



# ONR Overview

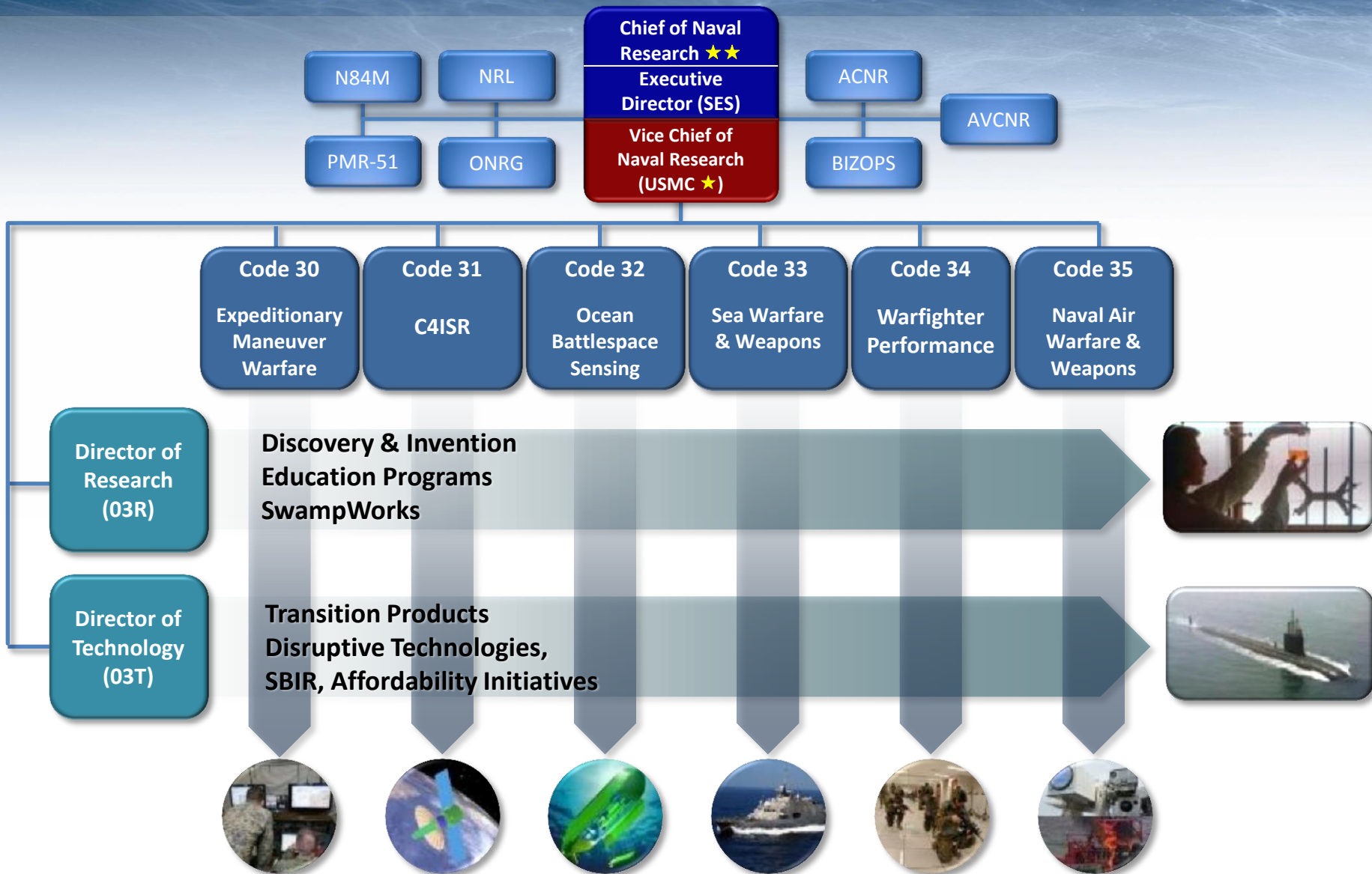
## *NDIA S&E Conference 2015*

**Dr. Lawrence C. Schuette**  
Acting Director of Research - ONR  
*March 2015*

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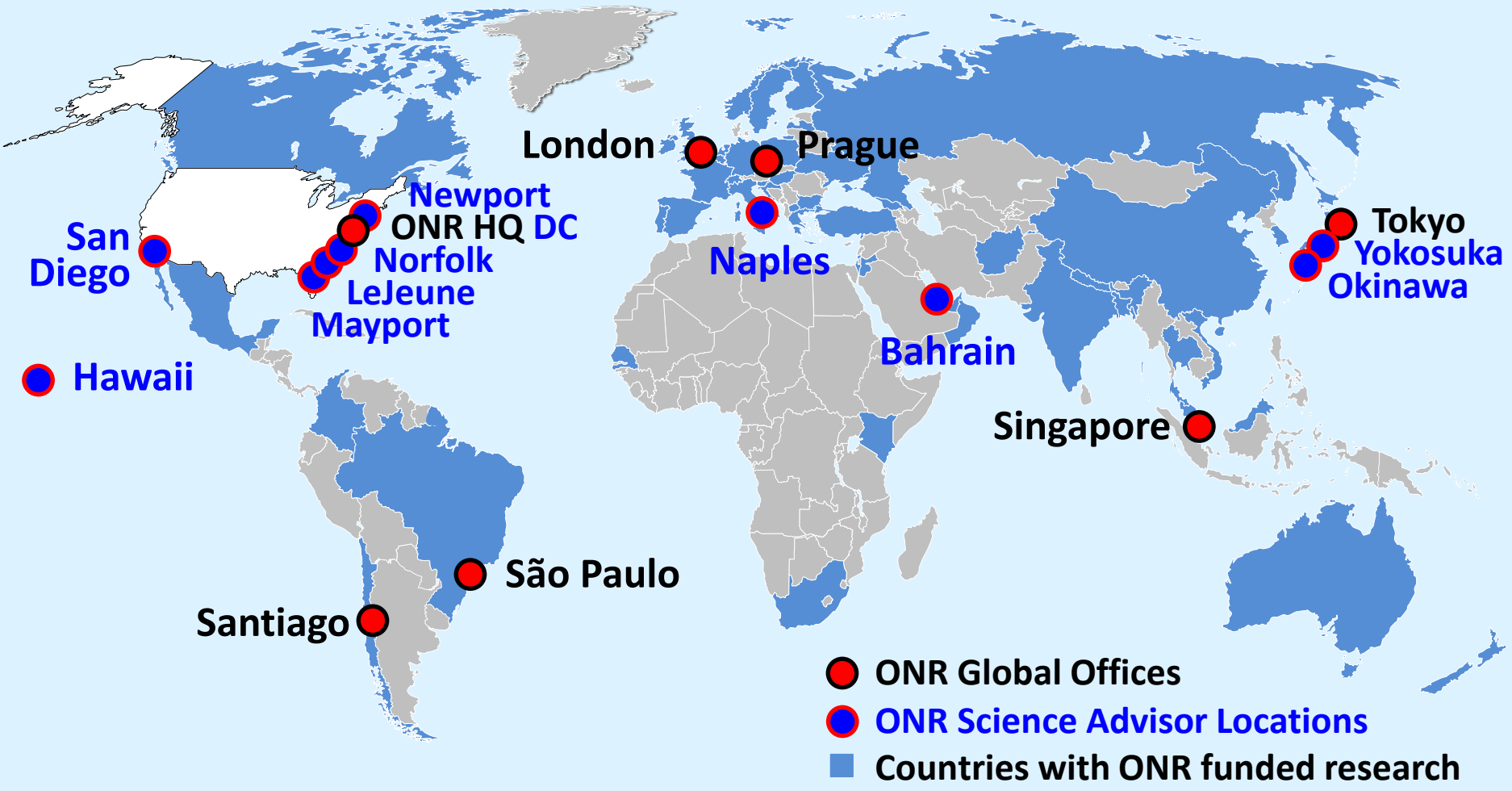


# ONR Organization





# Global & Fleet Engagement



**We execute \$2B/year with the Naval S&T community in the US and 54 countries**



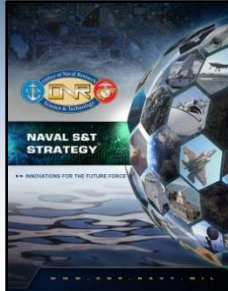
# Naval S&T Strategy

## ***DISCOVER, DEVELOP and DELIVER***

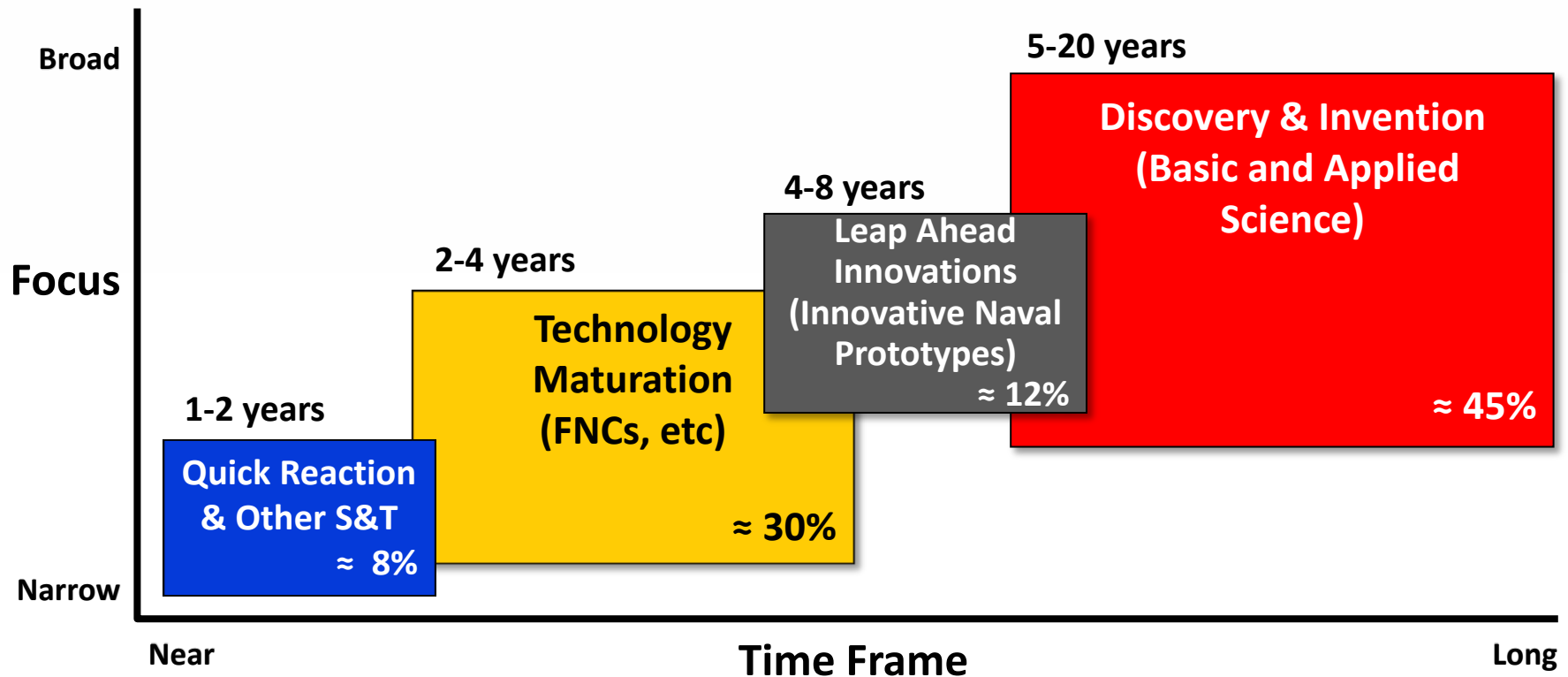
***decisive naval capabilities, in the near and long term,  
by investing in a balanced portfolio of promising scientific  
research, innovative technology and talented people***



# 2014 Naval S&T Strategy

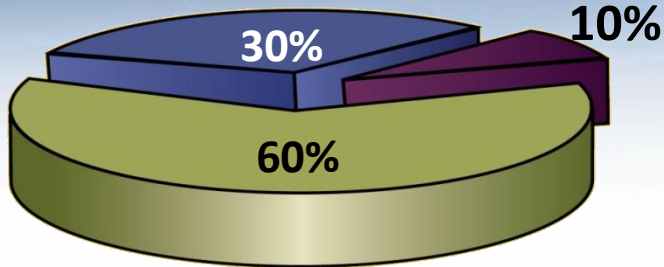


- *Assure Access to Maritime Battlespace*
- *Autonomy & Unmanned Systems*
- *Electromagnetic Maneuver Warfare*
- *Expeditionary & Irregular Warfare*
- *Information Dominance/Cyber*
- *Platform Design & Survivability*
- *Power & Energy*
- *Strike & Integrated Defense*
- *Warfighter Performance*

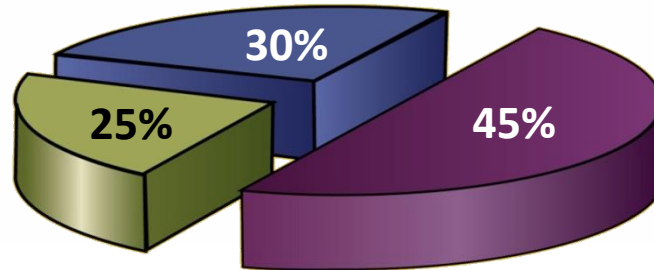


# Investment Balance

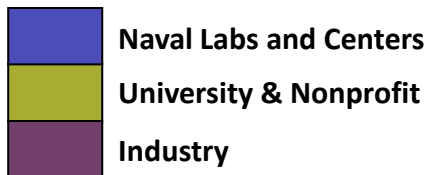
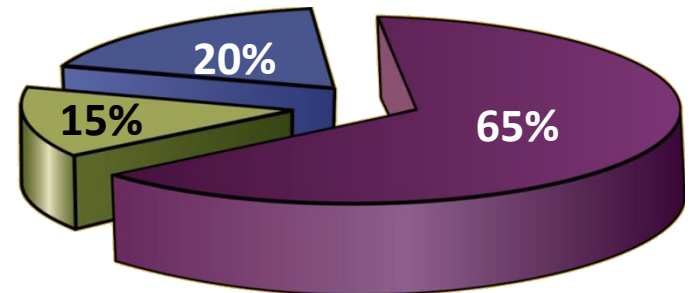
## 6.1: Basic Research



## 6.2: Applied Research



## 6.3: Advanced Tech Development



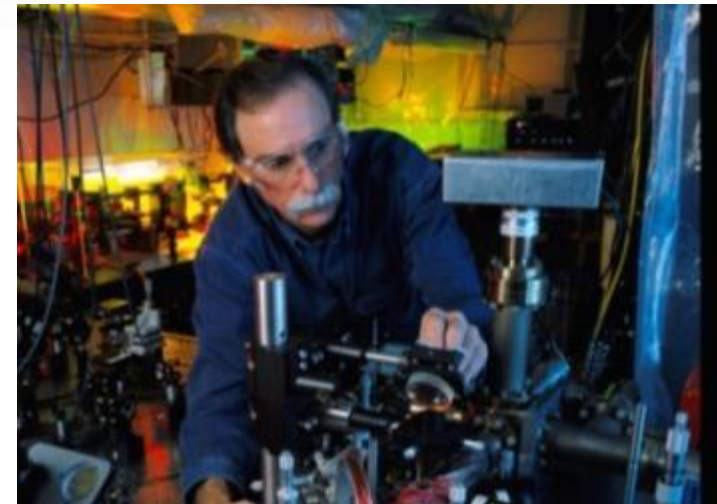
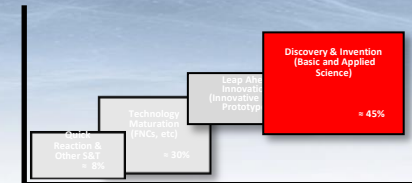
*Figures cited are nominal historical averages*



# Discovery & Invention S&T

***Discovery & Invention S&T is the essential foundation required for advanced technology***

- ***Focused on 5-20 years out***
- ***Basic Research and early Applied Research***
- ***Research maps to the Naval S&T Strategic Plan***



Dr. David Wineland  
2012 Nobel Prize in Physics

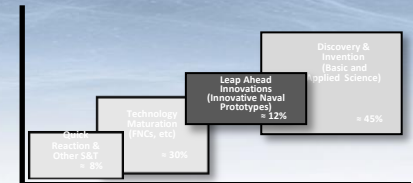
***Basic Research is the Foundation of the Navy's Newest Technologies***



# Leap Ahead Innovations

***Innovative Naval Prototypes (INPs) will dramatically change the way naval forces fight in the future. These programs are 4 to 8 years in length***

- ***High technical risk***
- ***High pay-off***
- ***Disruptive/asymmetric***
- ***Radical departure from status quo***



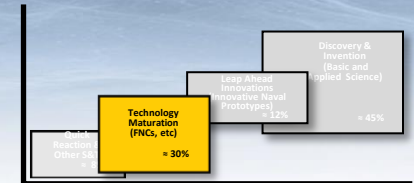
The Electromagnetic Railgun will transform naval gunfire





# Technology Maturation

***Matures S&T efforts into products in 2 to 4 years***

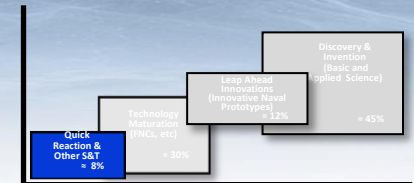


- ***Future Naval Capabilities (FNCs)***
  - Demonstrates / Delivers prototype systems, components, knowledge products, and technology improvements in response to validated S&T Capability Gaps
- ***Manufacturing Technology Program (ManTech)***
  - Developing critical manufacturing and repair/sustainment solution
  - Cost reduction is the primary benefit



ManTech S&T projects are saving **\$32M per hull** on VIRGINIA Class submarine construction

## *Off-the-shelf technology projects with a 12 to 24 month time horizon*



- **Experimentation:**
  - MCWL and NWDC
- **Swamp Works:**
  - Newly invented/discovered technologies
  - Accelerated timeframe.
- **TechSolutions:**
  - Operational problems identified by Sailors and Marines
- **Speed to Fleet (S2F):**
  - High priority, near-term needs
  - CNO funded, ONR managed



**Power Management Kit,  
an 80% weight reduction**



# How we execute our mission

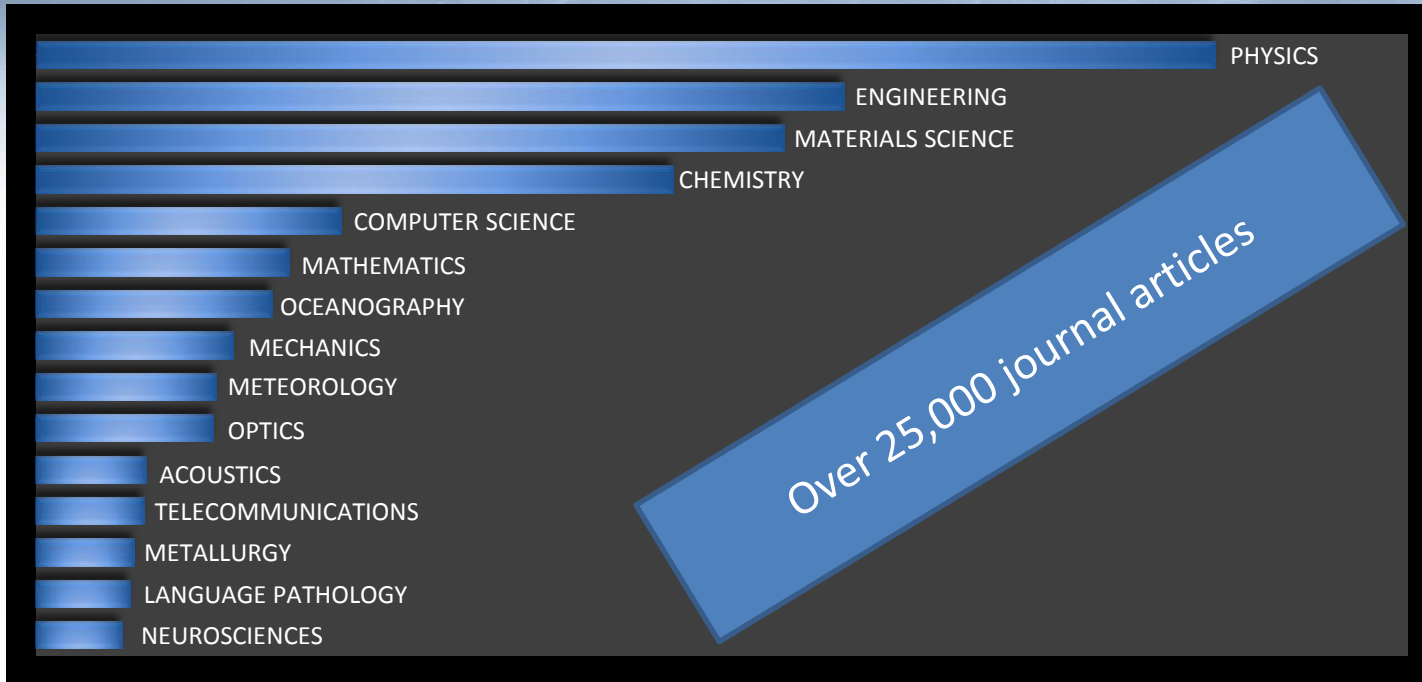
***ONR finds, funds and manages a national and global network of researchers and innovators***

- Annual budget of ≈\$2 billion
- All 50 states, over 70 countries
- Over 1000 companies
- More than 350 academic institutions
- Navy Warfare Centers
- Naval Research Laboratory
- Other federal & university research centers





# Top Research Areas: ONR Publications 2009-2014





# Finding Research Opportunities at ONR

<http://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities.aspx>

Who should I talk to?



Technology Locator

Glossary

Careers

Events

Search

ONR Global ▶ Marine Corps Warfighting Lab ▶ Naval Research Laboratory ▶ Naval Research Advisory Committee ▶

About ONR

Science & Technology Organization

Contracts & Grants

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Contracts & Grants

Solicitations

Broad Agency Announcements

Requests for Information

Requests for Proposals

Requests for Quotes

Special Notices

SeaPort-e

Submit a Proposal

Manage Your Contract

Manage Your Grant

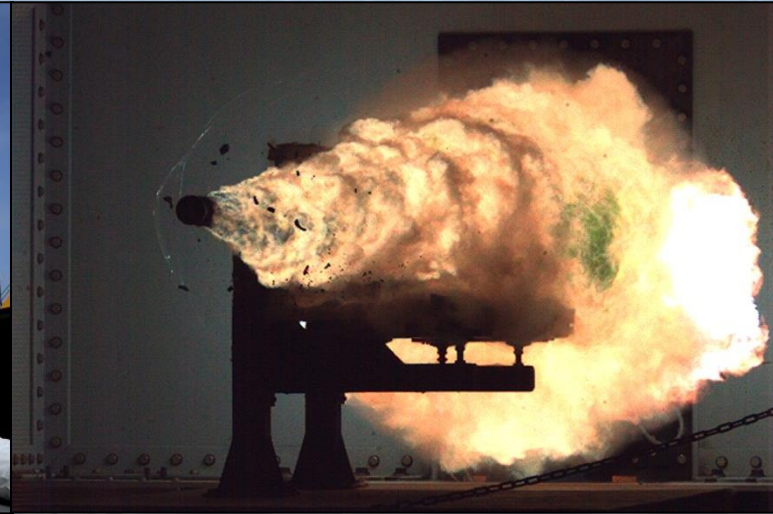
## Solicitations

- **Broad Agency Announcements (BAAs):** A BAA announces an agency's research interests including criteria for selecting proposals and soliciting the participation of all offerors capable of satisfying the government's needs. [See current BAAs](#)
- **Requests for Information (RFIs):** An RFI is used when a government agency does not presently intend to award a contract, but wants to obtain price, delivery, other market information or capabilities for planning purposes. Responses to these notices are not offers and cannot be accepted by the government to form a binding contract. [See current RFIs](#)
- **Requests for Proposals (RFPs):** An RFP is used in negotiated acquisitions to communicate government requirements to prospective contractors and to solicit proposals. [See current RFPs](#)
- **Requests for Quotes (RFQs):** An RFQ is a solicitation that provides in exacting detail a list or description of all relevant parameters of the requirement. RFQs are best suited to commercial products and services. [See current RFQs](#)
- **Special Notices:** These notices provide information about Industry Days, other events and other information that, while not captured in one of the other funding announcements, may be relevant to a given opportunity. [See current Special Notices](#)
- **Multiple-Award Task Order Contracts (MATOCs):** MATOCs were previously used by ONR for acquiring support services. As of Oct. 1, 2009, ONR now uses SeaPort-e for acquiring support services.
- **SeaPort-e:** This portal is the Nav's electronic platform for acquiring support services in 22 functional areas including

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# Delivering Affordable Asymmetric Capabilities



***Innovative Solutions for the Warfighter***