

International Research & Education Opportunities & Resources at NSF

NSF Virtual Grants Conference
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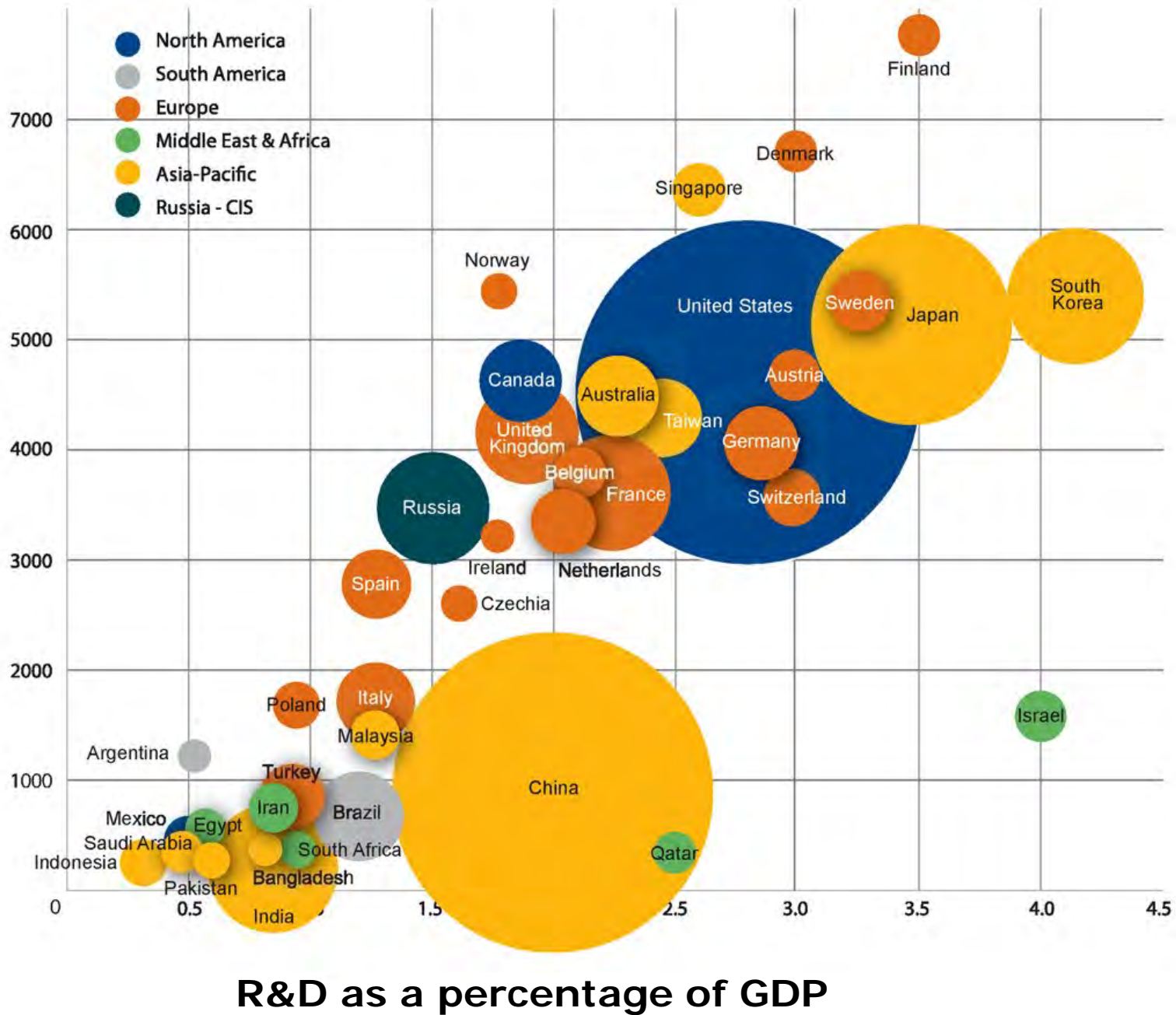
NSF Office of International Science and Engineering (OISE)

- Scientific research is increasingly international
- International collaboration supported across NSF
- OISE facilitates NSF international engagement
 - Diplomatic "desk officers"
 - Coordinate with other federal agencies in international policy issues
 - Targeted funding



Global R&D Landscape

Scientists & Engineers per Million People



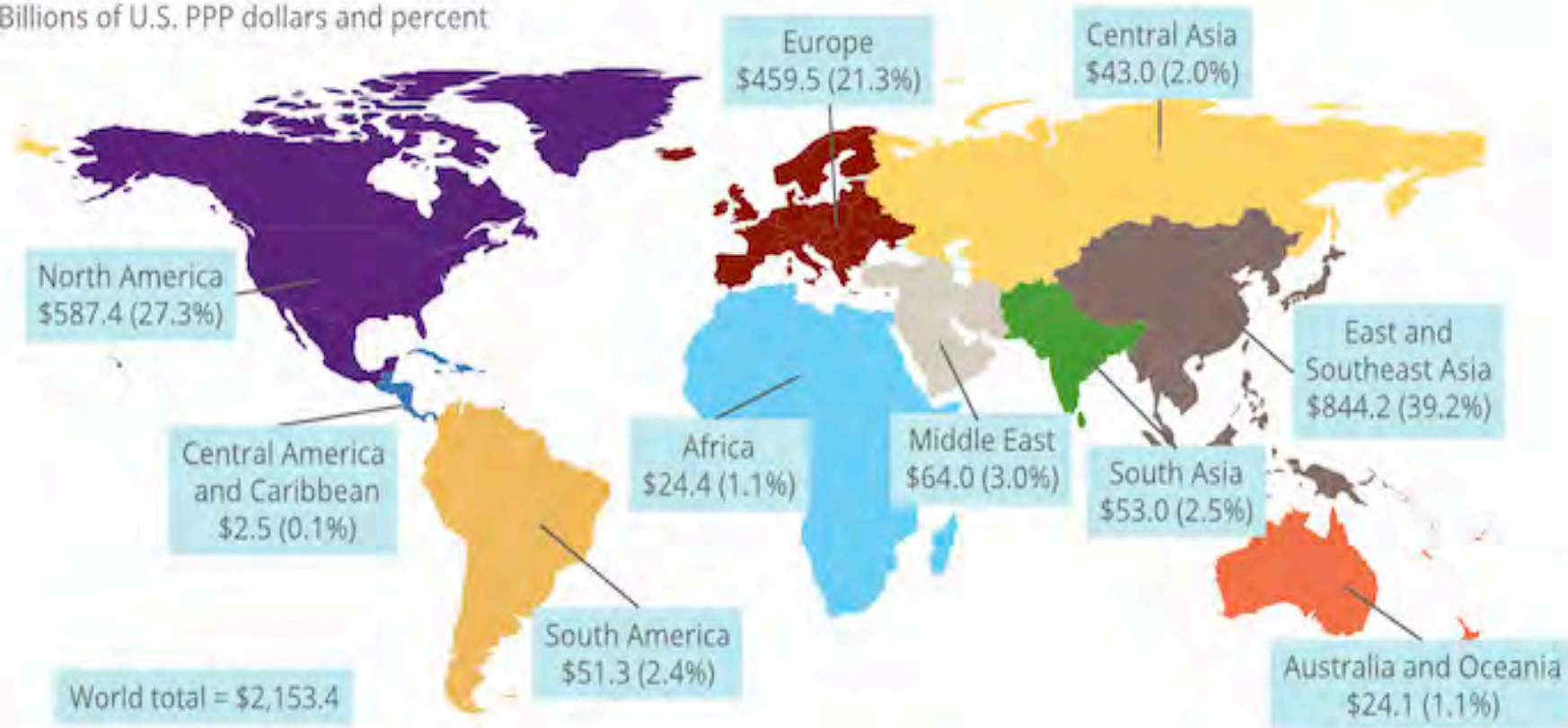
Source: R&D Magazine, World Bank, International Monetary Fund, CIA Fact Book, OECD



Most Global R&D Investment Outside U.S.

Global R&D expenditures, by region: 2017

Billions of U.S. PPP dollars and percent



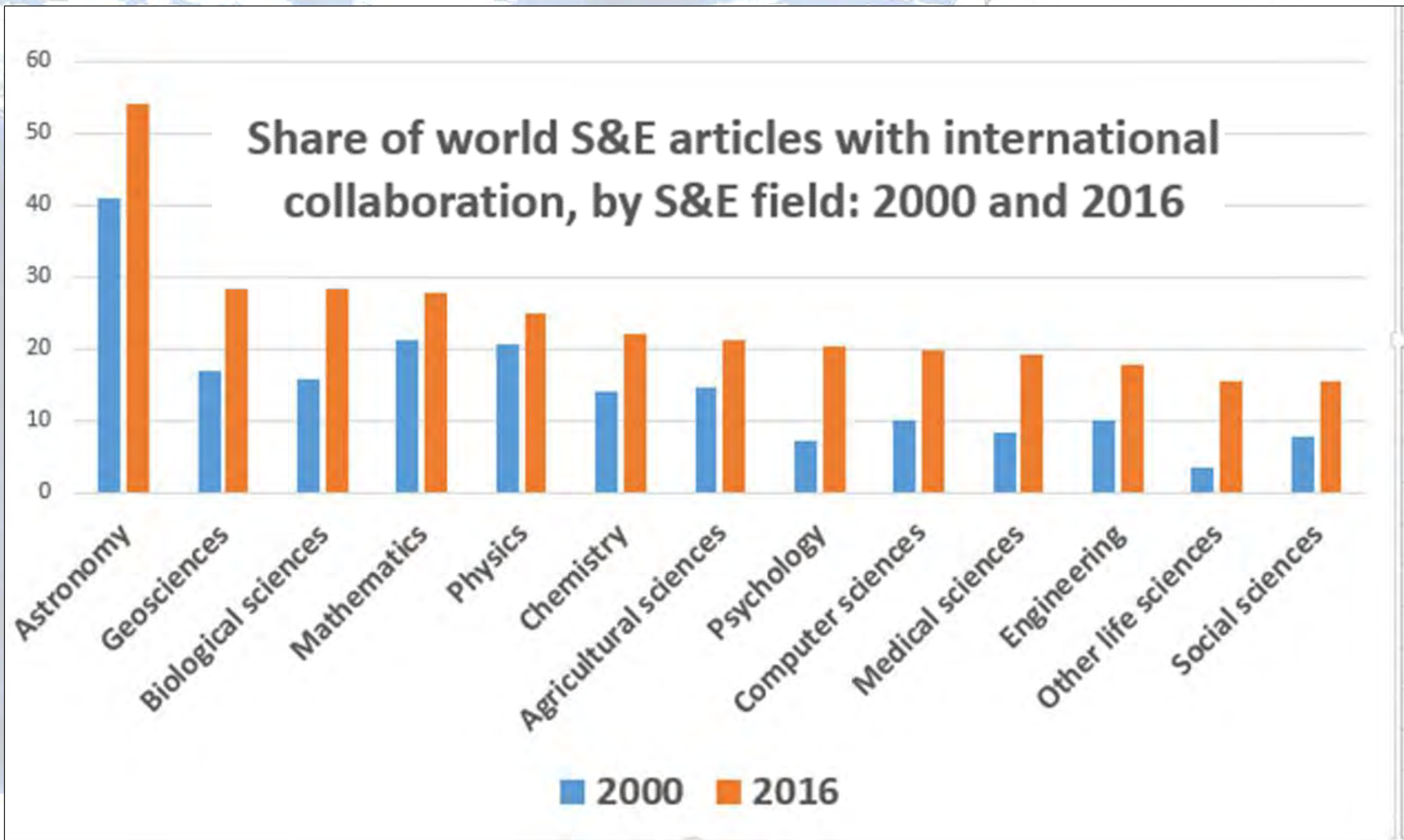
PPP = purchasing power parity.



Source: Science and Engineering Indicators 2020



International Co-authorship Increasing



Source: Science and Engineering Indicators 2018



NSF International Priorities

Promote development of a globally engaged workforce

Facilitate international partnership to advance research

Provide opportunities for U.S. leadership to shape global S&E agenda



Core Values for International Engagement

- International collaboration enhances research & education
- Intellectual partnerships with reciprocal benefit
- Networks that link expertise and leverage resources
- Opportunities for U.S. student engagement in international research activities
- Commitment to openness, data sharing



NSF Funding for International Activities

Primarily occurs in NSF disciplinary directorates

- Part of awards through regular program
- Supplements to regular awards
- Targeted opportunities

BIO

CISE

EHR

ENG

GEO

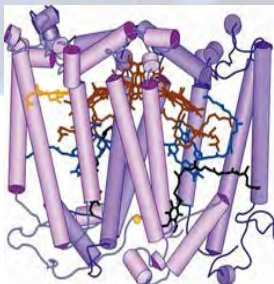
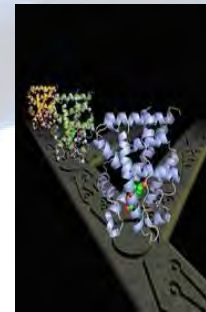
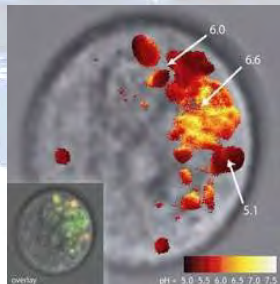
MPS

SBE



Examples of Funding Opportunities for International

- Lead Agency Opportunities
 - Broad: UK and Israel
 - Focused: Finland, France, Germany, Ireland, Israel, Japan, Taiwan
- Dear Colleague Letters
 - International Collaboration Supplements in Quantum Information Science and Engineering Research (*NSF 20-063*)
 - Research Collaboration Opportunities in Europe for NSF Awardees (*NSF 20-069*)
- Co-review and co-funding with foreign funding agencies
 - Ecology and Evolution of Infectious Diseases (*NSF 20-585*)
 - Collaborative Research in Computational Neuroscience (*NSF 20-609*)



OISE-Managed Funding Opportunities

- Accelerating Research through International Network-to-Network Collaboration (AccelNet)
- International Research Experience for Students (IRES)
- Partnerships for International Research and Education (PIRE)
- DCL: The Future of International Research Collaboration in the Post-COVID Era



Accelerating Research through International Network-to-Network Collaborations (AccelNet)

- **NSF 21-511**
- Aims to foster *networks of networks*, creating links between multiple networks that cross international boundaries
 - Leverage expertise, data, facilities, and/or other resources to stimulate critical research advances.
- Supports catalytic and full-scale implementation projects
- Topic areas focus on grand challenges identified by NSF or a research community as a priority
- Deadline: January 4, 2021



International Research Experiences for Students (IRES)

NSF 20-598

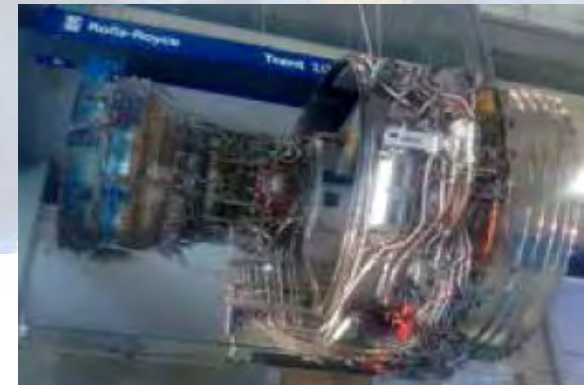
OISE program to develop a globally engaged STEM workforce

- Track - I: IRES Sites
 - Faculty-led cohort of undergrads and/or grad student
 - Deadline: Nov 12, 2020
- Track-II: Advanced Studies Institutes
 - Seminar-style training for graduate students
 - Deadline: Nov 9, 2020



Partnerships for International Research and Education (PIRE)

- OISE-managed flagship research program
- Frontier research that leverages complementary expertise of US and international teams
- Extensive overseas research opportunities for
 - U.S. students/early career researchers
 - Active awards across all NSF disciplines
 - Revised solicitation in 2021, awards in 2022



Dear Colleague Letter: Future of International Research Collaboration in Post-COVID Era

NSF 20-132

- OISE invites proposals using the RAPID or EAGER mechanism to address two broad areas of research
 - Type I: Research to Clarify Lessons of COVID for International Collaboration
 - Type II: Research to Strengthen International Collaboration in the Future
- Consult program officer in advance. Must receive approval to submit
- Open until March 31, 2021 or until funds are fully obligated.

Final Guidance for NSF Proposal Submissions that include International Collaborations

- Demonstrate how international collaboration enhances proposed research
- Involve U.S. students and junior researchers
- Pay attention to diversity
- Include biosketch of key collaborator(s) in Supp Docs
- Include letter(s) of commitment from collaborator(s)
- NSF typically only funds the U.S. side of the collaboration.
- Read the solicitation; follow solicitation-specific guidance
- Consult OISE country officer for questions about international

○ <https://www.nsf.gov/od/oise/country-list.jsp>



Thank You!

For further information:
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National Science Foundation

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