

**Impact of 50 years of U.S.-Japan S&T Cooperation  
in Science and Engineering Research and Education  
from the Japanese Perspective**

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# President Roosevelt and Dr. Bush



President Franklin D. Roosevelt

**Letter**



**Report**



Dr. Vannevar Bush

**“Science, the Endless Frontier”**

# Legacies of V. Bush

- 
1. Foundation of NSF
  2. Extramural Funding of NIH
  3. Science Advisor to the President
- 

**Importance of Science Policies  
for the Government**

# US-Japan Cooperative Science Program

- 1963 Three Proposals
  - Exchange of Scholars
  - Exchange of Scientific Information and Materials
  - Cooperative Research Project
- 1964 R&D Cooperation in the Utilization of Natural Resources
- 1965 US-Japan Cooperative Medical Science Program
- 1979 R&D Cooperation in Energy Related Area
- 1980s~ Numerous Programs such as Ocean Drilling, Earthquake Engineering, Robotics etc

# US-Japan Cooperative Medical Science Program

## ● Panels and Boards

- Acquired Immunodeficiency Syndrome Panels
- Acute Respiratory Infection Panels
- Cholera and Other Bacterial Enteric Infections Panels
- Environmental Genomics and Carcinogenesis Panels
- Hepatitis Panels
- Immunology Boards
- Nutrition and Metabolism Panels
- Parasitic Diseases Panels
- Tuberculosis and Leprosy Panels
- Viral Disease Panels

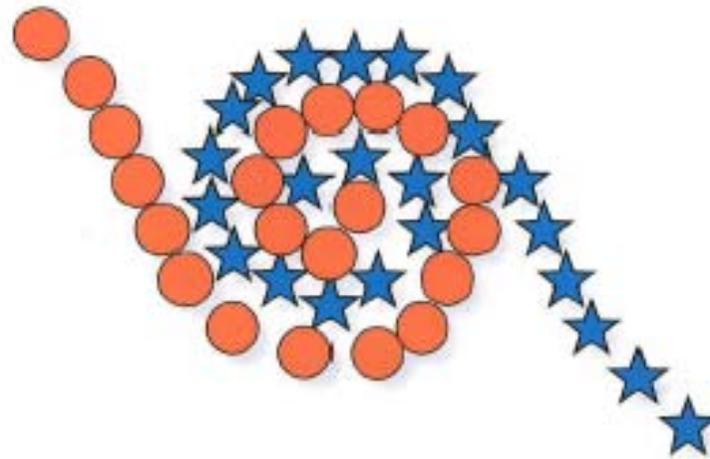
## ● Symposium on Selected Topics

## ● Joint Delegations Meeting

# United States – Japan Cooperative Medical Science Program

*40<sup>th</sup> Anniversary Report*

**1965–2005**



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

U.S. DEPARTMENT OF STATE

MINISTRY OF FOREIGN AFFAIRS

MINISTRY OF HEALTH, LABOUR AND WELFARE

MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY



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# US-Japan Dialogue on the Role of Science and Technology in Society Into the New Millennium:

## An Agenda for Future US-Japan Scientific & Technical Cooperation

Report of a Joint US-Japan Dialogue Group

Submitted to the Governments of the  
United States and Japan

July 2001

# An Agenda for Future US-Japan Scientific & Technologies Cooperation

## I . Mission-oriented Research

- Health and Medicine
- Freshwater Management
- Natural Disaster Mitigation
- The Environment
- Energy
- Societal Aspects of Inform. Tech.

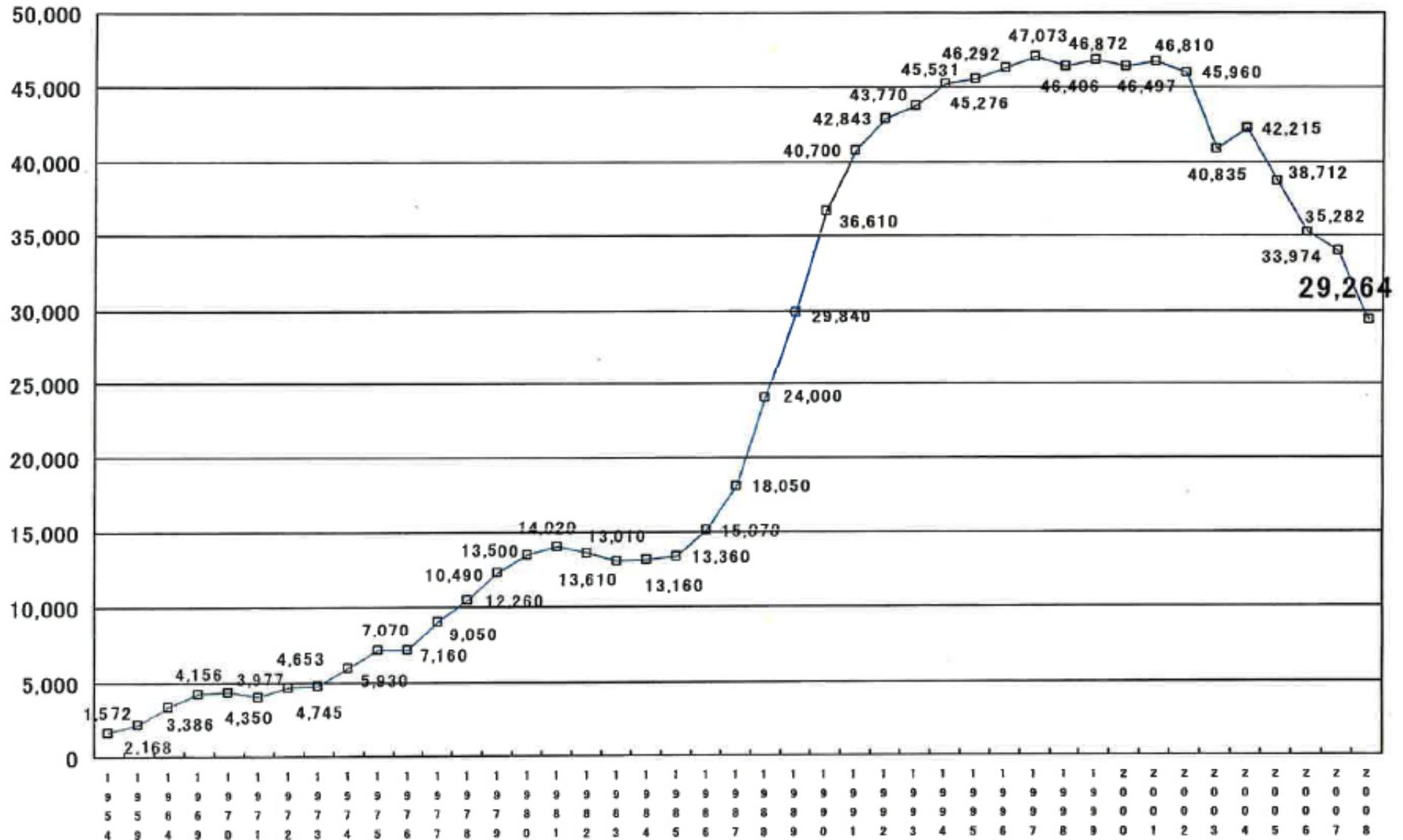
## II . New Frontier s of Science and Technology

- Earth Science
- The Structure of Matter
- Young Scientists for the Future
- Space Science
- Life Science

## III. Societal Context of Science

- S&T in Policy Decision Making
- Ethical and Social Responsibility of S&T
- Sci Education and Public Understanding of S&T

# Number of Japanese Students in American Universities



Open Doors

# Some Issues for Future USJCSP

- Importance of Basic Science and Fundamentals of Technology
- Bilateral vs. Multilateral Cooperation  
Bilateral + Multilateral (on Demand)
- Continuing Cooperation
- Revitalization of Exchange of Students and Researchers

# Health and Medicine —Life Innovation—

## ● Infectious Diseases

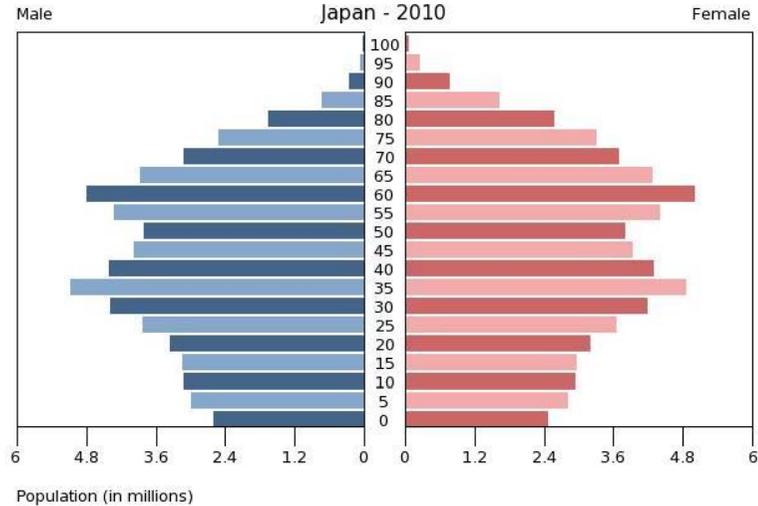
- AIDS, Tuberculosis, Malaria
- Pandemia of Influenza etc
- Drug-Resistant Infection etc

## ● Age-Associated Diseases

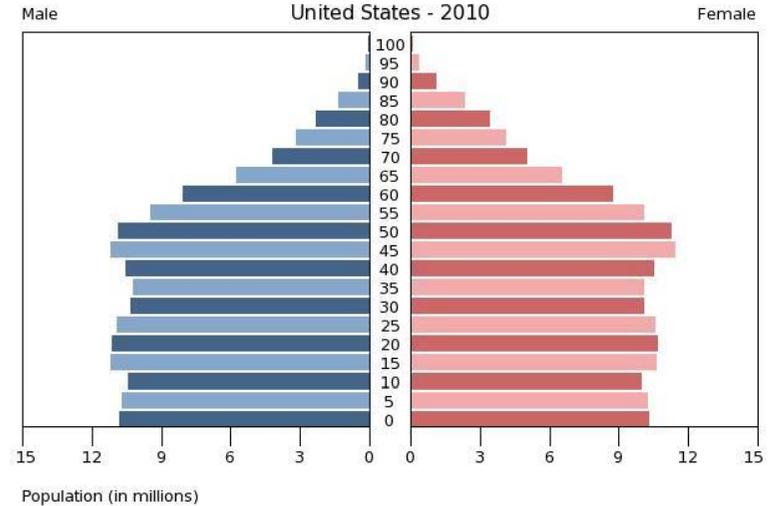
- Cancer
- Cardiovascular Diseases
- Diabetes, Obesity, Metabolic Syndrome
- Alzheimer Disease
- Osteoporosis

# Population Pyramids of Japan and USA in 2010 and 2030

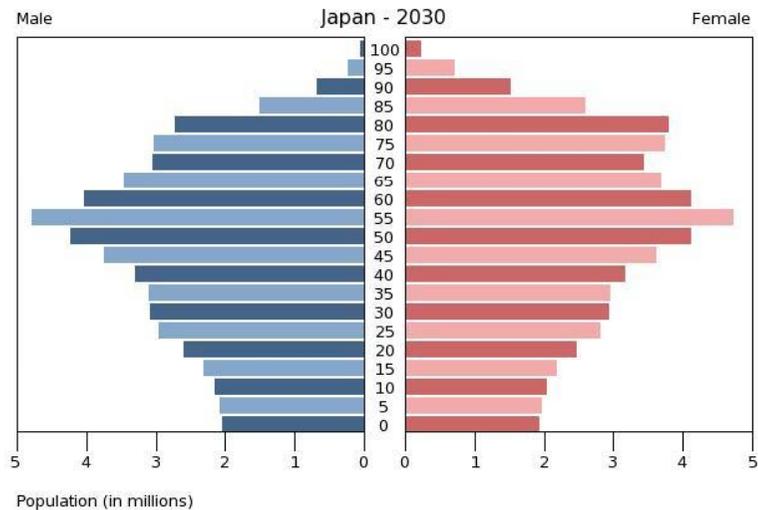
**Japan**  
**2010**



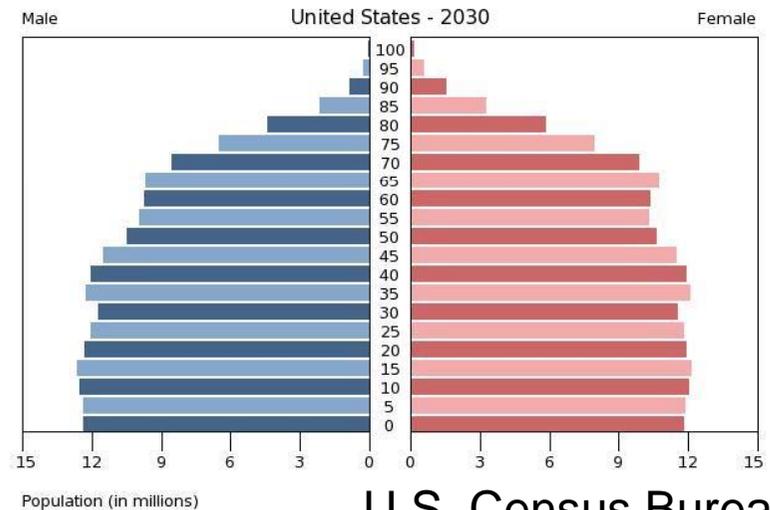
**USA**  
**2010**



**2030**

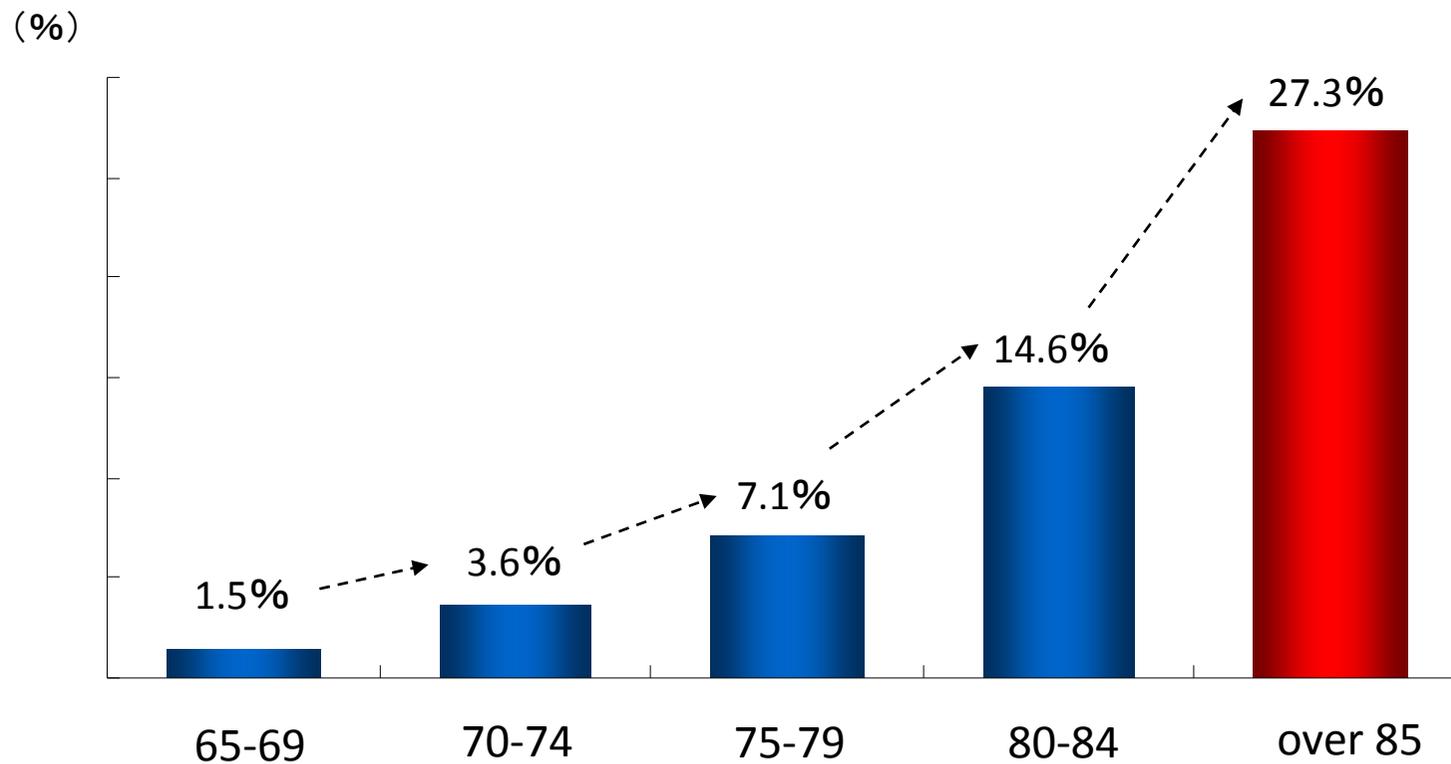


**2030**

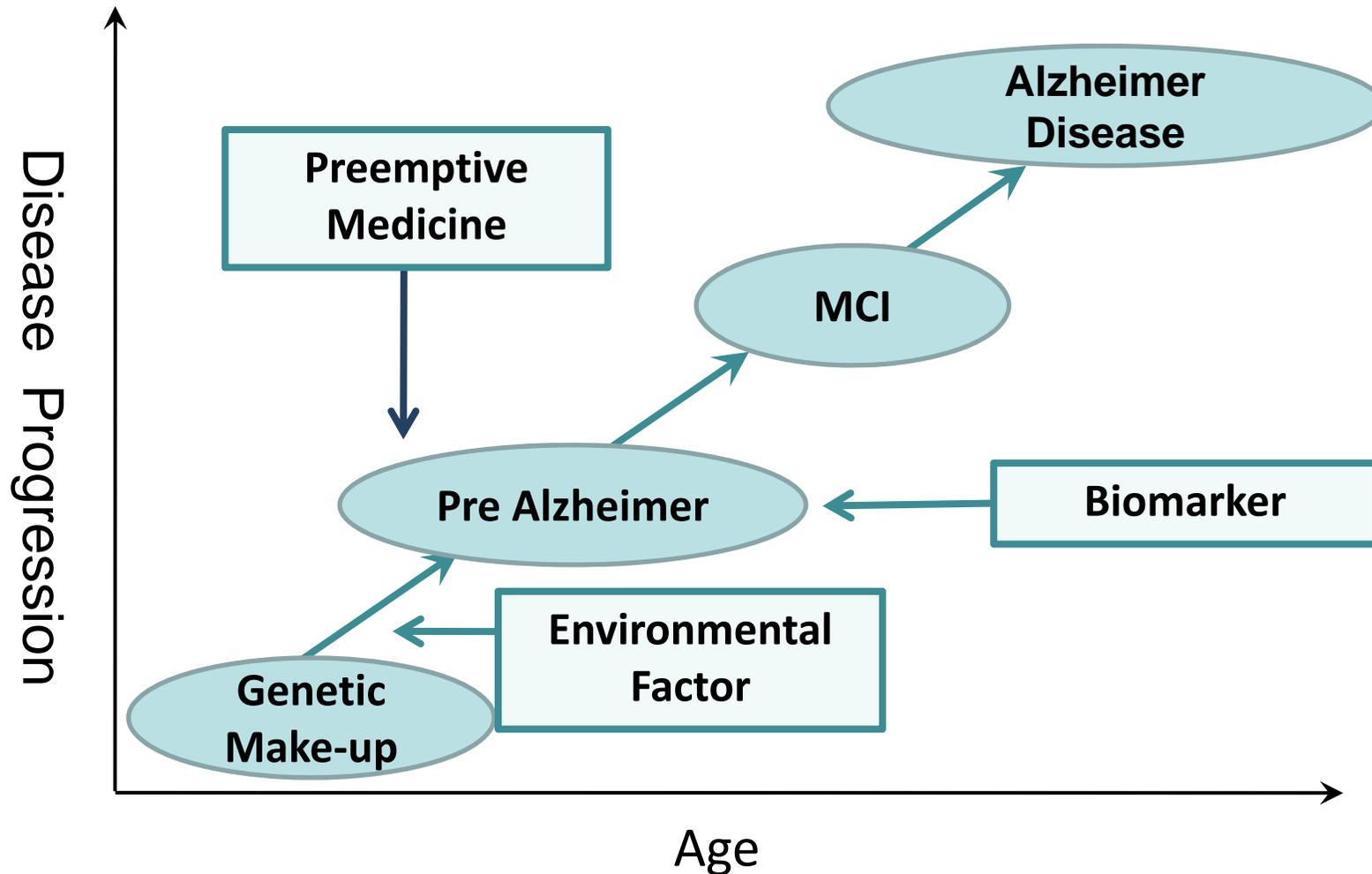


U.S. Census Bureau

# Prevalence of Dementia in Different Age Group



# Progression of Alzheimer Disease and Preemptive Medicine



# Science of Aging

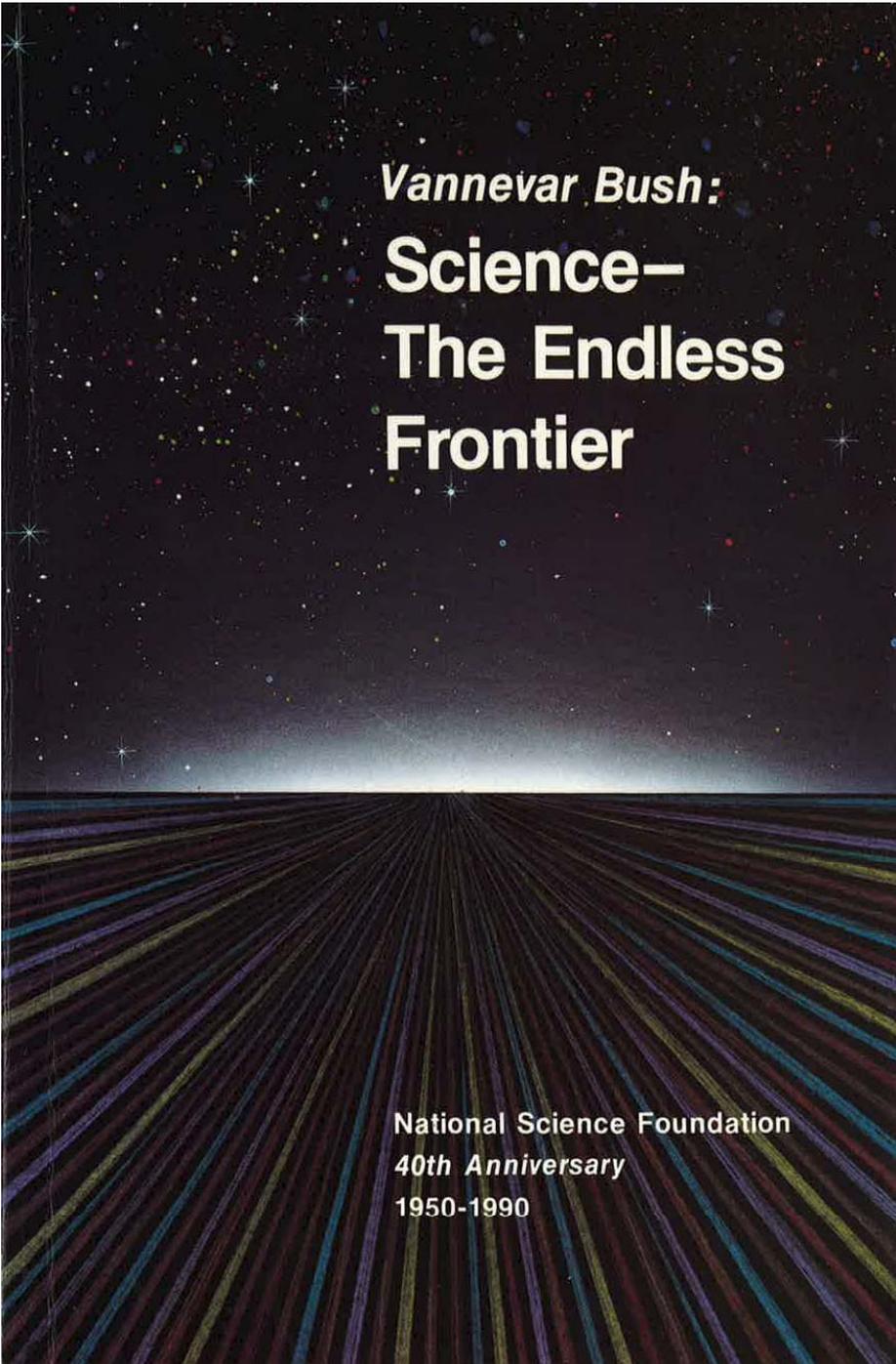
- Biology of Aging and Age-associated Diseases  
Preemptive Medicine
- Aging and Mental and Cognitive Function
- Social and Economic Aspects of Aging

# The Environment — Green Innovation —

- Carbon Dioxide; Inhibition of Emission and Sequestration
- Renewable Energy
- Global Warming
- Biodiversity
- Endocrine Disrupters
- Freshwater Management

# Possible New Sciences

- Materials and Nanoscience
- Psychological, Behavioral, Mental and Evolutionary Approaches to
  - Violence, War
  - Altruism, Cooperative Behavior
  - Too Much Worldly Desire

The background of the cover is a dark, starry sky with a horizon line. Below the horizon, there are numerous colorful, parallel light streaks in shades of blue, purple, and green, creating a sense of depth and perspective. The text is overlaid on this background.

*Vannevar Bush:*  
**Science—  
The Endless  
Frontier**

National Science Foundation  
*40th Anniversary*  
1950-1990