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

- **Discovery & Invention** (Basic and Applied Science) ≈ 45%
- **Technology Maturation** (FNCs, etc) ≈ 30%
- **Quick Reaction & Other S&T** ≈ 8%
- **Leap Ahead Innovations** (Innovative Naval Prototypes) ≈ 12%

Focus: Near 1-2 years, 2-4 years, 4-8 years
Focus: Broad 5-20 years

Distribution Statement A: Approved for Public Release
6.1: Basic Research
- 10% Naval Labs and Centers
- 30% University & Nonprofit
- 60% Industry

Figures cited are nominal historical averages

6.2: Applied Research
- 45% Naval Labs and Centers
- 30% University & Nonprofit
- 25% Industry

6.3: Advanced Tech Development
- 20% Naval Labs and Centers
- 15% University & Nonprofit
- 65% Industry

Top Universities funded by ONR:
- Massachusetts Institute of Technology
- University of California, San Diego
- University of Washington
- Carnegie Mellon University
- Duke University

1,791 Active Grants/Contracts in D&I in FY14

Distribution Statement D: Distribution authorized to the Department of Defense and U.S. DoD contractors only
Finding Research Opportunities at ONR

Who should I talk to?


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.
Basic Research Proposal Success

Pre - Proposal Inquiries

Formal Proposals

Funded Grants \ Contracts

>6,000

~3,000

~1000

NSF’s 2014 funding rate: 23% (10,981/48,074)

NIH’s 2014 funding rate: 18.1% (9,241/51,073)
Where’s the science?

Web of Science Top Research Areas: ONR publications 2009-2014

- PHYSICS
- ENGINEERING
- MATERIALS SCIENCE
- CHEMISTRY
- COMPUTER SCIENCE
- MATHEMATICS
- OCEANOGRAPHY
- MECHANICS
- METEOROLOGY
- OPTICS
- ACOUSTICS
- TELECOMMUNICATIONS
- METALLURGY
- LANGUAGE PATHOLOGY
- NEUROSCIENCES

Industry Collaborations

- Bell Labs: 31
- BOEING: 132
- Northrop Grumman: 32
- IBM: 89
- BAE Systems: 25
- Siemens: 32
- Lockheed Martin: 152
- Raytheon: 43
- Microsoft: 120
- Battelle: 88
- xerox: 30

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Impact to scientific community


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Discovery & Invention

University Research Programs

**University Research Programs** fund promising new research, stimulate innovation, and attract outstanding researchers to naval-relevant research projects

- The **Multidisciplinary University Research Initiative (MURI)** involves teams of researchers investigating high priority topics and opportunities that intersect more than one traditional technical discipline

- The **Defense University Research Instrumentation Program (DURIP)** supports university research infrastructure essential to high-quality naval-relevant research

- The **Presidential Early Career Award for Scientists & Engineers (PECASE)** recognizes and honors extraordinary achievements of young professionals at the outset of their independent research careers in S&T

- The **National Security Science & Engineering Faculty Fellowship (NSSEFF)** provides extensive, long-term financial support to distinguished university faculty and staff scientists and engineers to conduct unclassified, basic research on topics of interest to DoD
Enterprise Research Programs develop scientific and fundamental knowledge, provide the basis for future Naval systems, and maintain the health of the defense scientist and engineer workforce

- The **Basic Research Challenge (BRC)** competitively selects and funds promising research programs in new areas not addressed by the current basic research program.
- The **Applied Research Challenge (ARC)** stimulates new applied research projects in areas not currently addressed by the departmental core applied research programs and explores feasibility of basic research with high risk and significant potential naval payoffs.
- The **Young Investigator Program (YIP)** supports academic science and engineering faculty who been on tenure track within the last five years and show exceptional promise for doing creative research.
**Discovery & Invention**

**Laboratory Research Programs**

Laboratory Research Programs provide naval laboratories the ability to invest in basic research of technical interest to meet laboratory mission elements

- **In-house Laboratory Independent Research (ILIR)** enables laboratories to sponsor focused, high-risk research with potential high payoffs to the Navy and Marine Corps on a discretionary basis

- **Independent Applied Research (IAR)** focuses on performing innovative, promising applied research consistent with the mission of the claimant organizations and the current DON S&T strategy

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Education & Workforce

The Education & Workforce portfolio raises awareness of naval career opportunities, attracts and nurtures the future talent pool, and fosters the continued development of the current naval science, technology, engineering, and mathematics (STEM) workforce.

- Develop the workforce and capabilities needed today and in the future
- Emphasize Total Force approach to workforce development
- Align DON STEM portfolio with Federal and Office of the Secretary of Defense (OSD) directives in order to foster a highly competent and diverse DON STEM talent pipeline

Promote and Develop STEM Workforce & Capabilities

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Larry.Schuette@navy.mil