiple tier 1 and tier 2 categories, and primary pain condition

Portfolio Analysis Process

Basic to Clinical

Development of Animal & Human
Models
Analgesic Development
Device & Therapy Delivery Systems
Development

Disparities

Unique Populations
Substance Use & Abuse/Addiction
Women's & Minority Health Research
Sex & Gender Differences
Health Disparities & Access to Care

Training & Education

Training in Pain Research
Pain Education

Tools & Instruments

Outcomes & Health IT for Decision-
Making
Diagnosis & Case Definitions
Informatics, Databases, & IT
Development

Risk Factors & Causes

Genetics & Genomics
Pain Prevention
Other "Omics"

Surveillance & Human Trials

Comparative Effectiveness Research
Epidemiology
Analgesic Drug Safety

Overlapping Conditions

Pain & Non-Pain Comorbidities
Chronic Overlapping Conditions

Use of Services, Treatments, & Interventions

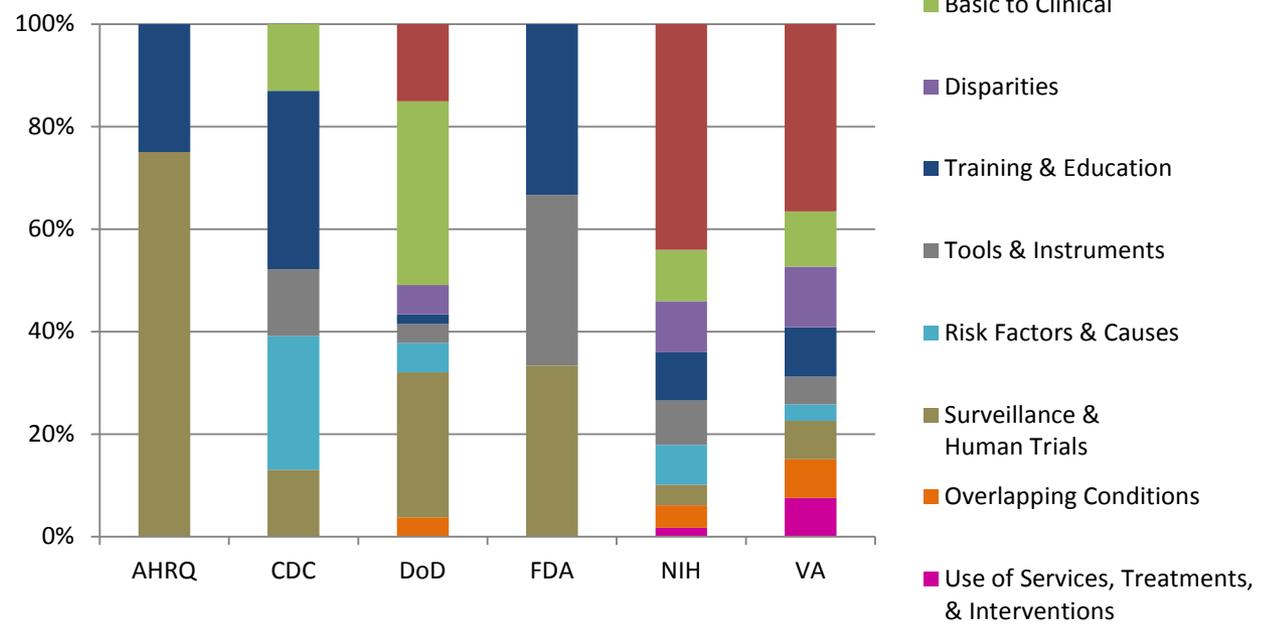
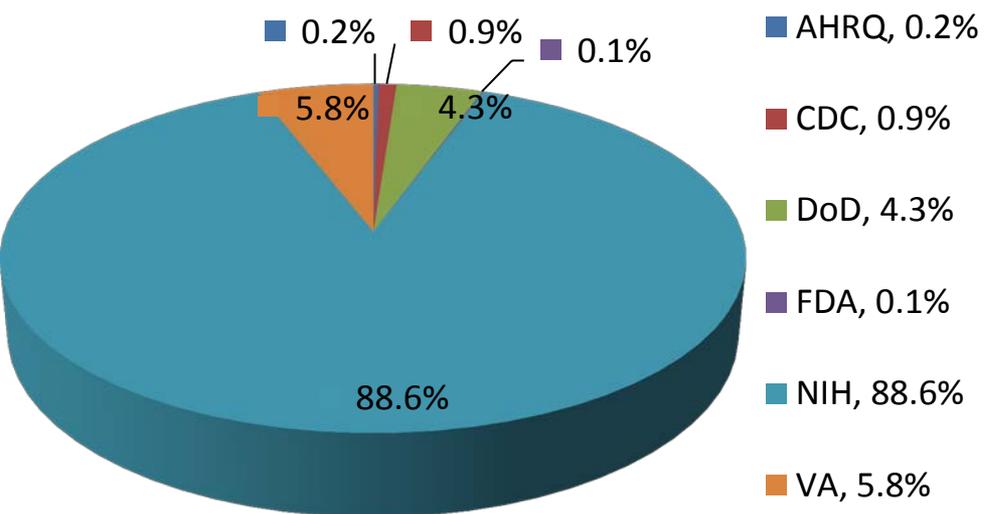
Medical Management
Health Care Utilization

Portfolio Analysis Levels

- Analyses
 - ❖ Agency, Institute: Tier 1, 2 Themes
 - ❖ Tier 1, 2 Defined topic areas
 - ❖ Single Pain Conditions
 - ❖ Grouped Pain Conditions
 - ❖ Overarching themes
 - ❖ In depth/interpretive for highlighted research areas
 - ❖ Overlap/intersections

Portfolio Analysis

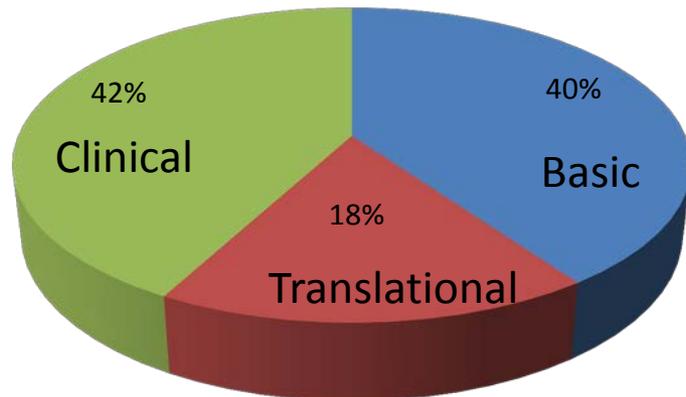
Data: Agency



Portfolio Analysis

Data: Tier 1, 2 Categories

Tier 1

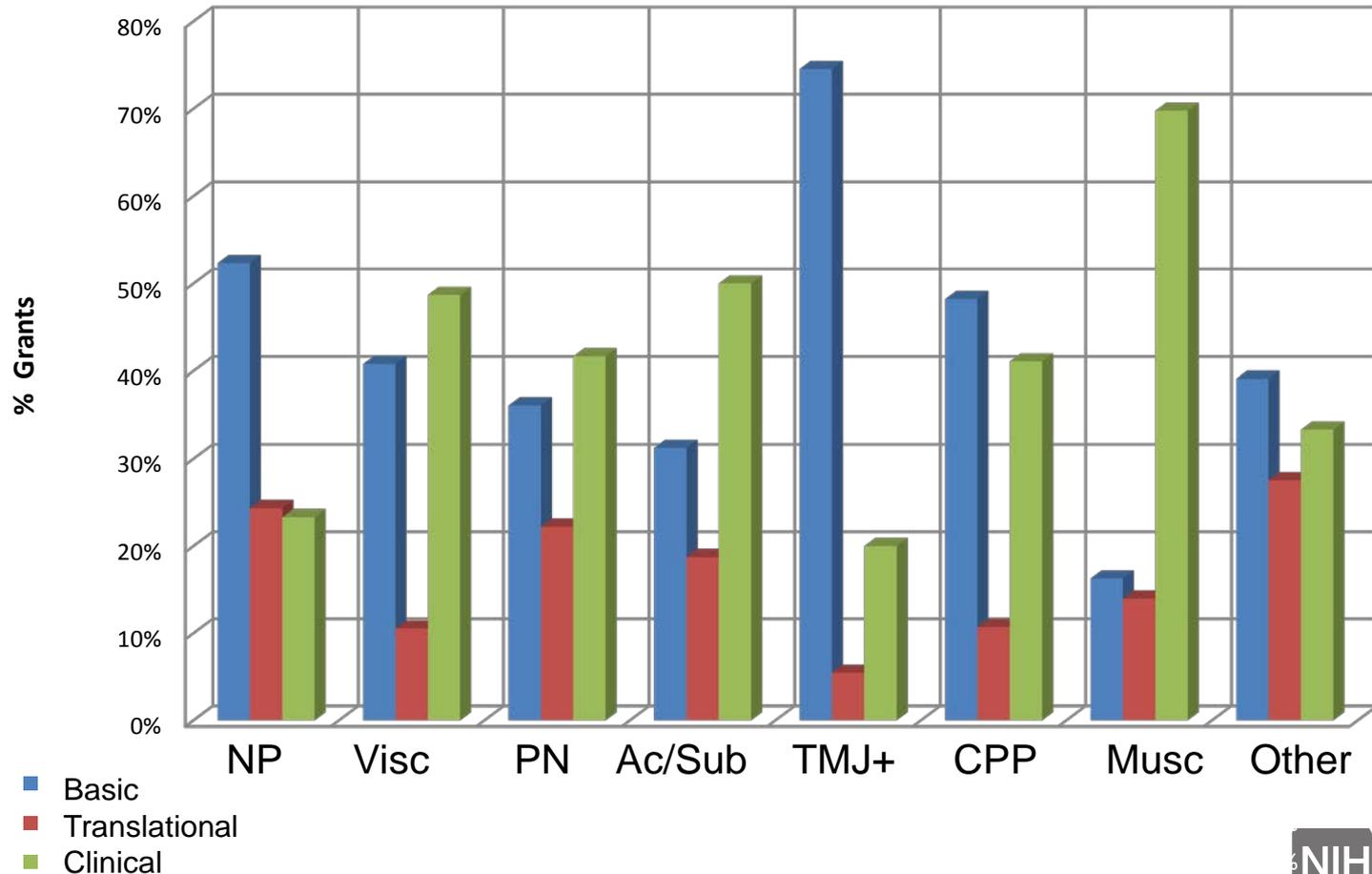


Tier 2 Categories	%
Neurobiological/Glial Mechanisms	20.4%
Pharm Mechanisms & Treatment	8.3%
Non-Pharm Mechanisms & Treatment	7.3%
Training in Pain Research	6.9%
Biobehavioral & Psychosocial Mechanisms	5.9%
Development of Animal & Human Pain Models	5.2%
Outcomes & Health IT for Decision-making	4.6%
Genetics & Genomics	4.2%
Unique Populations	4.2%
Mechanisms of Transition Phases	4.1%
Pain & Non-Pain Comorbidities	2.8%
Analgesic Development	2.7%
Device & Therapy Delivery Systems Development	2.3%
Comparative Effectiveness Research	2.0%
Diagnosis & Case definitions	1.9%
Epidemiology	1.8%
Pain Education	1.8%
Substance Use & Abuse/Addiction	1.7%
Medical Management	1.4%
Pain Prevention	1.4%
Other "Omics" of Pain	1.3%
Women's & Minority's Health Research	1.3%
Informatics, Databases, & IT Development	1.2%
Chronic Overlapping Conditions	1.2%
Sex & Gender Differences	1.1%
Analgesic Drug Safety	0.9%
Pain and Trauma	0.9%
Health Disparities & Access to Care	0.9%
Health Care Utilization	0.3%

Portfolio Analysis

Data: Pain Conditions

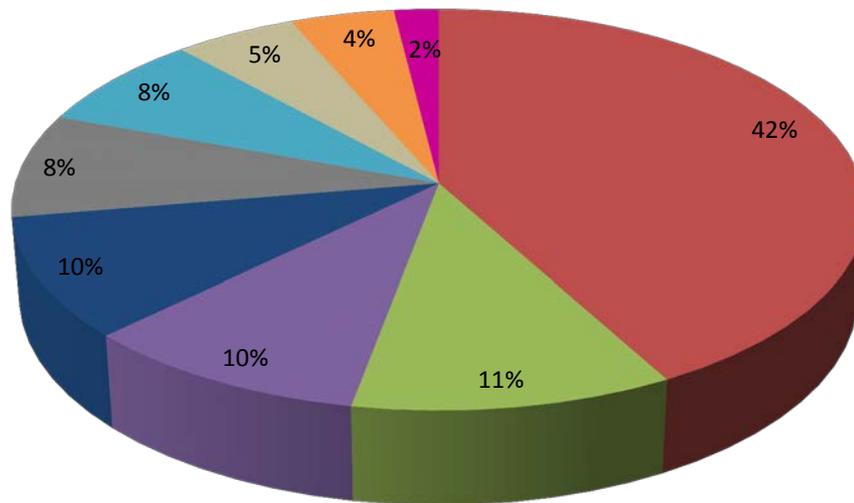
Pain Conditions Tier 1



Portfolio Analysis

Data: Overarching Themes

Pain Themes



- Pain Mechanisms,
- Basic to Clinical
- Disparities
- Training & Education
- Tools & Instruments
- Risk Factors & Causes
- Surveillance & Human Trials
- Overlapping Condition
- Use of Services, Treatments & Interventions

Portfolio Analysis

Data – Theme overlap example

Disparities	
Theme Overlap	
Grants with overlap/no overlap	79%/21%
Pain Mechanisms	19%
Training & Education	10%
Tools & Instruments	6%
Pain Mechanisms, Tools & Instruments	5%
Surveillance & Human Trials Use of Services, Treatments, & Interventions	4%
Basic to Clinical Overlapping Conditions Basic to Clinical, Pain Mechanisms Pain Mechanisms, Training & Education	3%
Risk Factors & Causes Risk Factors & Causes, Overlapping Conditions Surveillance & Human Trials, Use of Services, Treatments, & Interventions	2%
Others	1%

Challenges

- Target and goals
- Logistics of data collection
- Meaningful category selection for complex conditions
- Manual coding by multiple representatives
- Accommodate category overlap for grants
- Interpretation of large data sets
- Static or enduring

Outcomes

- Identification of shared interests: partner/collaborate
- Lack of redundancies
- Gaps
- Commonalities across gap areas
- Leverage/optimize advances

Next Steps

- Portfolio Analysis Interpretation: Report
- Portfolio Analysis Database
 - ❖ Accessible
 - ❖ Searchable
 - ❖ Enduring
 - ❖ Cost effective

IPRP Database



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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:

Funding Agency:

Funding Year:

or

Search Keyword:

 Search Now