Office of Naval Research Global (ONRG)
International Science Program Overview

Dillard Patton
Department Head, International Science
Office of Naval Research Global – London, UK
dillard.c.patton2.civ@us.navy.mil

Office of Naval Research (ONR)

Read more about ONR's history and scientific contributions here:
https://www.nre.navy.mil/about-onr/history

Established in 1946

~$2.7bn (USD) annual budget, with research partners across government, industry, and academia…both in the U.S. and abroad.

~70 Nobel Prize winners funded

Who We Are

ONR **plans, fosters, and encourages** scientific research in recognition of its paramount importance as related to the maintenance of future naval power and preservation of national security.

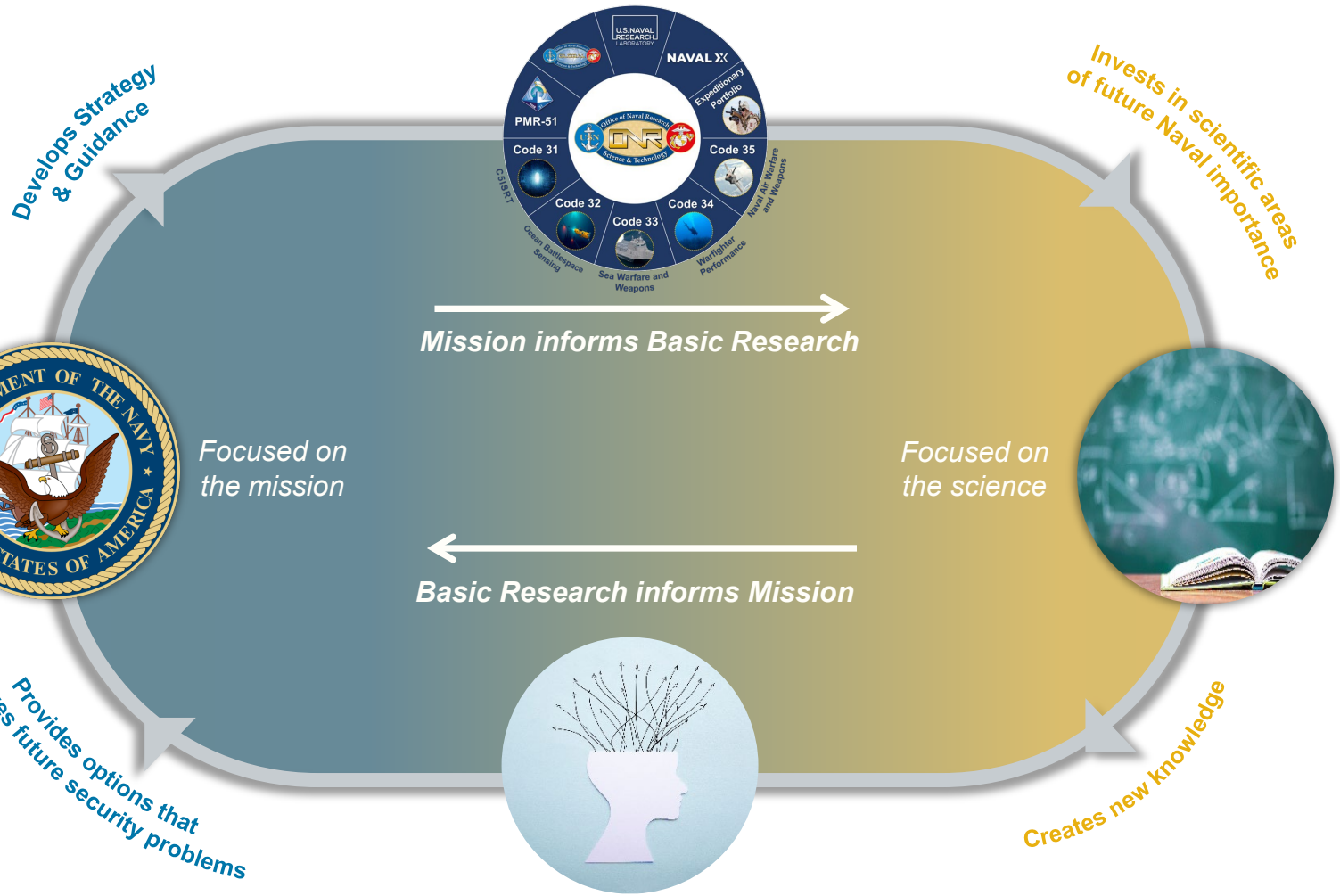
Discover – Develop - Deliver

11 research focus areas

- Autonomy/AI
- Naval Aerospace
- Directed Energy
- C5ISR/Space
- Human & Biological Systems
- Manufacturing
- Materials/Electronics
- Naval Engineering
- Ocean, Atmosphere, & Space
- Power & Energy
- Undersea Systems

NRE's Role In Fostering *Fundamental Research*

Naval Research Enterprise



ONR Technology Areas

Naval S&T Focus Areas

- Autonomy/AI
- Naval Aerospace
- Directed Energy & Kinetic Systems
- C5ISR/Naval Space
- Human & Biological Systems
- Manufacturing
- Materials/Electronics
- Naval Engineering
- Ocean, Atmosphere, & Space
- Power & Energy
- Undersea Systems

ONR Technical Departments

Command, Control, Computing, Communications, Cyber, Intelligence, Surveillance, Reconnaissance and Targeting (C5ISRT) (Code 31)

Code 31 supports research in Mathematics, Electronics, Computer & Information Sciences and their applications in Command & Control, Communications, Cyber, EW, Intelligence, Surveillance and Reconnaissance.

Ocean Battlespace Sensing (Code 32)

Code 32 is responsible for Navy and Marine Corps S&T in ocean and meteorological science, undersea warfare, mine warfare, space technology and marine mammals.

Sea Warfare and Weapons (Code 33)

Code 33 develops and delivers technologies that enable superior warfighting and energy capabilities for naval forces, platforms and undersea weaponry.

Warfighter Performance (Code 34)

Code 34's mission is to enhance warfighter effectiveness and efficiencies through bioengineered and biorobotic systems, medical and behavioral technologies, improved manpower, personnel, and training and systems design.

Naval Air Warfare and Weapons (Code 35)

Code 35 supports the Navy's air warfare and weapons needs, fostering the technology development of naval aviation platforms, kinetic weapons, directed energy and electric weapons.

Office of Naval Research Global (ONRG)

Executing ONR's mission across the globe

- Science Advisors
- TechSolutions
- International Engagement
- Experimentation & Analysis
- London Tech Bridge
- Foreign Comparative Test

https://www.nre.navy.mil/organization/onr-global

International Science Program

Mission

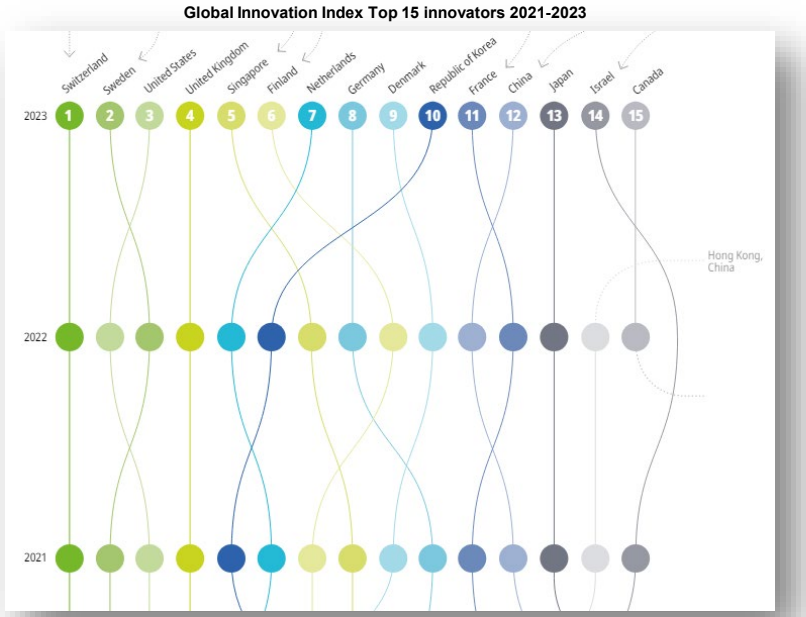
Foster trusted partnerships with the world's leading scientific researchers.

Vision

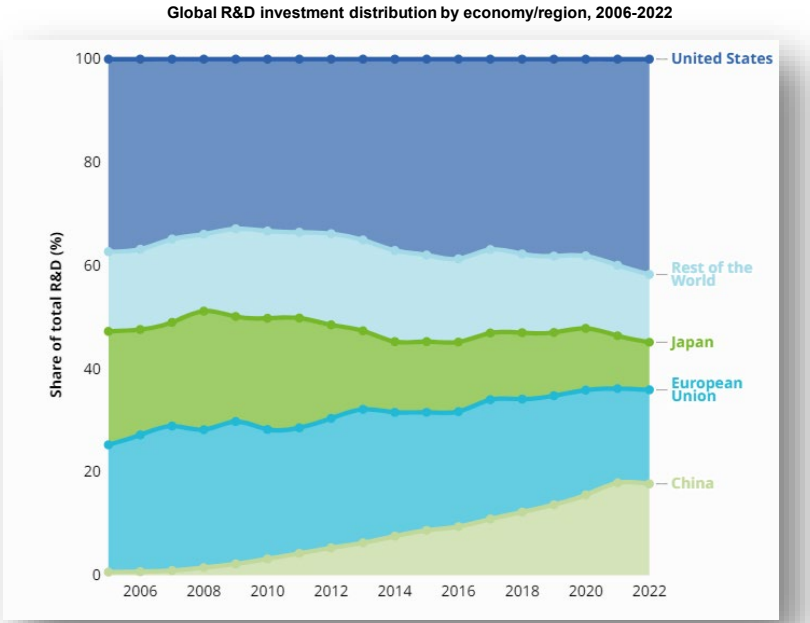
Enable future naval capabilities through revolutionary *fundamental research* that challenges conventional thinking.

Why International Science?

U.S. is a lead global innovator…



…but most of the R&D investment is outside its borders.

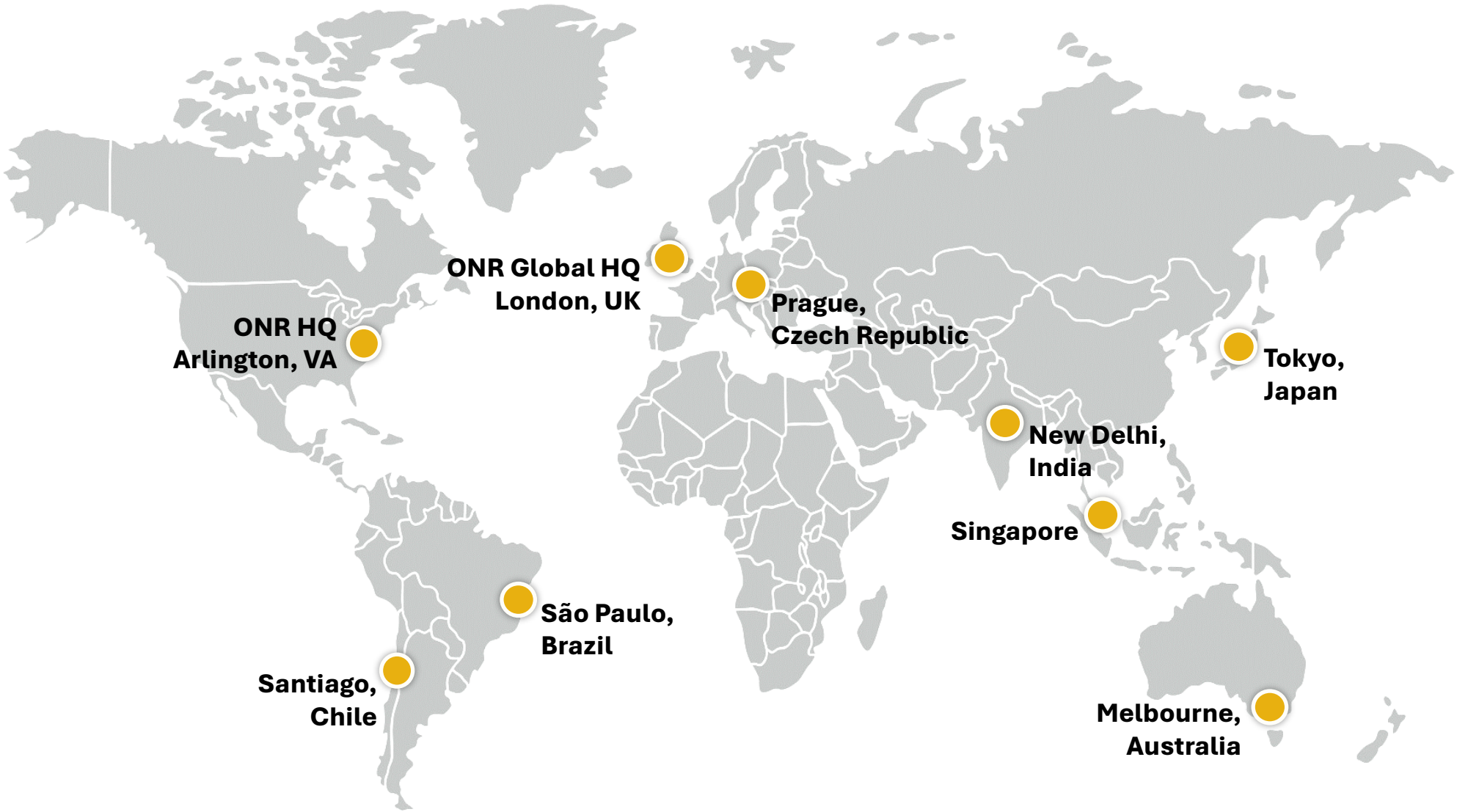


Investing in fundamental research to source **bold ideas** leads to breakthroughs which will **reshape future capabilities.**

Bold ideas come from highly trained & highly creative people who are **engaged in the global science conversation**.

https://www.wipo.int/global_innovation_index/en/gii-insights-blog/2024/r-and-d-spenders.html
https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023-en-main-report-global-innovation-index-2023-16th-edition.pdf

ONRG International Science Office Locations



28 Science Directors world-wide

- Provide a persistent global presence
- Identify cutting-edge Science & Technology
- Expand network of global scientists and technology innovators
- Link prominent international scientists with the Naval Research Enterprise
- Award seed grants to stimulate promising international research

ONRG International Science in Action

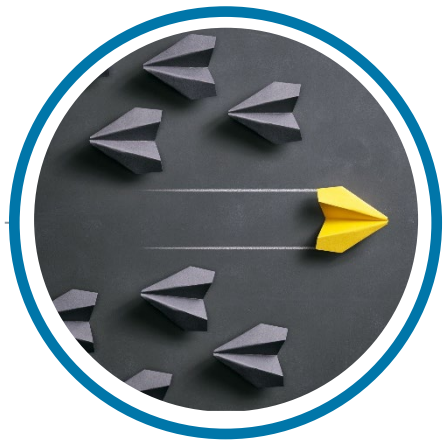
What do we do?

Maintain Global Scientific Awareness

- Visit international universities, research institutions, and foreign governments
- Attend international conferences
- Gain awareness of global S&T trends
- Communicate ONRG collaboration opportunities

Form Relationships

- Network with the international science community
- Discuss new research areas
- Solicit ideas for new research projects
- Refine ideas to ensure future Naval relevance



Invest in Cutting Edge Research

- Award research grants
- Sponsor scientific workshops
- Facilitate collaboration between international scientists, the Naval Research Enterprise, and other U.S. academic/research networks.

ONRG Funding Opportunities

Visiting Scientist Program (VSP)

Support for international scientists visiting the U.S.

- Socialize your research with US defense scientists, program managers, and DoD sponsored academics

Collaborative Science Program (CSP)

International workshop and conference grants

- ~$10-30k USD
- Invited speaker/student subsidies, A/V costs, publish a proceedings, offset venue costs (no food/beverage), etc..

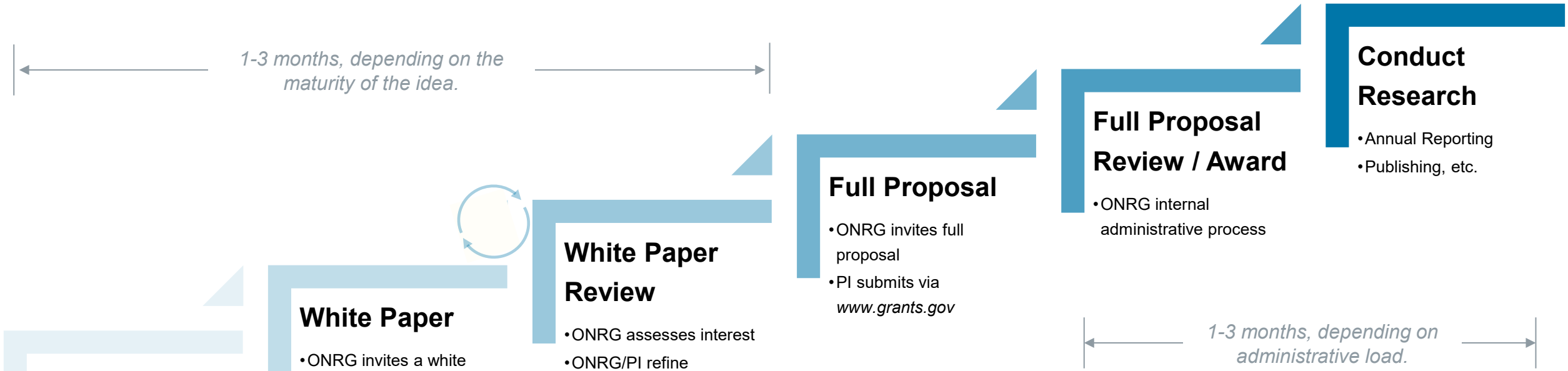
Research Grants

Innovative research of Naval relevance

- ~$100k /year for up to 3 years
- International or US collaboration encouraged, not required
- Publication encouraged. PI retains any intellectual property.

Typical Award Timeline

…for a typical Workshop or Research grant.
Visiting Scientist Program has a separate process.



Ideas can be considered at any time.

There are no submission deadlines.

Questions to consider when pitching ideas…

Is it *basic* research?

What is the **scientific** question?

What foundational knowledge is not currently available about the workings of the universe?

So what?

What impact will the research make on the scientific community or future technology?

What papers will be written because of your efforts? What papers will stop being written?

Is it hard?

If an “old” question, why have we not found an answer yet?

If a “new” question, what is the ‘sticky part’?

What is the risk?

How confident are you that you are asking the right question?

How will you know when you have an answer?

If you find a different answer, will you still learn something?

Why now? Why you?

What has been done before? Why was it not successful?

What new advance provides a new opportunity for progress?

What is novel about your skills/abilities/approach?

What will it take?

What resources (time, money, infrastructure, personnel, partnerships) are required to pursue the research?

Benefits of Collaborating with ONRG

Pursue your **high risk, high reward** ideas!

Publish results in the **open international** journals or conferences.

Retain all **intellectual property** that results from your research.

Gain **access to U.S. researchers** in government and academia.

Next step?

Let's talk about your ideas!

ONRG Science Director Points of Contact

Thank You!

ONR Global

https://www.nre.navy.mil/organization/onr-global

ONR Research Areas

https://www.nre.navy.mil/our-research/onr-technology-and-research

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