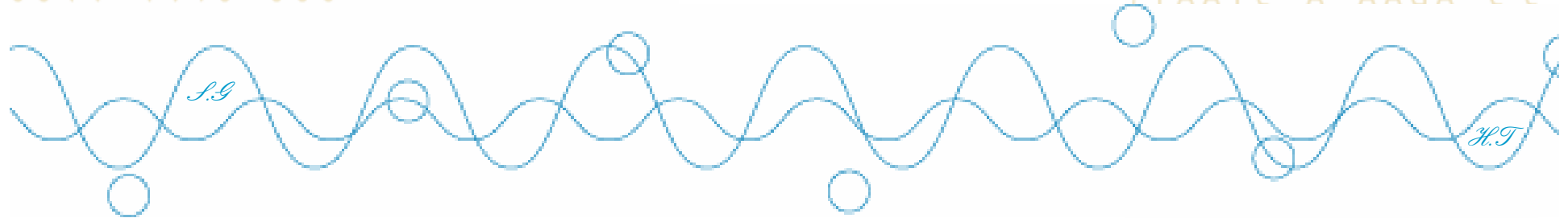


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米国動向報告:

# The National Academiesの概要 (ナショナルアカデミーズ)



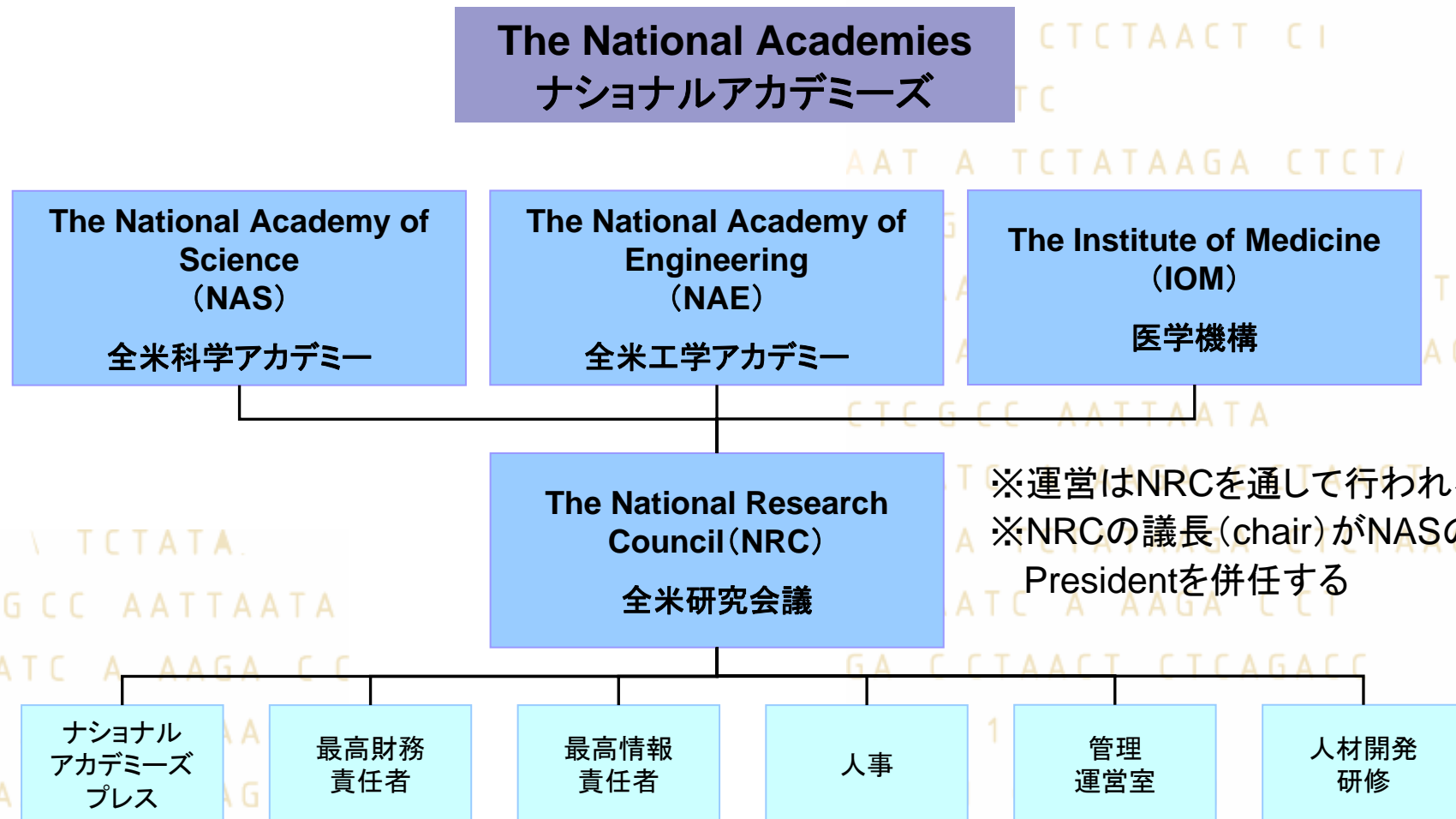
Center for Research and Development Strategy – Japan Science and Technology Agency

独立行政法人 科学技術振興機構 研究開発戦略センター

海外動向グループ

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組織



- 政府からは独立した非営利組織である
- 本部: Washington DC ; 支部: Irvine (California)

## 主なミッション

- 独自の研究施設を持たず、議会・政府省庁・その他財団等の関係組織からの国家の科学技術問題に関する依頼に基き、委員会を設置し、検討、提言を行う(依頼の8割が連邦政府からである)
- 報告書・会議記録・白書を発行するとともに、シンポジウムや専門委員会を開催し、研究者コミュニティーを形成する

## ～各機関のミッション～

### 【NRC】

- NAS・NAE・IOMの主要管理機関として機能すると同時に、科学者・技術者・教育者の活動状況をより良くし、幼稚園から大学院にわたる科学・数学教育の質を向上させる

### 【NAS・NAE・IOM】

- 科学・工学・医学の分野における国家に影響を与える問題を科学的に特定、解決し、アドバイスをすることにより国民の生活向上に貢献する

## 歴史

**1863.3** 南北戦争中、リンカーン大統領によって、国家への科学・技術的なアドバイスの提供を目的とした **The National Academy of Science (全米科学アカデミー)** 設立



業務範囲を政府全体へ徐々に拡大



約150名に限定された会員では、第一次世界大戦の軍事に係る多数の助言依頼に対応不可能になったことから、増員を大統領に要請



**1916** ウィルソン大統領の要望で幅広い科学技術分野からメンバーを募集するべく、**the National Research Council (全米研究会議)**を設立し、人員を増強



**1964** **the National Academy of Engineering (全米工学アカデミー)** 設立



**1970** **the Institute of Medicine (医薬機構)** 設立

## 報告書・取組内容

- 年間、200-300の報告書が発表され、全ての著作権は、ナショナルアカデミーズが所有する
- その他、
  - ・国土安全保障  
(例: 商業用核燃料プラントにおける使用済み燃料の安全性)
  - ・肥満の蔓延(例: 食品販売活動と子供の食事習慣の関係)
  - ・代替燃料 (例: 水素燃料)
  - ・宇宙探査の将来ビジョン  
(例: 宇宙探査に関するNASAの次なるステップ)
  - ・法廷での科学捜査の利用
  - ・外来植物
  - ・気候変動等に関する報告書が提出され、その多くが政策決定に影響を与えている
- 近年最も注目されているトピックスの一つに「エネルギー保障」がある

## 報告書・取組内容

### ～各機関の研究(調査)内容～

#### 【NAS】

- ① 物理学と数理科学 … 数学；天文学；物理学；化学；地学；地球物理学
- ② 生物科学 … 生物化学；細胞・発生生物学；生理学と薬理学；細胞・分子神経科学 等
- ③ 工学と応用科学 … エンジニアリング科学；応用数理科学；応用物理学；コンピュータ・情報科学
- ④ 生体医科学 … 遺伝医学・血液学・腫瘍学；医学生理学と代謝；免疫学；細菌生態学
- ⑤ 行動・社会科学 … 人類学；心理学；社会・政治学；経済学
- ⑥ 応用生物・農業・環境科学 … 動物・栄養・応用細菌科学；植物・土壌・細菌科学；環境科学と生態系 等

#### 【NAE】

- ① 教育・技術的手法・労働人口
- ② 工学と環境
- ③ 工学・経済・社会
- ④ 情報工学と社会
- ⑤ 国家安全と犯罪防止
- ⑥ 公共政策とプログラム審査

#### 【IMO】

- |           |          |        |           |           |         |        |
|-----------|----------|--------|-----------|-----------|---------|--------|
| ① 老化      | ② 小児保健   | ③ 病気   | ④ 教育      | ⑤ 環境      | ⑥ 食物と栄養 | ⑦ 国際保健 |
| ⑧ 健康科学    | ⑨ 医療とその質 | ⑩ 心の健康 | ⑪ 軍隊と退役軍人 | ⑫ 少数民族の健康 |         |        |
| ⑬ 公衆衛生と予防 | ⑭ 公共政策   | ⑮ 治療   | ⑯ 女性の健康   | ⑰ 職場環境    |         |        |

## 予算

- 政府からの直接の予算割当はなく、各省庁をはじめとする依頼機関との契約・グラントにより収入を得ている。同時に、個人的な出資からなる独自の基金を所有している
- 委員会メンバーへの報酬はないが、委員会運営にかかった諸経費は、連邦政府から支払われる
- 予算執行については、毎年、下院司法委員会がNAS(全米科学アカデミー)の会計報告を審査する
- 2005年度の総予算は \$245,506,410 であった  
2004年度と比較すると・・・
  - ・総額で13パーセントの増額
  - ・連邦政府からの配分が2パーセント増と横ばいであるのに対して、非連邦政府・産業界からの配分は、66パーセント増と大幅に増加した

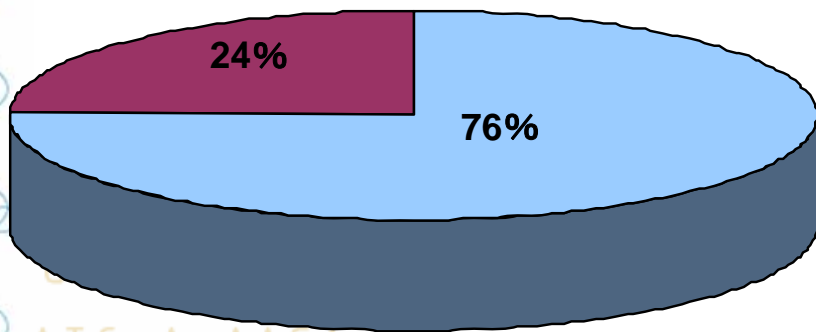
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# 予算

収入源の内訳 (2005年度)

非連邦政府機関(財団・企業)

\$59,952,689



連邦政府機関

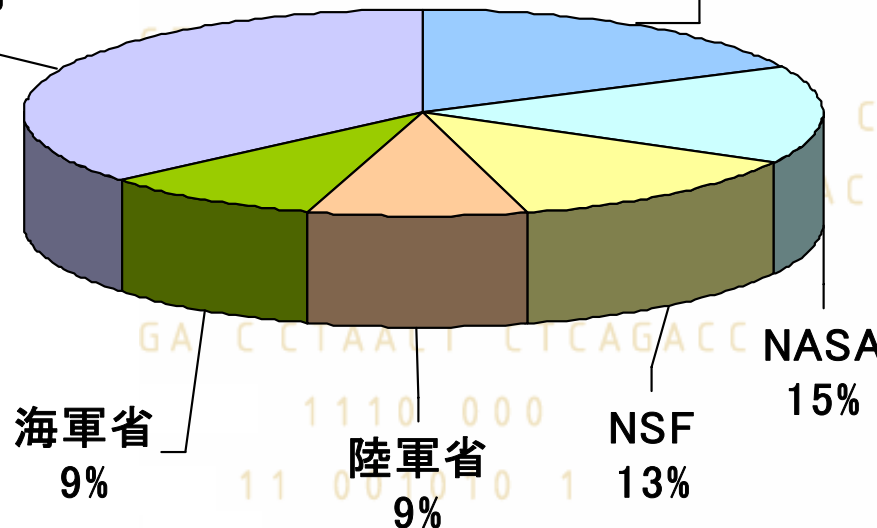
\$185,553,721

合計: \$245,506,410

連邦政府からの収入の内訳(2005年度)

その他  
36%

厚生省  
18%



海軍省  
9%

陸軍省  
9%

NSF  
13%

NASA  
15%



## 職員 (Staff)

- ナショナルアカデミーズ全体で1,100名が雇用されている  
(フルタイム、パートタイム等の形態がある)
- 一委員会につき、一名が調査責任者に任命される
- 個人的な利益を追求せず客観的(公平な立場から)研究が行われるように監督し、スケジュールおよび予算の管理をする
- 調査、執筆、スタイル・フォーマットの調整等、報告書作成の多くの段階に関するが、あくまで結論や提言は委員会メンバーが出すものであり、職員が独自の意見を述べることはない

## 会員(Committee Member)

- 各組織の会員数は・・・
  - NAS: 約1,900名の会員と約350名の外国人会員
  - NAE: 約1,900名の会員と約180名の外国人会員
  - IOM: 約1,500名の会員と約80名の外国人会員
- 政府退職者、産業界退職者、技術者、大学教授等の、その分野で卓越した経験・知識を持つ人の中から、その実績により推薦、選考される  
(現役の政府関係者はいない)
- 新会員推薦資格はアカデミーズの会員のみが持つ
- 会員資格は無期限
- 会員は無報酬で働く(必要経費は支払われる)

## 委員会

- 依頼案件に対し設置される
- 年間稼働数は900を超える
- 委員会は10-20名で構成され、期間は半年から2年にわたる

### ～依頼から委員会結成、報告書公開までの流れ～

アカデミーズの会員、スタッフが依頼機関と研究内容を決定（研究内容の詳細、研究期間、コスト）

※ NRC執行委員会（The Executive Committee of National Research Council Governing Board）が  
審査・承認



研究委員会（Study Committee）を結成

※スタッフの主導でメンバーに相応しい人材を選び、NRC議長が正式に任命する



公開会議、情報収集、調査、検討を行いながら報告書を作成



報告書作成に関っていない専門家（匿名）による外部審査

The Report Review Committee（RRC）による確認



公開

## ナショナルアカデミーズプレス National Academies Press

- ナショナルアカデミーズの出版部門
- 毎年、約200-300件の委員会報告書が出版され、そのほとんどがPDF化され、多くが無料で公開されている
- 出版物の価格は、利益も損失もないように設定されるため、売上げがアカデミーズの収入になることはない

## 対象分野(2007年10月現在)

- 農学
- 社会科学
- 生物学
- 経済学
- 化学
- コンピュータ科学
- 紛争・防衛
- 地球科学
- 教育
- エネルギー
- 工学
- 環境問題

- 研究職への就職機会
- 食糧・栄養
- 医療
- 国際問題
- キャリア形成
- 数学・自然科学
- 国家安全保障
- 科学政策
- 科学
- 宇宙
- 運輸

## 農学

- A Leadership Summit to Effect Change in Teaching and Learning
- Examining the Safety of Dietary Supplements for Horses, Dogs, and Cats
- Frontiers in Soil Science Research
- Future Contributions of the Biosciences to Public Health, Agriculture, Basic Research, Counter-terrorism, and Non-Proliferation Activities in Russia
- Global Challenges and Directions for Agricultural Biotechnology
- Lost Crops of Africa: Fruits and Vegetables
- Review of NIOSH Research Programs
- The Economic Development and Current Status of the Sheep Industry in the United States
- The National Plant Genome Initiative: Achievements and Future Directions

## 社会科学

- Adolescent Health Care Services and Models of Care for Treatment, Prevention, and Healthy Development
- Assessing Behavioral and Social Science Research on Aging
- Assessing the Feasibility, Accuracy, and Technical Capability of a National Ballistics Database
- Contributions from the Behavioral and Social Sciences in Reducing and Preventing Teen Motor Vehicle Crashes
- Developmental Outcomes and Assessments for Young Children
- FAA Aviation Safety Inspector Staffing Standards
- Human-System Design Support for Changing Technology
- Impact of Pregnancy Weight on Maternal and Child Health: A Workshop
- International Collaborations in Social and Behavioral Research: A Workshop
- Organizational Models From Individuals to Societies
- Pilot Study for Evaluation of USAID Programs to Support Development of Democracy
- Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions
- Research and Development Priorities for the U.S. Census Bureau's State and Local Government Statistics Program
- Review of NIOSH Research Programs
- Strategic Advice on the U.S. Climate Change Science Program
- Strategies for Network Science, Technology, and Experimentation
- Teacher Preparation Programs in the United States
- Treatment of Post Traumatic Stress Disorder (PTSD)
- Understanding Crime Trends: A Workshop
- Women in Science and Engineering: A Guide to Maximizing their Potential
- Youth Population and Military Recruitment: Physical, Medical, and Mental Health Standards

# 生物学

- A Leadership Summit to Effect Change in Teaching and Learning
- Adolescent Health Care Services and Models of Care for Treatment, Prevention, and Healthy Development
- Assessing Fundamental Attitudes of Life Scientists as a Basis for Biosecurity Education
- Astrobiology Strategy for the Exploration of Mars
- Biomolecular Materials and Processes
- Defining and Advancing the Conceptual Basis of Biological Science for the 21st Century
- Enhancing the Master's Degree in the Natural Sciences
- Exploring Organic Environments in the Solar System
- Frontiers in Soil Science Research
- Future Contributions of the Biosciences to Public Health, Agriculture, Basic Research, Counter-terrorism, and Non-Proliferation Activities in Russia
- Human Embryonic Stem Cell Research Advisory Committee
- Impact of Pregnancy Weight on Maternal and Child Health: A Workshop
- International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts
- Lost Crops of Africa: Fruits and Vegetables
- Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions
- Prevention of Proliferation of Biological Weapons
- Review of Cooperative Projects with Former Soviet Union Biological Weapons Institutes
- Review of NIOSH Research Programs
- Strategic Advice on the U.S. Climate Change Science Program
- The Limits of Organic Life of Planetary Systems
- The National Plant Genome Initiative: Achievements and Future Directions
- Women in Science and Engineering: A Guide to Maximizing their Potential



## 経済学

- Capitalizing on Science, Technology, and Innovation: An Assessment of the Small Business Innovation Research Program
- Innovation Inducement Prizes at the National Science Foundation
- Investor Exit Strategies and Entrepreneurial Firm Growth: Phase One
- Review of NIOSH Research Programs
- Strategies for Network Science, Technology, and Experimentation
- Teacher Preparation Programs in the United States
- Women in Science and Engineering: A Guide to Maximizing their Potential

## 化学

- Approaches for the Evaluation of the NIST/NRC Postdoctoral Research Associateships Program
- Enhancing the Master's Degree in the Natural Sciences
- Exploring Organic Environments in the Solar System
- Frontiers in Soil Science Research
- Strategic Advice on the U.S. Climate Change Science Program
- Technical Assessment of Environmental Programs at the Los Alamos National Laboratory
- The Limits of Organic Life of Planetary Systems
- Women in Science and Engineering: A Guide to Maximizing their Potential

## コンピュータ科学

- Advancing Software-Intensive Systems Producibility
- Approaches for the Evaluation of the NIST/NRC Postdoctoral Research Associateships Program
- Contributions from the Behavioral and Social Sciences in Reducing and Preventing Teen Motor Vehicle Crashes
- Enhancing the Master's Degree in the Natural Sciences
- Forecasting Future Disruptive Technologies
- Improving Cybersecurity Research in the United States
- Strategies for Network Science, Technology, and Experimentation
- Sustaining Growth in Computing Performance
- Whither Biometrics?
- Women in Science and Engineering: A Guide to Maximizing their Potential

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## 紛争・防衛

- Assessing Fundamental Attitudes of Life Scientists as a Basis for Biosecurity Education
- Assessment of Security Technologies for Transportation
- Strengthening Long-Term Nuclear Security: Protecting Weapon-Usable Material in Russia

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## 地球科学

- A Strategy to Mitigate the Impact of Sensor Descopes and De-manifests on the NPOESS and GOES-R Spacecraft
- A Survey of the Scientific Uses of the Radio Spectrum
- Developing Mesoscale Meteorological Observational Capabilities to Meet Multiple National Needs
- Earth Science and Applications from Space: A Community Assessment and Strategy for the Future
- Enhancing the Master's Degree in the Natural Sciences
- Frontiers in Soil Science Research
- Independent Scientific Review of Everglades Restoration Progress
- Panel on Climate Variability and Change
- Panel on Earth Science Applications and Societal Needs
- Panel on Human Health and Security
- Panel on Land-use Change, Ecosystem Dynamics and Biodiversity
- Panel on Options to Ensure the Climate Record from the NPOESS and GOES-R Spacecraft
- Panel on Solid-Earth Hazards, Resources, and Dynamics
- Panel on Water Resources and the Global Hydrologic Cycle
- Panel on Weather
- Strategic Advice on the U.S. Climate Change Science Program
- Sustainable Underground Storage of Recoverable Water
- Technical Assessment of Environmental Programs at the Los Alamos National Laboratory
- Women in Science and Engineering: A Guide to Maximizing their Potential

## 教育

- A Leadership Summit to Effect Change in Teaching and Learning
- Adolescent Health Care Services and Models of Care for Treatment, Prevention, and Healthy Development
- An Assessment of Research-Doctorate Programs
- Approaches for the Evaluation of the NIST/NRC Postdoctoral Research Associateships Program
- Assessing Corrosion Education
- Assessing Fundamental Attitudes of Life Scientists as a Basis for Biosecurity Education
- Contributions from the Behavioral and Social Sciences in Reducing and Preventing Teen Motor Vehicle Crashes
- Developmental Outcomes and Assessments for Young Children
- Early Childhood Mathematics
- Enhancing the Master's Degree in the Natural Sciences
- Evaluation of the Impact of Teacher Certification by the National Board for Professional Teaching Standards (NBPTS)
- Panel on Data Collection for the Assessment of Research-Doctorate Programs
- Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions
- Science Learning, Kindergarten through Eighth Grade
- Teacher Preparation Programs in the United States
- U.S. - Chinese Glossary of Nuclear Security Terms
- Women in Science and Engineering: A Guide to Maximizing their Potential

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# エネルギー

- Assessment of Resource Needs for Development of Fuel Cell and Hydrogen Technology
- Review of DOE's Nuclear Energy Research & Development Program

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# 工学

- Approaches for the Evaluation of the NIST/NRC Postdoctoral Research Associateships Program
- Assessing Corrosion Education
- Assessment of NASA's Aeronautics Research Program
- Assessment of Resource Needs for Development of Fuel Cell and Hydrogen Technology
- Assessment of Security Technologies for Transportation
- Biomolecular Materials and Processes
- Contributions from the Behavioral and Social Sciences in Reducing and Preventing Teen Motor Vehicle Crashes
- Enhancing the Robustness and Resilience of Future Electric Transmission and Distribution in the United States to Terrorist Attack
- Forecasting Future Disruptive Technologies
- Grand Challenges for Engineering
- Independent Scientific Review of Everglades Restoration Progress
- Integrated Computational Materials Engineering: A Grand Challenge in Materials
- Meeting the Workforce Needs for the National Vision for Space Exploration
- Review of DOE's Nuclear Energy Research & Development Program
- Review of NIOSH Research Programs
- Review of NIOSH Research Programs-Construction
- Strategies for Network Science, Technology, and Experimentation
- Sustainable Underground Storage of Recoverable Water
- Technologies to Deter Currency Counterfeiting
- Technology for a Quieter America
- Women in Science and Engineering: A Guide to Maximizing their Potential



## 環境問題

- A Strategy to Mitigate the Impact of Sensor Descoptes and De-manifests on the NPOESS and GOES-R Spacecraft
- Assessment of Resource Needs for Development of Fuel Cell and Hydrogen Technology
- Contaminated Drinking Water at Camp Lejeune
- Development and Implementation of a Cleanup Technology Roadmap for DOE's Office of Environmental Management
- Disposition of the Air Force Health Study
- Earth-Atmosphere Interactions: A Workshop on Understanding and Responding to Multiple Environmental Stresses
- Evaluating the Efficiency of Research and Development Programs at the Environmental Protection Agency
- Frontiers in Soil Science Research
- Independent Scientific Review of Everglades Restoration Progress
- International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts
- Lost Crops of Africa: Fruits and Vegetables
- Mississippi River and the Clean Water Act
- Reducing Stormwater Discharge Contributions to Water Pollution
- Review of EPA's Toxicological Assessment of Tetrachloroethylene
- Review of NIOSH Research Programs
- Strategic Advice on the U.S. Climate Change Science Program
- Sustainable Underground Storage of Recoverable Water
- Technical Assessment of Environmental Programs at the Los Alamos National Laboratory
- The Limits of Organic Life of Planetary Systems

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## 研究職への就職機会

- Women in Science and Engineering: A Guide to Maximizing their Potential

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# 食糧・栄養

- A Leadership Summit to Effect Change in Teaching and Learning
- Adolescent Health Care Services and Models of Care for Treatment, Prevention, and Healthy Development

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## 医療

- Adolescent Health Care Services and Models of Care for Treatment, Prevention, and Healthy Development
- Disposition of the Air Force Health Study
- Future Contributions of the Biosciences to Public Health, Agriculture, Basic Research, Counter-terrorism, and Non-Proliferation Activities in Russia
- Health Research and the Privacy of Health Information: The HIPAA Privacy Rule
- Human Embryonic Stem Cell Research Advisory Committee
- Impact of Pregnancy Weight on Maternal and Child Health: A Workshop
- Lost Crops of Africa: Fruits and Vegetables
- Making Best Use of the Agent Orange Exposure Reconstruction Model
- Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions
- Review of Cooperative Projects with Former Soviet Union Biological Weapons Institutes
- Review of NIOSH Research Programs
- Review of NIOSH Research Programs--Personal Protective Technology
- Review of NIOSH Research Programs-Construction
- Review of the Adoption and Implementation of Health IT Standards by the DHHS Office of the National Coordinator for Health Information Technology
- Reviewing Evidence to Identify Highly Effective Clinical Services
- Traumatic Brain Injury
- Treatment of Post Traumatic Stress Disorder (PTSD)
- Women in Science and Engineering: A Guide to Maximizing their Potential
- Youth Population and Military Recruitment: Physical, Medical, and Mental Health Standards

## 国際問題

- Establishing Priorities for US-Russian Cooperation in Countering Radiological Terrorism
- Future Contributions of the Biosciences to Public Health, Agriculture, Basic Research, Counter-terrorism, and Non-Proliferation Activities in Russia
- International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts
- Lost Crops of Africa: Fruits and Vegetables
- Pilot Study for Evaluation of USAID Programs to Support Development of Democracy
- Prevention of Proliferation of Biological Weapons
- Review of Cooperative Projects with Former Soviet Union Biological Weapons Institutes
- Strategic Advice on the U.S. Climate Change Science Program
- Strengthening Long-Term Nuclear Security: Protecting Weapon-Usable Material in Russia
- U.S. - Chinese Glossary of Nuclear Security Terms

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# キャリア形成

- Meeting the Workforce Needs for the National Vision for Space Exploration
- Women in Science and Engineering: A Guide to Maximizing their Potential

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## 数学・自然科学

- Approaches for the Evaluation of the NIST/NRC Postdoctoral Research Associateships Program
- Biomolecular Materials and Processes
- Enhancing the Master's Degree in the Natural Sciences
- Frontiers in Soil Science Research
- Meeting the Workforce Needs for the National Vision for Space Exploration
- Methodological Improvements to the Department of Homeland Security's Biological Agent Risk Analysis
- NASA Astrophysics Performance Assessment
- Strategies for Network Science, Technology, and Experimentation
- Strengthening Long-Term Nuclear Security: Protecting Weapon-Usable Material in Russia
- Women in Science and Engineering: A Guide to Maximizing their Potential

## 国家安全保障

- Assessing Fundamental Attitudes of Life Scientists as a Basis for Biosecurity Education
- Assessing the Need for a Defense Materials Stockpile
- Directed Energy Technology for Countering Indirect Weapons
- Forecasting Future Disruptive Technologies
- Future Contributions of the Biosciences to Public Health, Agriculture, Basic Research, Counter-terrorism, and Non-Proliferation Activities in Russia
- Prevention of Proliferation of Biological Weapons
- Review and Assess Developmental Issues Concerning the Metal Parts Treater Design for the Blue Grass Chemical Agent Destruction Pilot Plant
- Review Chemical Agent Secondary Waste Disposal and Regulatory Requirements
- Science, Security and Prosperity in a Changing World
- Strategies for Network Science, Technology, and Experimentation
- Strengthening Long-Term Nuclear Security: Protecting Weapon-Usable Material in Russia
- U.S. - Chinese Glossary of Nuclear Security Terms



## 科学政策(1/2)

- A Strategy to Mitigate the Impact of Sensor Descopes and De-manifests on the NPOESS and GOES-R Spacecraft
- A Survey of the Scientific Uses of the Radio Spectrum
- Adolescent Health Care Services and Models of Care for Treatment, Prevention, and Healthy Development
- An Assessment of Research-Doctorate Programs
- Assessing Corrosion Education
- Assessment of Resource Needs for Development of Fuel Cell and Hydrogen Technology
- Assessment of Security Technologies for Transportation
- Astrobiology Strategy for the Exploration of Mars
- Capitalizing on Science, Technology, and Innovation: An Assessment of the Small Business Innovation Research Program
- Contributions from the Behavioral and Social Sciences in Reducing and Preventing Teen Motor Vehicle Crashes
- Developmental Outcomes and Assessments for Young Children
- Earth Science and Applications from Space: A Community Assessment and Strategy for the Future
- Enhancing the Robustness and Resilience of Future Electric Transmission and Distribution in the United States to Terrorist Attack
- Evaluating the Efficiency of Research and Development Programs at the Environmental Protection Agency
- Future Contributions of the Biosciences to Public Health, Agriculture, Basic Research, Counter-terrorism, and Non-Proliferation Activities in Russia
- Health Research and the Privacy of Health Information: The HIPAA Privacy Rule
- Human Embryonic Stem Cell Research Advisory Committee
- Independent Scientific Review of Everglades Restoration Progress
- International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts
- Large Optical Systems in Space
- Meeting the Workforce Needs for the National Vision for Space Exploration
- NASA Astronomy Science Centers: An Assessment of Best Practices and Guiding Principles for the Future
- New Opportunities in Solar System Exploration: An Evaluation of the New Frontiers Announcement of Opportunity
- On Being a Scientist: Responsible Conduct in Research -- 3rd Edition

## 科学政策(2/2)

- Panel on Earth Science Applications and Societal Needs
- Panel on Human Health and Security
- Panel on Land-use Change, Ecosystem Dynamics and Biodiversity
- Panel on Options to Ensure the Climate Record from the NPOESS and GOES-R Spacecraft
- Panel on Solid-Earth Hazards, Resources, and Dynamics
- Panel on Water Resources and the Global Hydrologic Cycle
- Panel on Weather
- Pilot Study for Evaluation of USAID Programs to Support Development of Democracy
- Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions
- Recognition and Alleviation of Distress in Laboratory Animals: An Update of the 1992 ILAR Report
- Review of EPA's Toxicological Assessment of Tetrachloroethylene
- Review of NIOSH Research Programs
- Review of NIOSH Research Programs-Construction
- Review of the NASA Astrobiology Institute
- Science, Security and Prosperity in a Changing World
- Strategic Advice on the U.S. Climate Change Science Program
- Strategies for Network Science, Technology, and Experimentation
- Strengthening Long-Term Nuclear Security: Protecting Weapon-Usable Material in Russia
- Sustainable Underground Storage of Recoverable Water
- Technologies to Deter Currency Counterfeiting
- The Limits of Organic Life of Planetary Systems
- The Scientific Context for the Exploration of the Moon
- Treatment of Post Traumatic Stress Disorder (PTSD)
- U.S. - Chinese Glossary of Nuclear Security Terms
- Whither Biometrics?
- Women in Science and Engineering: A Guide to Maximizing their Potential
- Youth Population and Military Recruitment: Physical, Medical, and Mental Health Standards

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# 科学

## ■ Forecasting Future Disruptive Technologies

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# 宇宙

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- Exploring Organic Environments in the Solar System
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- Panel on Solid-Earth Hazards, Resources, and Dynamics
- Panel on Water Resources and the Global Hydrologic Cycle
- Panel on Weather
- Review of the NASA Astrobiology Institute
- The Limits of Organic Life of Planetary Systems
- The Scientific Context for the Exploration of the Moon
- Workshops on Technology for Commercialization and Human/Robotic Exploration and Development of Space

## 運輸

- Assessment of Resource Needs for Development of Fuel Cell and Hydrogen Technology
- Assessment of Security Technologies for Transportation
- Assessment of Security Technologies for Transportation
- Climate Change and U.S. Transportation
- Contributions from the Behavioral and Social Sciences in Reducing and Preventing Teen Motor Vehicle Crashes
- Determination of the State of the Practice in Travel Forecasting
- FAA Aviation Safety Inspector Staffing Standards
- Long-term Viability of Fuel Taxes for Transportation Finance
- Pavement Technology Review and Evaluation
- Research and Technology Coordinating Committee
- Research and Technology Coordinating Committee (Federal Highway Administration)
- Research Priorities and Coordination in Highway Infrastructure and Operations Safety
- Review of NIOSH Research Programs
- Review of the Federal Railroad Administration Research, Development, and Demonstration Programs
- Transit Research and Development: Federal Role in the National Program