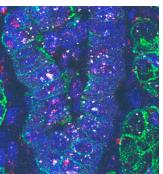
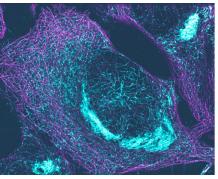
NIH Director's Welcome, Overview of NIH, and SMRB Charge

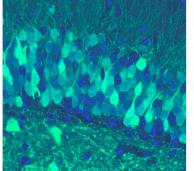
Scientific Management Review Board November 12, 2024



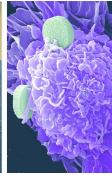














Monica M. Bertagnolli, MD
Director, National Institutes of Health



Topics

- Mission
- Overview of NIH
- The Health of the U.S. Population
- Two Priorities
- SMRB Charge

Turning Discovery into Health...for All



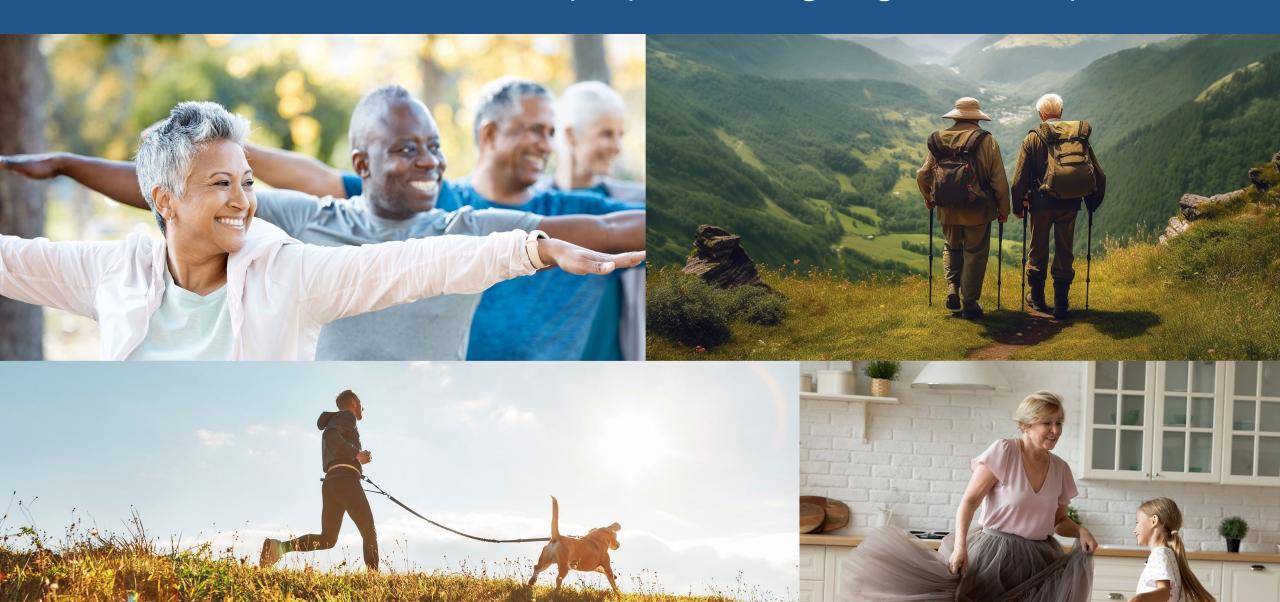
National Institutes of Health

NIH supports:

- Basic research...to fuel progress
- Translational research...to move basic discoveries forward
- Clinical research...to turn discoveries into prevention, treatments, and cures
- A creative and diverse workforce...since people are our most important resource
- A balanced research portfolio...to ensure high return on investment for U.S. taxpayers



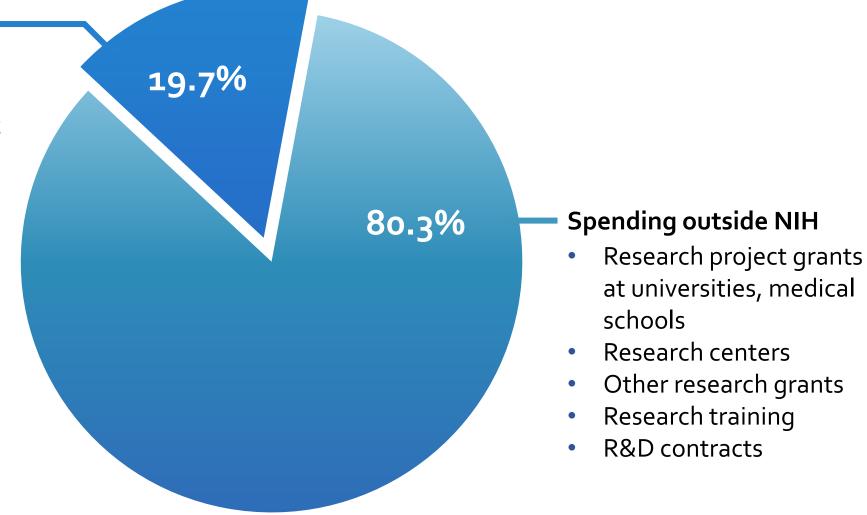
Our work is not finished when we deliver scientific discoveries, our work is finished when all people are living long and healthy lives.



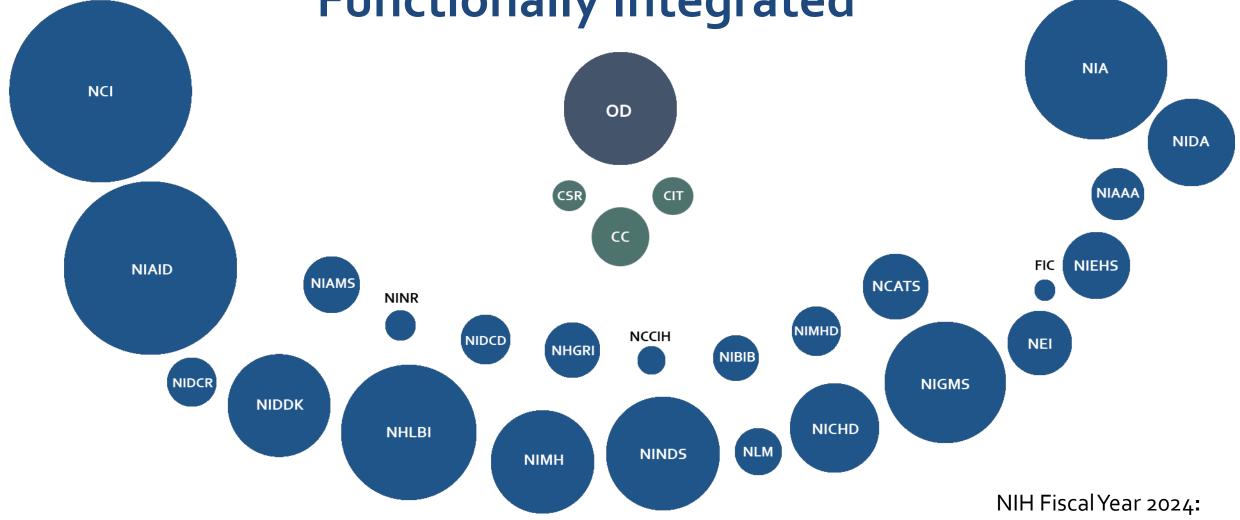
NIH FY 2024 Budget: \$47.4 Billion

Spending at NIH

- Projects conducted by NIH scientists
- Research management and support
- Other (administrative, construction, maintenance, operational costs)



NIH: Legally Decentralized but Functionally Integrated



Integrated Policies and Infrastructure

~\$47.4 Billion

Office of the Director (OD)

Division of Program Coordination, Planning and Strategic Initiatives

Office of Extramural Research Office of Intramural Research

All of Us Research Program

Immediate Office of the Director

Office of Management

Office of Science Policy

Office of Communications and Public Liaison

Office of Equity,
Diversity and
Inclusion

Office of Legislative Policy and Analysis

Executive Office

Office of the Ombudsman

NIH Ethics Office

Office of the Chief Information Officer

Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI)

Office of AIDS Research (OAR) Office of
Behavioral and
Social Sciences
Research (OBSSR)

Office of Data Science Strategy (ODSS) Office of Dietary Supplements (ODS)

Office of Disease Prevention (ODP)

Office of
Evaluation,
Performance, and
Reporting (OEPR)

Office of Nutrition Research (ONR)

Office of Portfolio Analysis (OPA)

Office of Research Infrastructure Programs (ORIP)

Office of Research on Women's Health (ORWH)

Office of Strategic Coordination (OSC)

Sexual & Gender Minority Research Office (SGMRO)

Tribal Health Research Office (THRO) Office of Administrative Management (OAM)

NIH Common Fund

 Multiple NIH Institutes and Centers collaborate in innovative research addressing high priority challenges for the scientific community and the NIH as a whole

> Regenerative Medicine Program: NCATS, NHLBI, NEI

Illuminating the Druggable Genome:

NCATS, NIDDK

Extracellular RNA Communication: NCI, NCATS, NIEHD

Transformative
High-Resolution
Cryo-EM:
NIGMS, NEI

Human BioMolecular Atlas Program: NHLBI, NIBIB, NCI

Somatic Cell Genome Editing: NINDS, NCATS, NCI, NHGRI

Human Virome Program: NCI, NCCIH

NIH Helping to End Addiction Long-term® Initiative (NIH HEAL Initiative®)

- Collaboration across 18 NIH Institutes and Centers
- Since 2018, >1,800 projects in all 50 states, including 300+ clinical trials.
- Clinical trials evaluating:
 - New medications and interventions for opioid use disorder and overdose
 - Non-addictive pain management strategies



INCLUDE (INvestigation of Co-occurring conditions across the Lifespan to Understand Down syndromE)

 Trans-NIH research initiative on critical health and quality-of-life needs for individuals with Down syndrome



NIH Extramural Program By the Numbers



Recruits 29,000 Reviewers



~80,000
Applications of many types reviewed



~39,000 Grad Students



~52K research project applications (~11K awards) in all 50 states and DC



>29,000 Postdocs



>2,700 NIH-Funded Institutions



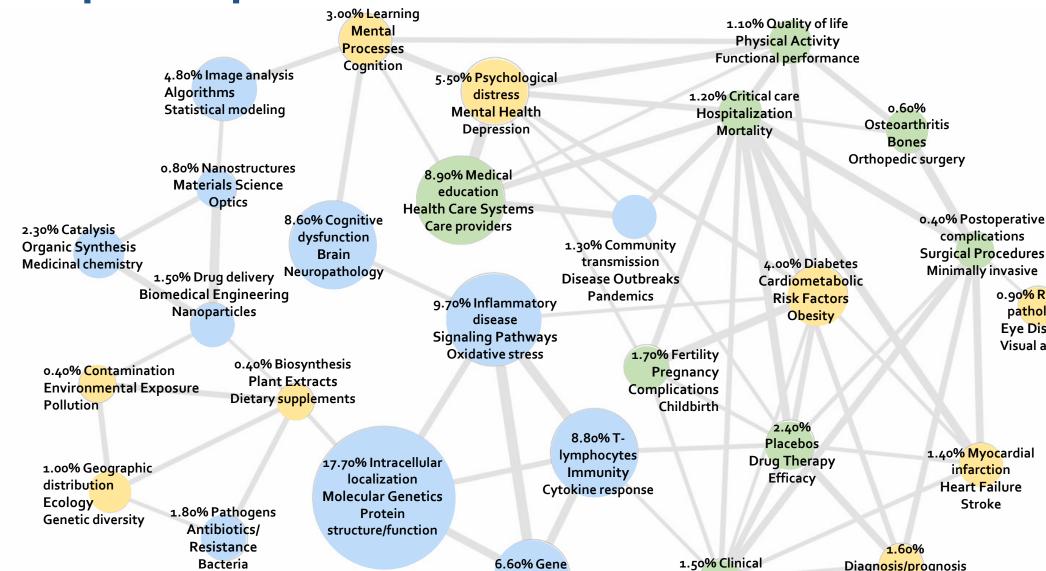
~350,000 NIH-Supported Researchers



171 Nobel Prize winners

Topic Map of the NIH Portfolio

% of all NIH-funded research



expression

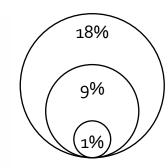
Tumorigenesis

Cell proliferation

manifestations

Differential Diagnosis

Case studies



o.90% Retinal

pathology

Eve Disease

Visual acuity

infarction

Stroke

Cancer Treatment

Metastasis

Edges, or lines between nodes, represent connections between topics. Thicker lines indicate greater content similarity between the connected topics. **Grant application** titles, abstracts, and specific aims were used to determine nodes and edges.

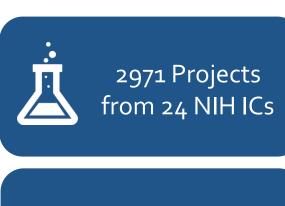


NIH Clinical Center: Our Unique Hospital



- Only admits patients as part of clinical research
- Doctors can refer patients or patients can selfrefer by visiting clinicaltrials.gov or clinicalstudies.info.nih.gov.
- About 1,600 clinical studies currently in progress
- 40 languages translated to support patients, staff and visitors

NIH Intramural Program by the Numbers











Health care system performance rankings Comparing 10 Nations

United States

Overall Rankings **10**th

Access to care **10**th

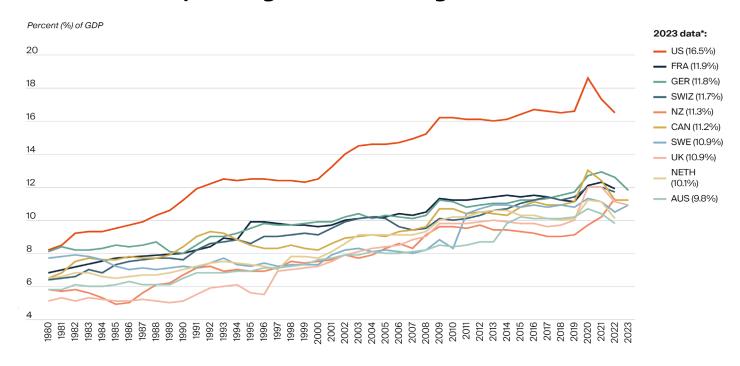
Care process 2nd

Admin Efficiency 9th

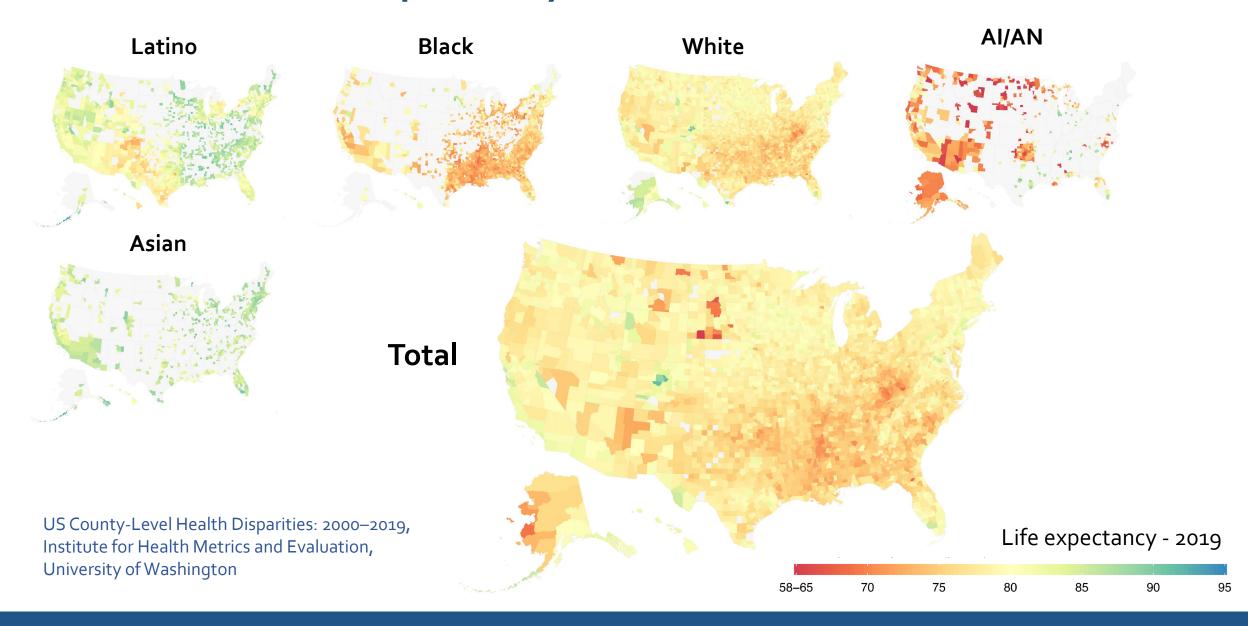
Equity 9th

Health Outcomes 10th

Health Care Spending as a Percentage of GDP 1980-2023



Estimated Life Expectancy at Birth



Communities Advancing Research Equity for Health

CARE for Health™

research into the clinical care environment **Engender trust** in science by addressing community needs

Conduct research addressing issues important to diverse communities, particularly those underrepresented in biomedical research

Achieve longitudinal collection of clinical data to address health across the lifespan

Reduce burden on providers using innovative data collection methods

Increase adherence to evidence-based care



Community-based primary care practices

National Library of Medicine: Envisioning A Platform for Biomedical Discovery and Data-Powered Health



Advance information science, analytics and data science

Maintain a **federated digital ecosystem.**



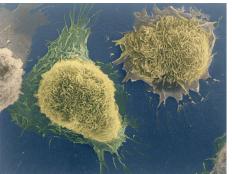
Offer access to data so that it may be used **as often as possible.**

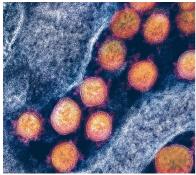
Provide **stability and functionality** for the broader biomedical data ecosystem.

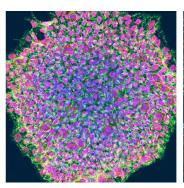
Initial Charge: SMRB Restart

The NIH requests that SMRB evaluate the current structure of NIH and propose changes that will enhance the ability of the Agency to fulfill its mission. To address this charge, the SMRB should:

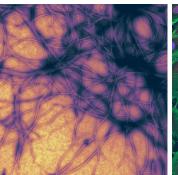
- 1. Reexamine the 2010 SMRB report, Deliberating Organizational Change and Effectiveness. Should we update the criteria for determining when organizational change should be contemplated?
- 2. Consider recent proposals from the House Energy and Commerce Committee and Senate HELP Committee
- 3. Reevaluate existing guiding principles for the process of deliberating proposed organizational changes, and
- 4. Based upon these updated criteria and principles, **provide recommendations** of any organizational change that will enhance the ability of the Agency to fulfill its mission.

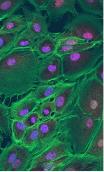














NIH

Turning Discovery Into Health

