



Medical Policy Formulation in NASA

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NASA Chief Health and Medical Officer

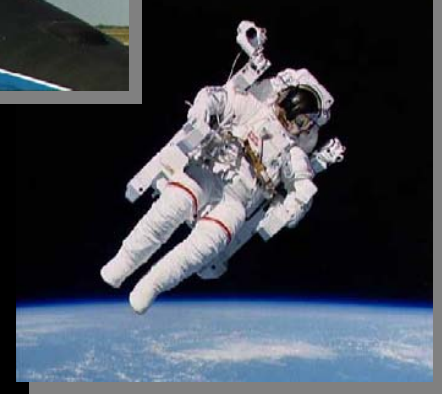




Stakeholders

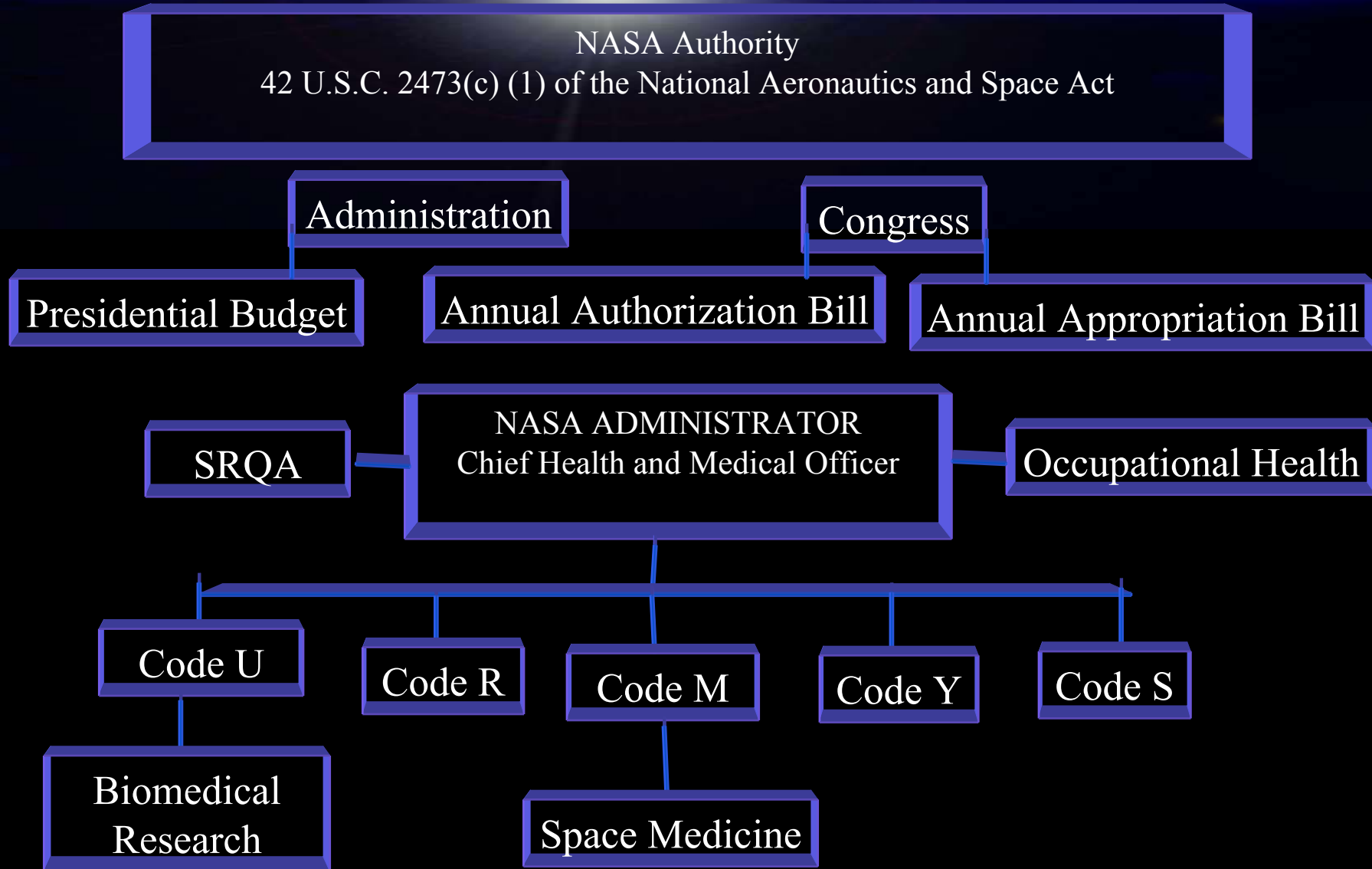


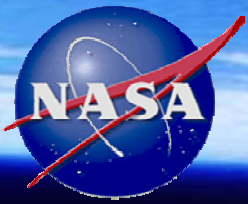
NASA work force,
Industry, Private Sector,
International Partners, Government,
Public, Global Community





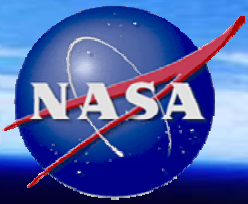
Flow of Authority for Medical Policy at NASA





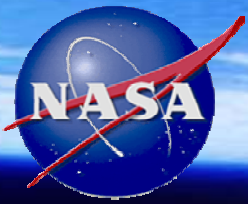
Policy Makers

- Medical Policy Board (HQ)
 - *Medical policy for space medicine, atmospheric flight, and occupational health*
 - *Permanent medical waiver authority*
 - *Reviews/approves selection and retention medical standards*
 - *Review of salient space medicine issues with recommendations to the Office of Space Flight as appropriate*
 - *Reviews health related research requirements and deliverables*
- Aerospace Medicine Board (JSC)
 - *Clinical board*
 - *Temporary medical waiver authority, recommends permanent waivers*
 - *Develops medical standards*
- Health Board (HQ)
 - *CHMO chairs*
 - *Occupational Health forum*

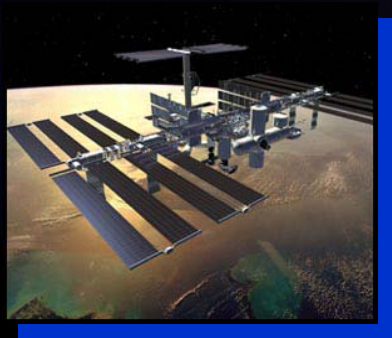


Policy Makers

- **Medical Policy Board Membership**
 - *NASA physicians*
 - *National Institutes of Health*
 - *DoD*
 - *Agency for Health Care Research and Quality*
- **Aerospace Safety Advisory Panel**
- **Aerospace Medicine and Occupational Health Advisory Committee**
 - *NASA Advisory Council*
- **Institute of Medicine**



NASA Medical Policy Process for Space Medicine



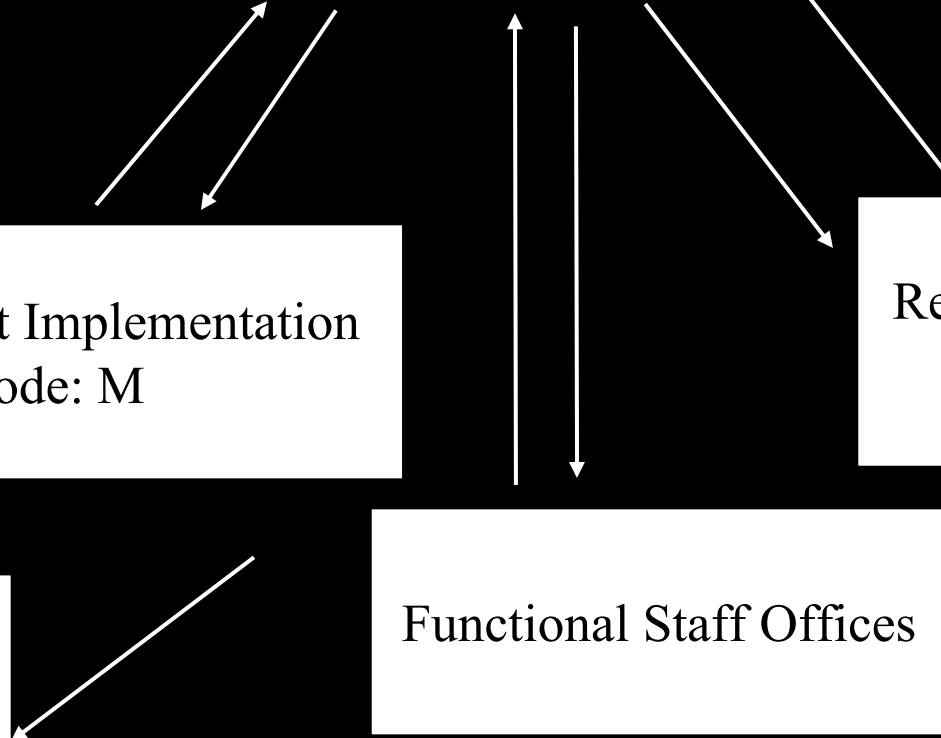
Policy, Review &
Oversight
OCHMO

Space Flight Implementation
Code: M

Research Codes:
U,R,S,Y

Functional Staff Offices

Crewmembers
NASA Workforce



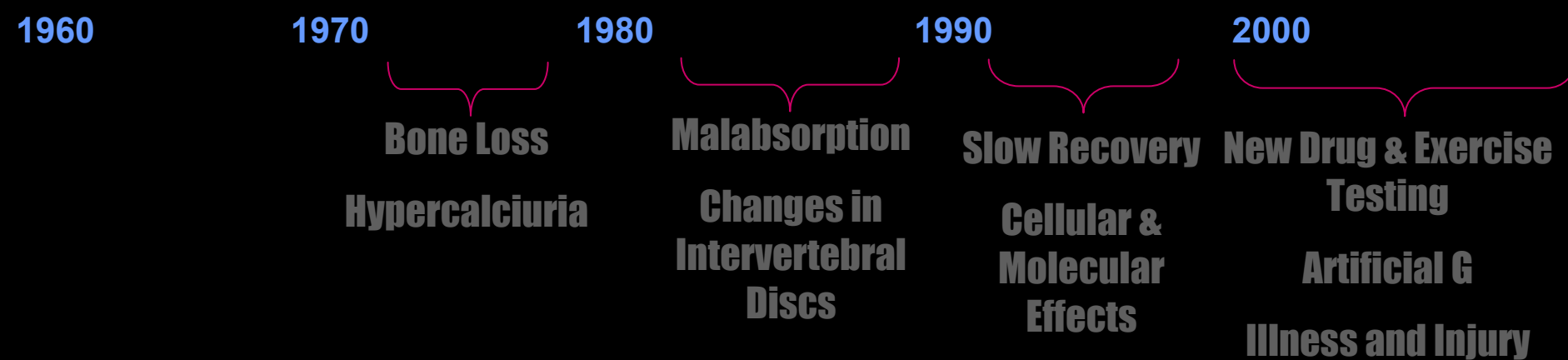


Evidence Acquisition for Space Medicine

Is There
A Problem?

Defining
the Problem

Countermeasures Found
Not Effective

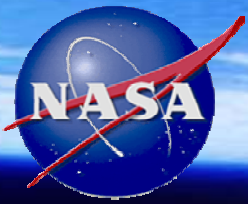




Evidence Base for Space Medicine

- Types of examinations
 - *Selection*
 - *Retention*
 - *Pre-flight*
 - *Post-flight*
 - *Post-retirement*
- Components of examinations
 - *Physical exam*
 - *Laboratory analysis*
 - *Imaging*
 - *Special studies*

**Longitudinal Study of
Astronaut Health**



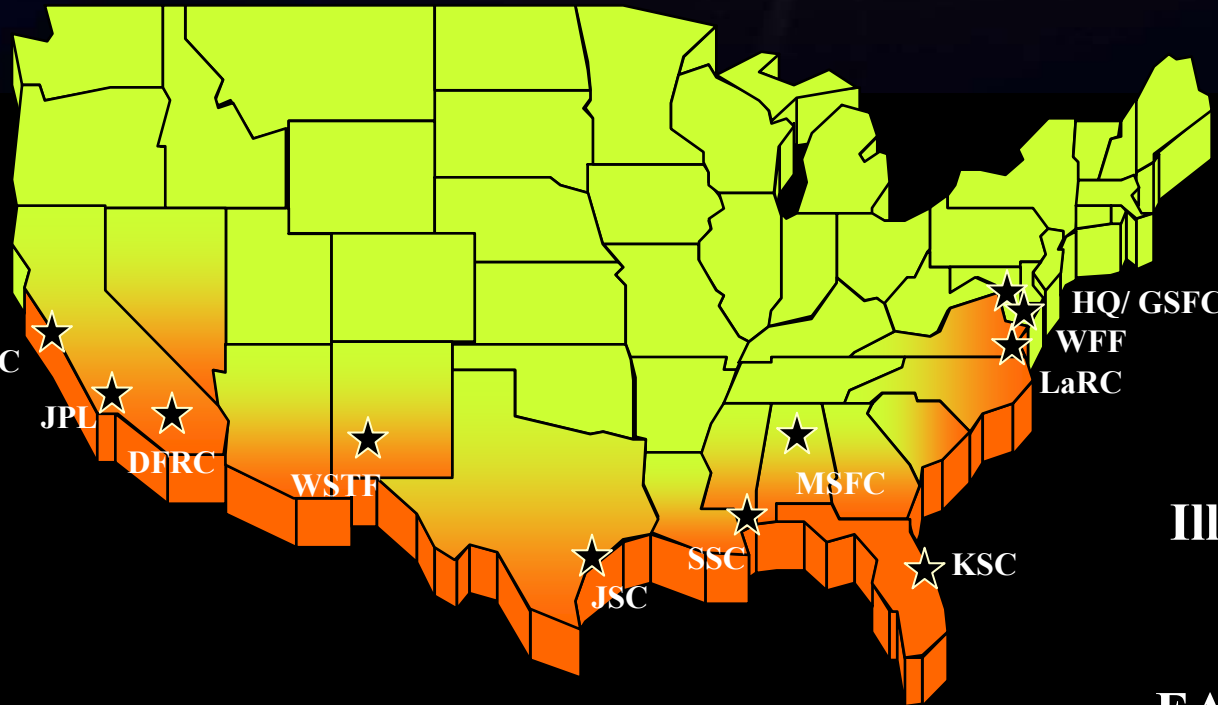
Evidence Base from ground analogs





Evidence Base for Occupational Health

18,500 Civil Service Employees Agency-Wide



Longitudinal Study of Employee Health

Worker's Comp cases

Illness/Injury database

EAP usage

Leave stats (sick leave, unscheduled leave)



Facilitators and/or Obstacles

- **Facilitators**

- *Partners*

- International
 - Academia
 - Other Federal Agencies

- *Strategy, clear goals*

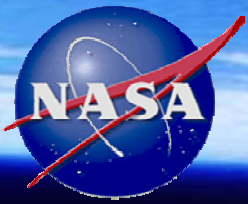
- *Training*

- **Detractors**

- *Resource acquisition and allocation*

- *Access to space*

- *“Traditional” science approach*



Outcome and Impact

Ensure the health and safety of NASA employees in all environments

- Develop sensible health and medical policies*
- Establish guidelines for NASA health and medical practice*
- Provide oversight of health care delivery and assurance of professional competency*
- Target health related research*
- Ensure protection of research subjects and patients*
- Review/approve medical selection/retention standards*
- Ensure responsible implementation of standards*