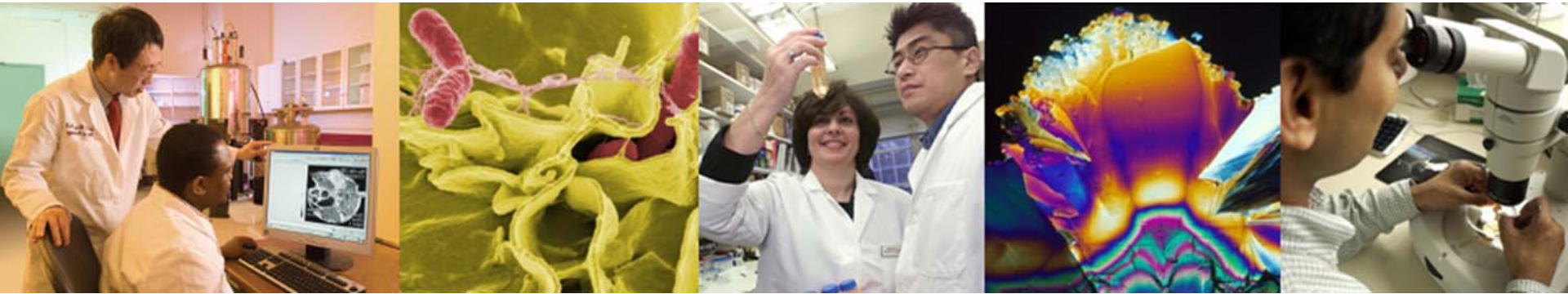


# NIH: The View from 10,000 Feet

*NIH Tribal Consultation Advisory Committee Meeting*

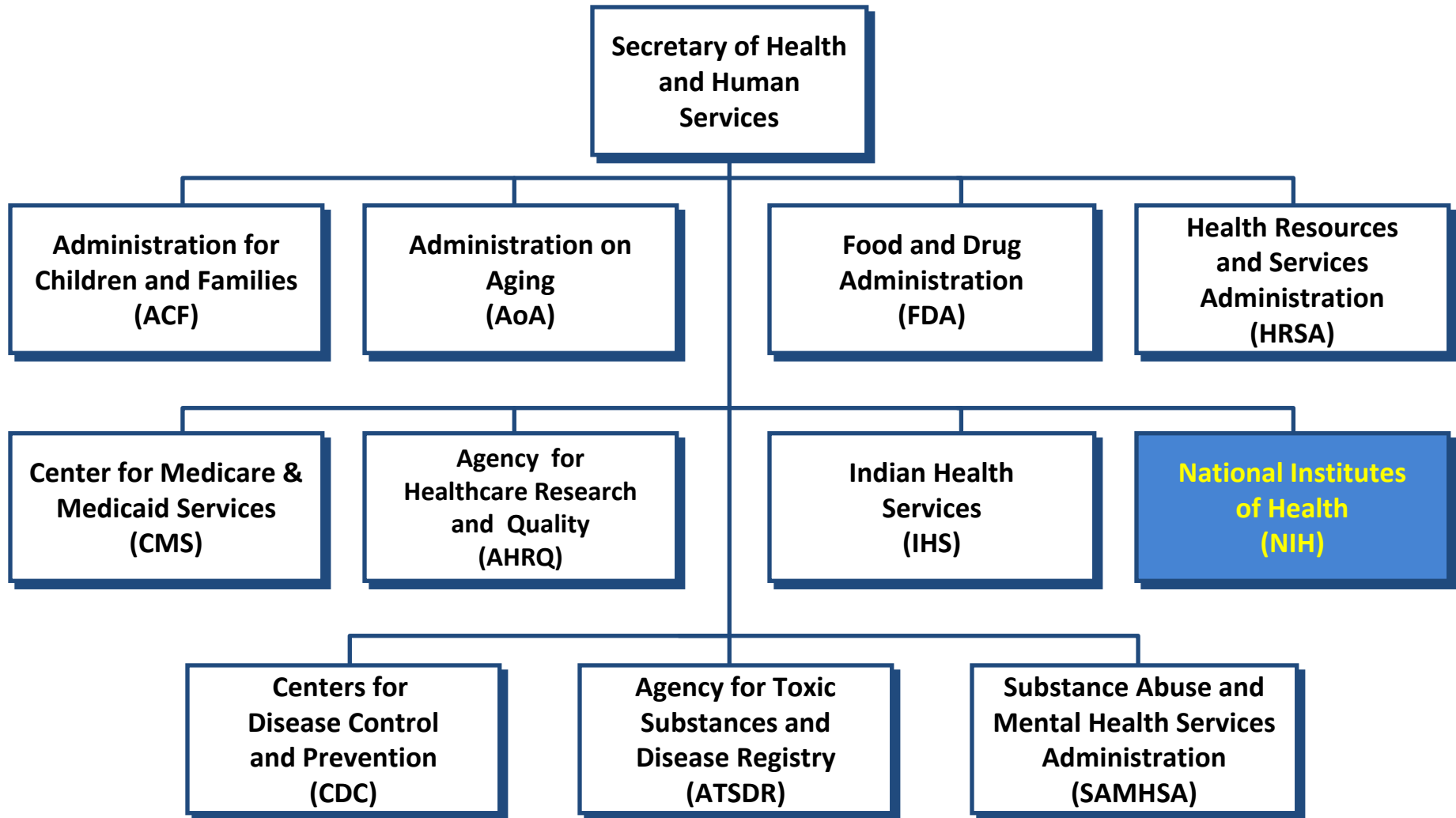
*September 29, 2015*



**Lawrence A. Tabak, DDS, PhD**  
Principal Deputy Director, NIH  
Department of Health and Human Services



# U.S. Dept. of Health & Human Services



# Francis S. Collins, MD, PhD

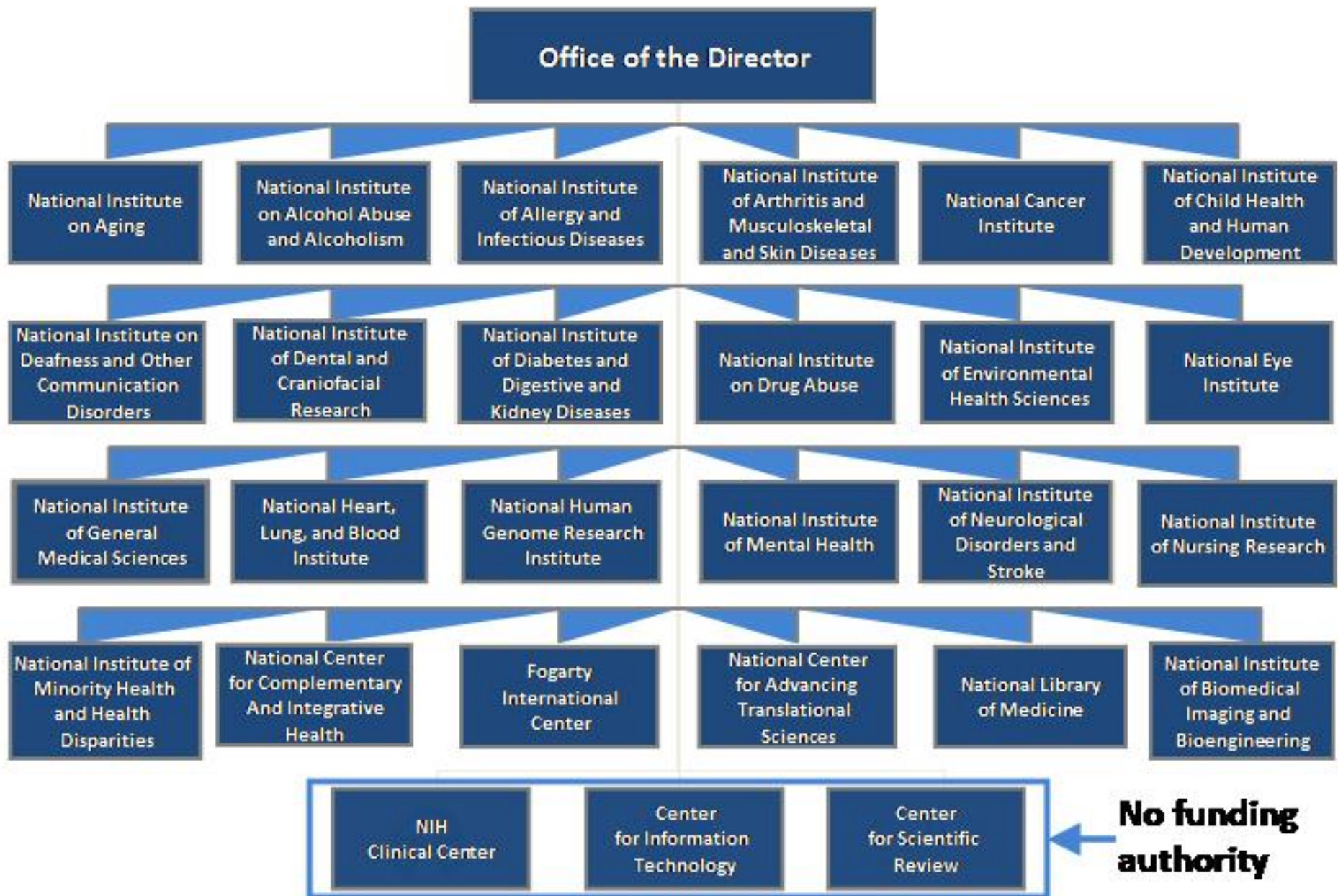
## *16th Director of the National Institutes of Health*



- A physician-geneticist noted for his landmark discoveries of disease genes and his leadership of the international Human Genome Project
- Served as director of the National Human Genome Research Institute
- An elected member of the Institute of Medicine and the National Academy of Sciences
- Awarded the Presidential Medal of Freedom in November 2007; received the National Medal of Science in 2009

***No one can whistle a symphony; you need a team to make that kind of music!***

# ***National Institutes of Health***







You are  
here



WINNING  
*the*  
FUTURE

# NIH: Steward of Biomedical & Behavioral Research for the Nation

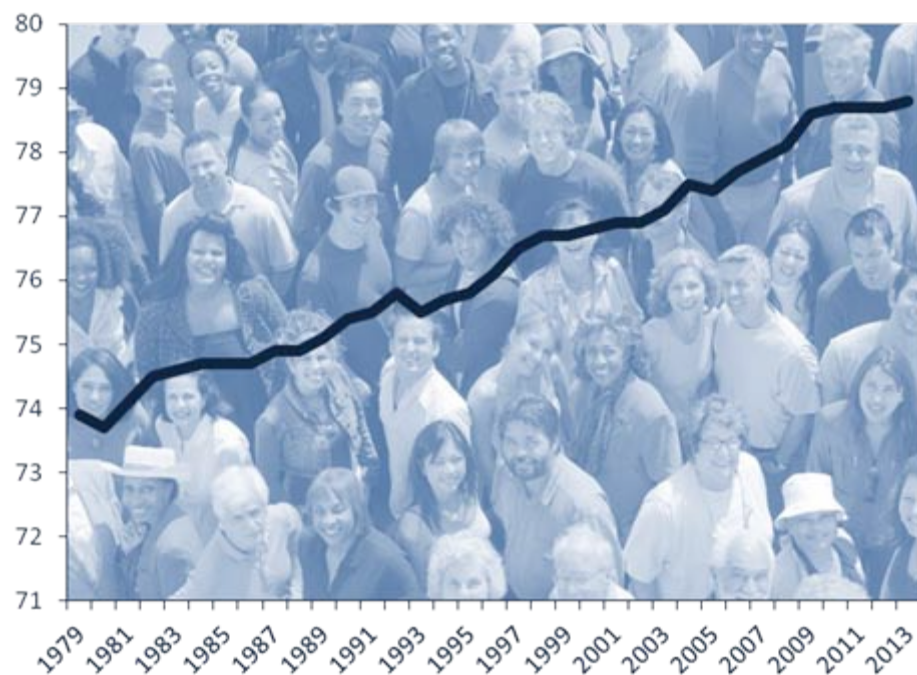


*NIH's mission is to seek **fundamental knowledge** about the nature and behavior of living systems...*

*...and the **application of that knowledge** to enhance health, lengthen life, and reduce illness and disability.*



# NIH's Impact on U.S. Health and Medicine



Cardiovascular disease death rates have fallen > 70% in the last 60 years

Cancer death rates now falling ~1% per year; each 1% drop saves ~\$500 billion

HIV therapies enable people in their 20s to live to age 70+

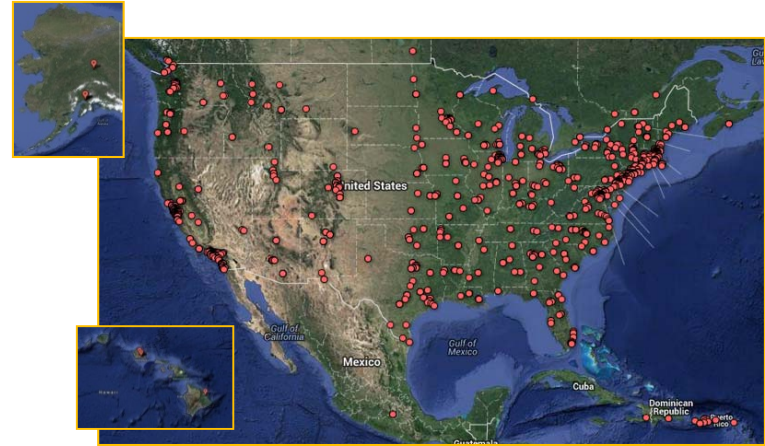
# Understanding the Dual Nature of NIH



## Intramural Research

- Approx. 6,000 scientists
- Approx. 11% of NIH's budget

***All of NIH Fosters  
communication of  
medical information.***



## Extramural Research

- Supports research and training of scientists located in universities, medical schools, hospitals, and research institutions throughout the United States and overseas
- >2,500 institutions
- >400,000 scientists & research personnel
- Approx. 70,000 applications and 40,000 awards annually
- Approx. 81% of the NIH budget



# Understanding NIH Basics

- What does NIH Fund?
  - Research projects of high scientific caliber
    - NIH does not offer grants to pay for service delivery
  - Investigator initiated research
  - Unique research projects
- Who can apply?
  - Scientists at various career stages as permitted by the funding opportunity announcement
  - Public or private, for profit and not for profit organizations, including federally recognized tribal organizations.

# Key Elements of NIH's Approach to Supporting and Conducting Biomedical Research

- More than 60% of NIH funding is used to support ideas from researchers (investigator-initiated research)
  - Research to improve public health outcomes
- NIH develops major initiatives to foster the acceleration of knowledge
- Funding decisions are made through consideration of:
  - Scientific merit as determined by rigorous peer review
  - Scientific opportunity
  - Public health needs
  - The current portfolio of funded work





## Researcher



Initiates grant proposal:

- New project
- Continuing project

NIH  
Grant  
Proposal

## Scientific Review Panel



Scientists evaluate  
scientific merit of grant  
proposal

## Program Officer



Main contact for applicant  
Helps interpret review results

## Institute National Advisory Councils



Assess programs  
Approve applications  
Public members



## Congress

## Institute Director



Makes final decision  
Allocates funds  
Provides annual justification  
to Congress

Funds

# Key Elements of NIH's Approach to Supporting and Conducting Biomedical Research

- NIH ensures that the most rigorous and innovative science is supported
- Each year, NIH:
  - Issues ~1,000 Funding Opportunity Announcements
  - Reviews 70,000 – 80,000 applications
  - Recruits ~22,500 reviewers
  - Runs ~2500 review meetings



# Key Elements of NIH's Approach to Supporting and Conducting Biomedical Research

- Support training and career development, across the U.S. and around the world
- Encourage diversity of research participants *and* the biomedical research workforce
- Solicit broad input from all stakeholder groups when setting research priorities



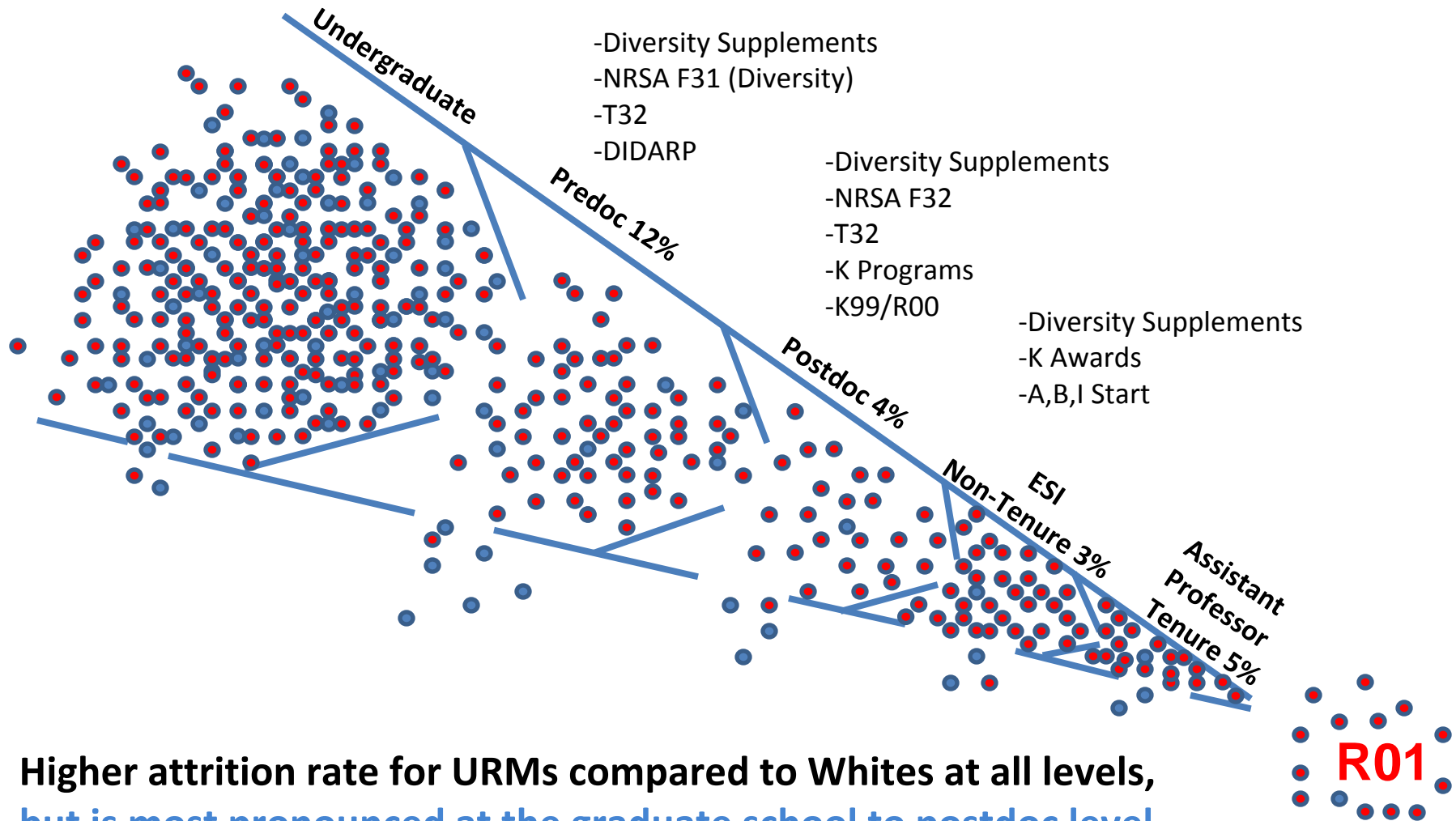


# **Enhancing the Diversity of the NIH-Funded Workforce through Training and Infrastructure Development**



# The Leaky Pipeline!

## Race & Ethnicity Disparities in Neuroscience



**Higher attrition rate for URMs compared to Whites at all levels,  
but is most pronounced at the graduate school to postdoc level**

Report of the Advisory Committee to the NIH Director Working Group on Diversity in the Biomedical Research Workforce, 2012.

# BUILD, NRMN, and CEC



**Building Infrastructure Leading to Diversity (BUILD):** provides support to undergraduate institutions (and their pipeline partners) to design, implement, and evaluate innovative strategies to:

- Transform undergraduate research training
- Address barriers to participation
- Enhance faculty development
- Strengthen institutional infrastructure

**National Research Mentoring Network (NRMN):** provides support for the development of a national network of mentors and mentees from all disciplines relevant to the NIH mission to enhance training, preparation, and career development of individuals from diverse backgrounds in biomedical research.

- Develops best practices for mentoring and provides mentor training
- Provides mentoring, networking, professional development, opportunities for individuals from undergraduate to early faculty level

**Coordination and Evaluation Center (CEC):** *coordinates* consortium-wide activities, *evaluates the efficacy* of the training and mentoring approaches developed by the BUILD and NRMN awardees, and *disseminates information* to the broader research community to transform biomedical research training and mentoring nationwide.

# Native American Research Centers for Health (NARCH)

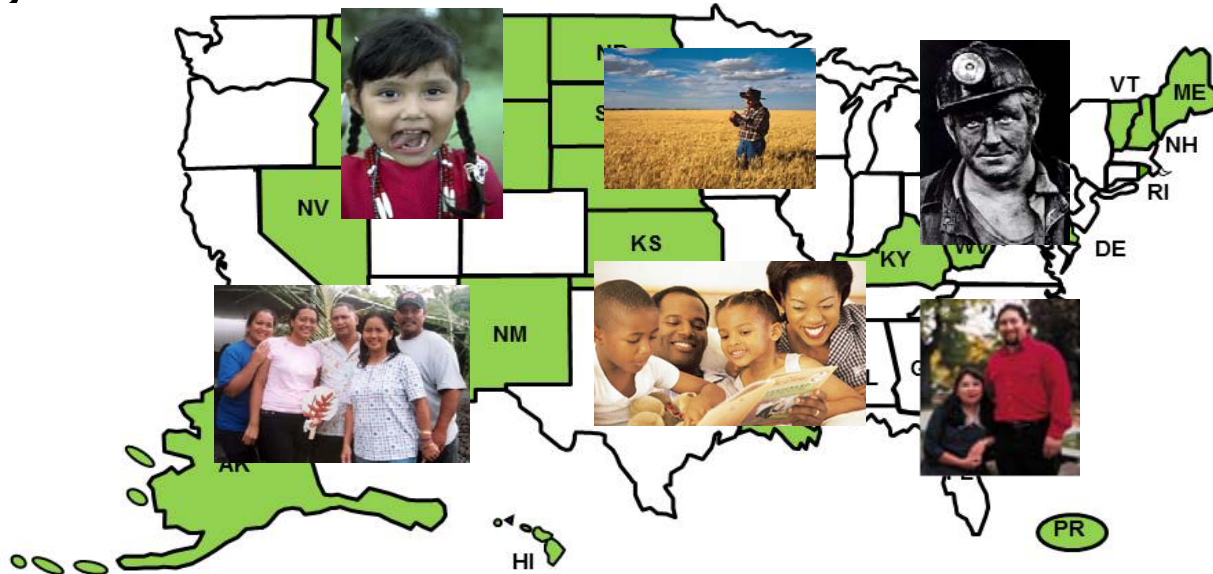
- Supports collaborations between federally recognized American Indian/Alaska Native (AI/AN) Tribes/Tribal organizations and research intensive academic institutions
- Promotes the training of a cadre of AI/AN scientists and health professionals and supports health research projects prioritized by Tribal communities





# IDeA Networks of Biomedical Research Excellence (INBRE)

- A funding opportunity under the IDeA program
- Supports the development of a statewide multi-disciplinary research network of doctoral degree-granting, undergraduate institutions and community colleges



# The Native Investigator Development Program

- Launches careers for Native scholars to support independently funded researchers in health sciences and policy to:
  - Establish mentoring relationships
  - Improve the methodological skills of Native investigators
- Requires each participant to submit a competitive application to the NIH
- **48 scholars** supported to date
  - Produced **362 published articles**
  - Secured **\$68 million** NIH funding



# Research Opportunities at the NIH

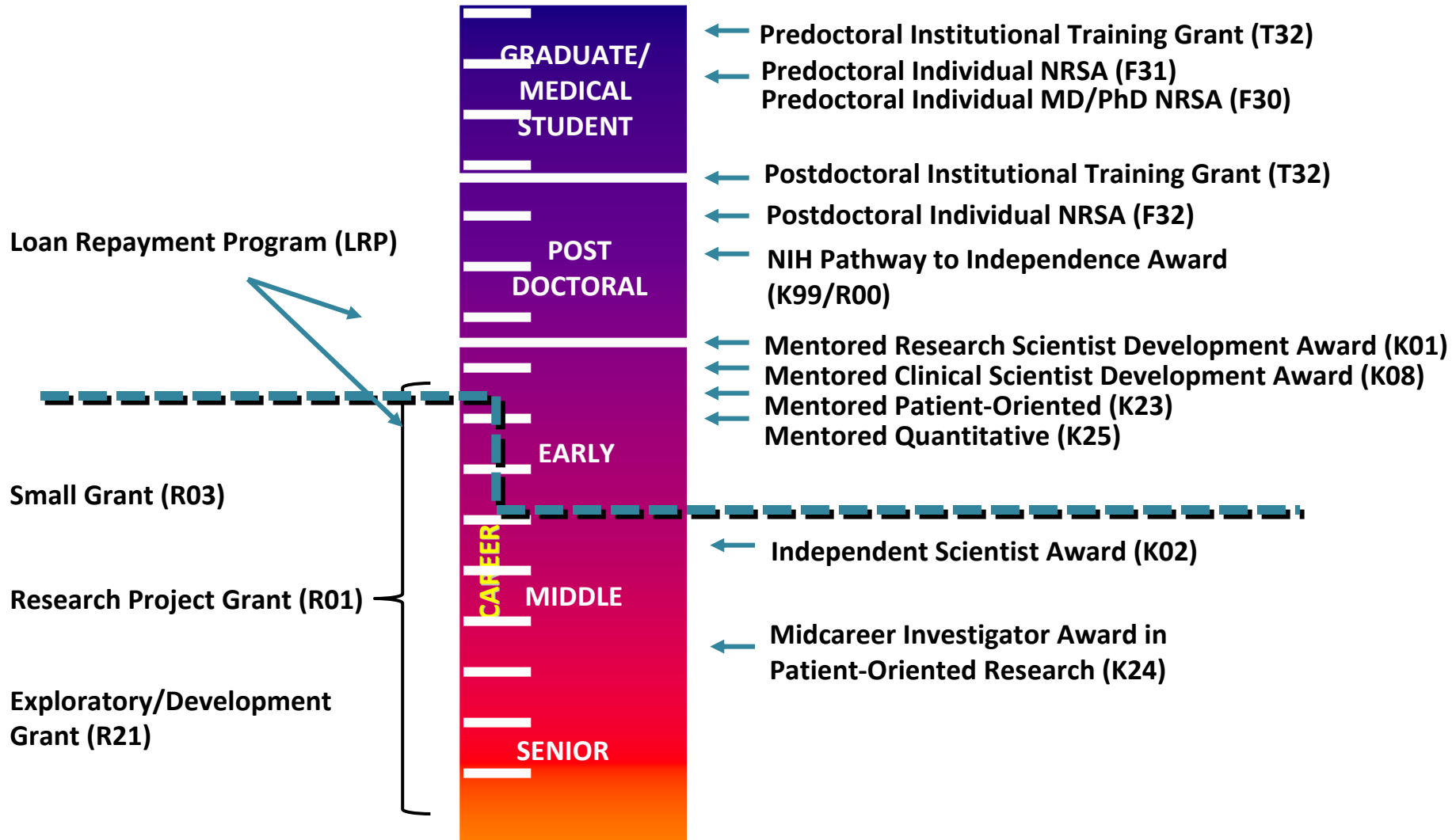
- Summer Internship Program (SIP)
  - High school, college, graduate, professional students perform research supervised by NIH investigators
- Undergraduate Scholarship Program (UGSP)
  - Provides support of up to \$20,000 per year to eligible undergraduates
- Postbaccalaureate Intramural Research Training Award (IRTA)
  - Graduates planning to apply to graduate or professional school spend 1-2 years working with investigators at the NIH
- Graduate Partnerships Program (GPP)
  - Dissertation research (all or part) is conducted at NIH

<https://www.training.nih.gov/programs>

# NIH Funding Mechanisms Throughout Career Development

Approx. Stage of Research  
Training Career Level

Funding Opportunity







# NIH...

[Lawrence.Tabak@nih.gov](mailto:Lawrence.Tabak@nih.gov)

## Turning Discovery Into Health

