BROAD AGENCY ANNOUNCEMENT (BAA)

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in the Department of Defense Grant and Agreement Regulation (DODGARS) 22.315. A formal Request for Proposals (RFP), solicitation, and/or additional information regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. The ONR reserves the right to select for award all, some, or none of the proposals submitted in response to this BAA. The ONR reserves the right to fund all, some, or none of the proposals submitted in response to this BAA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this BAA will not be returned. It is the policy of ONR to treat all proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

I. GENERAL INFORMATION

1. Agency Name

Office of Naval Research,
875 North Randolph Street - Suite 1425
Code 03R
Arlington, VA  22203-1995

2. Research Opportunity Title

Fiscal Year 2009 ONR Young Investigator Program (YIP)

3. Program Name

ONR Young Investigator Program (YIP)
4. Research Opportunity Number

ONR BAA 09-005

5. Response Date

Full proposals are due by 4:00 PM, Eastern Standard Time (EST), on Monday, 12 January 2009.

6. Research Opportunity Description

ONR’s Young Investigator Program (YIP) seeks to identify and support academic scientists and engineers who have received Ph.D. or equivalent degrees within the last five years (on or after 01 November 2003 for this FY09 competition) and who show exceptional promise for doing creative research. The objectives of this program are to attract outstanding faculty members of Institutions of Higher Education (hereafter also called "universities") to the Department of the Navy's research program, to support their research, and to encourage their teaching and research careers.

Proposals addressing research areas as described in the ONR Science and Technology (S&T) Department section of ONR's website at www.onr.navy.mil which are of interest to ONR Program Officers and Division Directors will be considered. Contact information for each Division (a subgroup of an S&T Department) is also listed within the S&T section of the website. Potential applicants may contact the appropriate Division Director, or the Program Officer who is the point-of-contact for a specific technical area, to discuss their research ideas. Brief informal pre-proposals may be submitted to facilitate these discussions. Such discussions can clarify the content and breadth of the priority research areas and enhance the match between a subsequent proposal and Department of the Navy research needs.

An individual wishing to apply for a Young Investigator award must submit a research proposal and a supporting letter through the appropriate university officials. ONR makes awards to institutions, not to individuals. The research proposal should follow the format described in BAA 09-005 Section IV entitled, "Application and Submission Information.

Proposals may request up to $170,000 per year for three (3) years. These funds may be budgeted against any reasonable costs related to the conduct of the proposed research, for example, salary for the Young Investigator, graduate student support, supplies, and operating expenses. Additional funds (beyond the basic $170,000 yearly amount) for capital equipment which enhances the Young Investigator's proposed research may be requested for the first budget period, based on the needs of the research. Requesting funds for capital equipment will not decrease the probability of receiving an award; additional support for equipment will be decided separately from award selections and will depend upon availability of funds.

The basic $170,000 per year award can be supplemented through a "matching funds" enhancement available only to those receiving an ONR Young Investigator award. As an incentive for becoming involved with other Department of the Navy research activities, the Office of the Director of Research of ONR may match on a 1-for-1 basis, the first $25,000 of additional Department of the Navy funding which a successful applicant obtains each year to support additional, collaborative research with a Navy laboratory during the YIP award. Potential sources of research support eligible for the 1-for-1 match include Navy laboratories and ONR Program Officers. Thus, this "matching funds" clause can provide research support over and
above the basic $170,000 per year award, e.g. to support an additional graduate student and an additional research task. A Young Investigator is not prohibited from receiving more than $25,000 from other Department of the Navy sources; however, the Office of the Director of Research will match on a 1-for-1 basis only the first $25,000 each year. Other Navy support eligible for matching funds can be arranged at any time and generally will not have been identified at the time of the initial award. ONR Program Officers will assist, upon request, Young Investigators in identifying potential collaborators at Navy laboratories. ONR Program Officers will also assist successful applicants who wish to seek support from other parts of the Department of the Navy in identifying individuals at other Navy organizations who may be interested in funding additional research by the Young Investigator.

Upon completion of the three (3) year award period, Young Investigators may apply to ONR for continued support under ONR's regular research grant program. Decisions about continued funding outside the context of the YIP will be made following a review of the new proposal by the cognizant Program Officer, based on the merits of the proposal, ONR's research priorities, and the creativity and productivity exhibited during the previous Young Investigator research program.

The competition in past years has been severe. Last year, 208 proposals were received, resulting in 27 Young Investigator awards. Past awardees have both submitted outstanding research proposals and possessed outstanding records of prior professional accomplishments. Given that "past performance" is a selection criterion, applicants are advised that the biographical information submitted as part of the proposal (see "Qualifications" under "Proposal Content", below) should list all relevant past activities.

Those proposals not selected for Young Investigator awards are automatically considered for ONR's regular research grant program in competition with all other research proposals submitted to ONR Long Range BAA. Typically, additional proposals originally submitted to the Young Investigator Program have been selected each year for funding via the regular research grant program. Thus, the YIP is not a "research initiation" opportunity with standards that are less demanding than ONR's regular research grant program. ONR's Young Investigator awards are intended to confer honor upon awardees beyond the research funding being provided.

7. Points of Contact

Questions of a technical nature shall be directed to the ONR Science and Technology Program Officer or Division Director (see ONR Science and Technology Departments section at www.onr.navy.mil to contact these individuals) responsible for a research area that best matches the research being proposed.

Questions regarding YIP policy issues should be directed to:

Dr. Bill Lukens  
Code 03R, YIP Program Manager  
Office of Naval Research  
875 North Randolph Street - Suite W256A  
Arlington, VA 22203-1995  
Telephone Number: (703) 696-4111  
FAX Number: (703) 588-1013  
Email Address: lukensw@onr.navy.mil or william.lukens1@navy.mil
Questions of a business nature should be directed to:

Primary
Kristin Fuller
Contracting Officer
Office of Naval Research, Code BD 251
875 North Randolph Street, Suite 1425
Arlington, VA 22203-1995
Telephone Number: (703) 696-4591
Email Address: kristin.fuller@onr.navy.mil

Secondary:
Ms. Vera M. Carroll
Acquisition Branch Head
Contract and Grants Awards Management, Code 0251
Office of Naval Research
875 North Randolph Street, Suite 1425
Arlington VA, 22203-1995
E-mail: carrolv@onr.navy.mil or vera.carroll@navy.mil

** Important Notices Regarding Questions of a Business Nature **

- All questions shall be submitted in writing by electronic mail.
- Questions presented by telephone call, fax message, or other means will not be responded to.
- Questions regarding full proposals must be submitted by 2:00 P.M. Eastern Time on Tuesday, 9 December 2008. Questions after this date and time may not be answered and the due date for submission of the proposals will not be extended

8. Instrument Type

It is anticipated that awards will take the form of research grants.

9. Catalog of Federal Domestic Assistance (CFDA) Numbers

CFDA No.: 12.300

10. Catalog of Federal Domestic Assistance (CFDA) Titles

CFDA Title: Basic and Applied Scientific Research - ONR
II. AWARD INFORMATION

- **Total Amount of Funding the Program Office expects to Award through the Announcement**

  Subject to official fiscal appropriation, it is anticipated that approximately $7,500,000 will be available for awards made under this BAA.

- **Anticipated Number of Awards**

  ONR anticipates that funding will be available to make approximately fifteen (15) awards under this FY09 YIP BAA.

- **Expected Amounts of Individual Grant Awards**

  Individual awards will be for up to $170,000 per year for three (3) years (with the possibility of greater support for equipment and/or to support additional, collaborative research with a Navy laboratory). The $170,000 limit includes all funds paid to the university, including all indirect costs.

- **Anticipated Start Date and Period of Performance**

  Proposed research should be structured to have a three (3) year period of performance beginning 01 June 2009.

III. ELIGIBILITY INFORMATION

Awards under this BAA will be made only to U.S. Institutions of Higher Education which award degrees in science, engineering, and/or mathematics. Further, the Principal Investigator of a proposal must be a U.S. citizen, national, or permanent resident (on the date proposals are due), holding a tenure-track or permanent faculty position at that university, who received her/his graduate degree (Ph.D. or equivalent) on or after 01 November 2003 (based on the date printed on the diploma). The term "national" of the United States includes a native resident of a possession of the United States, such as American Samoa. Faculty at an institution of higher education which does not designate any faculty appointments as "tenure track" and who do not have a permanent appointment are eligible if that is so indicated on the proposal cover and an accompanying letter from the university states that the faculty member will be considered for a permanent appointment.

IV. APPLICATION AND SUBMISSION INFORMATION

1. **Application and Submission Process**

   The deadline for receipt of proposals is 4:00 p.m. (Eastern Standard Time) on Monday, 12 January 2009. Proposals received after this time and date will not be considered for a FY09 YIP award under this BAA. After the proposal evaluation process is completed, the proposed Principal Investigator will be notified via email or U.S. mail whether or not the proposal has been recommended for an award.

   **Where to Submit:** Proposals must be submitted electronically to ONR, through Grants.gov.
NOTE: Full Proposals sent by fax, e-mail or paper submission will not be considered.

Registration Requirements for Grants.gov: There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). See www.grants.gov/GetStarted. Use the Grants.gov Organization Registration Checklist at www.grants.gov/assets/OrganizationRegCheck.doc to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and Grants.gov, should allow at least 21 days completing these requirements. It is suggested that the process be started as soon as possible.

Questions: Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or by email to support@grants.gov.

2. Content and Format of Full Proposals

The proposals submitted under this BAA should be for the conduct of unclassified basic and applied research. However, confidential proposals are permitted. The Proposal submissions will be protected from unauthorized disclosure in accordance with applicable law and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

Application forms and instructions are available at Grants.gov. To access these materials, go to http://www.grants.gov, select "Apply for Grants", and then select "Download Application Package". Enter the CFDA for ONR, which is 12.300, and the “Opportunity Number” designated as the “Research Opportunity Number” on page two of this BAA.

Forms

You must complete the mandatory forms and any applicable optional forms listed in grants.gov. in accordance with the instructions on the forms and the additional instructions listed below. The mandatory form for this BAA is SF424 (R&R), and the optional form for this BAA is SF-LLL Disclosure of Lobbying Activities.

Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in this announcement.

SF 424 (R&R)

Complete this mandatory form first to populate data in other forms. Complete all the required fields in accordance with the pop-up instructions on the form. To activate the instructions, turn on the “Help Mode” (icon with the pointer and question mark at the top of the form). The completion of most of the fields is self-explanatory except the following special instructions:

a. Field 2: In the Applicant Identifier area, please list the most appropriate ONR Program Officer to receive the proposal (if known).
b. Field 4: In the Federal Identifier Field, an ONR Department Code MUST be entered. These codes can be found on the right side of the ONR Home Page www.onr.navy.mil. Enter the Department Code which best relates to your proposal. Please choose at the sub-Department level wherever possible (i.e., for ONR Code 30, you should select at the 301, 302, or 303 level if possible).

c. Field 7: Complete as indicated. Please note under “Other (Specify)” if your organization is a Minority Institution (MI).

d. Field 18: The List of Certifications and Assurances referenced in Field 18 can be found on the ONR Home Page, (www.onr.navy.mil), select “BAAs”, then select “Representatives and Certifications”. The certification package for Grants is entitled, “Certifications for Grants and Agreements”.

e. Field 20: Use Field 20 to attach the proposal narrative as described below.

f. Field 21: Attach a supporting letter through the appropriate university officials. The supporting letter should be from the applicant’s Department Chairperson, Dean, or other official who speaks for the university regarding support for and commitment to the applicant. This commitment can be shown, for example, by the purchase of research equipment, support for the applicant’s graduate students, etc. The supporting letter should state whether the applicant holds a tenure track position or a permanent position. If the applicant does not have a permanent appointment and the university does not designate any faculty appointments as tenure track, the letter should note this and state when the applicant will be considered for a permanent appointment.

Proposal Narrative - The proposal narrative contains the cover, table of contents, executive summary, background, statement of work, management approach, reference citations, qualifications and cost proposal. The entire proposal narrative must be contained in a single pdf file and attached at Field 20 entitled, “Pre-Application”.

Format:

- Paper Size – 8.5 x 11 inch paper
- Margins – 1” inch
- Spacing – 1.5 or double-spaced
- Font – Times New Roman, 12 point
- Number of Pages – The Technical Proposal excluding sections listed as "not included in page limitations", should not exceed twenty-five (25) pages. There is no page limit for the Cost Proposal. Limitations within sections of the proposal are indicated in the individual descriptions shown below. Full Proposals exceeding the page limit may not be evaluated.

- **Cover:** (Not included in page limitations.) The first page of your narrative must include the following information:

  Principal Investigator status for eligibility (check those that apply)

  __Principal Investigator is U.S. Citizen or National
  __Permanent resident of U.S. (Alien#______________)
  __Will be considered for tenure
  __Holds a permanent position
  __Date printed on Ph.D. (or equivalent) diploma is on or after 1 November 2003.
Names and addresses (to be used for courtesy notification of Young Investigator awards of:

President (or Chancellor or Provost if there is no on-campus President)
Dean (if applicable)
Department Chair/Head or Supervisor

- **Table of Contents:** (Not included in page limitations) List the titles of proposal sections and their page numbers.

- **Executive Summary:** (Not to exceed one page.) Summarize the research being proposed and its potential technological impact.

- **Background:** Discuss the relationship of the proposed research to state-of-the-art knowledge in the field and to related efforts in progress elsewhere.

- **Statement of Work:** Provide a Statement of Work (SOW) clearly detailing the scope and objectives of the effort and the technical approach. The SOW must contain a description of the proposed research in sufficient detail for evaluation, including the objective and the technical approach for each proposed task, including how data will be analyzed. Appropriate references to the scientific literature should be cited. It is anticipated that the proposed SOW will be incorporated as an attachment to any resultant award instrument. To this end, such proposals must include a self-standing SOW, which can be attached to the award instrument.

- **Management Approach:** A discussion of the overall approach to the management of this effort, including brief discussions of the total organization, use of personnel, and nature and extent of any planned interactions with other organizations. Include a description of the facilities that are required for the proposed effort with a description of any Government Furnished Equipment/Hardware/Software/Information that is required. Also provide the rationale for any funding being requested to purchase equipment for performing the proposed work. This section should also include a:
  - listing and description of involvement in other research projects currently being undertaken by the Principal Investigator, whether or not acting as a Principal Investigator in these other projects;
  - listing of other pending research proposals (title, amount, where pending), including other agencies receiving this proposal; and
  - listing of the institution’s support for the proposed research program (e.g., equipment purchase, graduate student support, release time, etc.).

- **Reference Citations:** (Not included in page limitations.) List the references cited in the Statement of Work.

- **Qualifications:** (Not included in page limitations.) Provide biographical information of the applicant, including lists of her/his publications, professional activities (such as: organizing and/or serving on a program committee of conferences/workshops; chairing technical meetings; technical presentations
(indicate if invited); editing journals; serving as reviewer for publications/proposals or as a consultant; etc.), patents, honors, awards, and other accomplishments. Note the "past performance" proposal evaluation criterion listed below.

- **Cost Proposal Content:** (Not included in page limitations). Provide a detailed cost breakdown of all costs, by cost category and by federal government fiscal year. Start date for budget purposes should be 01 June 2009. Thus, as noted below, the proposed budget for three years beginning 01 June 2009 will have four budget periods.

  1. Four months (01 June 2009 through 30 September 2009)
  2. Twelve months (01 October 2009 through 30 September 2010)
  3. Twelve months (01 October 2010 through 30 September 2011)
  4. Eight months (01 October 2011 through 31 May 2012)

Offerors should make a concerted effort to ensure that the proposed costs in each of the four budget periods, which are outlined above, represent only those costs expected to be incurred (spent) during that specified budget period. (One exception: Costs for requested capital equipment (if any) should be included in the first budget period.)

The cost breakdown shall detail:

- **Direct Labor** – Individual labor category or person, with associated labor hours and unburdened direct labor rates.
- **Indirect Costs** – Fringe Benefits, Overhead, G&A, COM, etc. (Must show base amount and rate)
- **Travel** – Number of trips, number of travelers, destination, duration, purpose, etc.
- **Subcontract** – A cost proposal as detailed as the Offeror’s cost proposal will be required to be submitted by the subcontractor, if any. The subcontractor’s cost proposal can be provided with the Offeror’s cost proposal or will be requested from the subcontractor at a later date.
- **Consultant** – If included, provide a breakdown of the consultant’s hours, the hourly rate proposed, any other proposed consultant costs and a copy of the consultant’s proposed statement of work if it is not already separately identified in the prime recipient’s proposal. Strong justification must be provided, and consultants are to be used only under exceptional circumstances where no equivalent expertise can be found at a participating university. Justify in Field K.
- **Materials** should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, should be provided. Include a brief description of the Offeror’s procurement method to be used (Competition, engineering estimate, market survey, etc.)
- **Other Direct Costs**, particularly any proposed items of equipment. Include a brief description of the procurement method to be used by the Offeror (competition, market survey, etc.) for purchasing capital equipment. Explain the basis for the cost estimate for capital equipment in the proposal's budget.

- **Cost Proposal Submission:** The cost proposal must be part of the single pdf file attached to form SF 424 (R&R) at block number 20 entitled, “Pre-Application”.

BAA 09-005 Page 9 of 12
SF-LLL Disclosure of Lobbying Activities Form

If applicable, complete SF-LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."

3. Significant Dates and Times

<table>
<thead>
<tr>
<th>Schedule of Events</th>
<th>Date</th>
<th>Time (EST)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due Date for Proposals</td>
<td>12 January 2009</td>
<td>4:00 PM</td>
</tr>
<tr>
<td>Notification of Recommendation for Award</td>
<td>13 March 2009*</td>
<td>N/A</td>
</tr>
<tr>
<td>Grant Start Date</td>
<td>01 June 2009*</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*(These dates are estimates as of the date of this announcement.)

A list of proposals that are being recommended for an award will be posted on the ONR website at http://www.onr.navy.mil as soon as it is available, on or about 13 March 2009.

Proposal Receipt Notices

After proposal is submitted through Grants.Gov, the Authorized Organization Representative (AOR) will receive a series of three e-mails. It is extremely important that the AOR watch for and save each of the emails. You will know that your proposal has reached ONR when the AOR receives email Number 3. You will need the Submission Receipt Number (email Number 1) to track a submission. The three e-mails are:

Number 1 – The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp for the submission.

Number 2 – The applicant will receive an email indicating that the proposal has been validated by Grants.gov within a few hours of submission. (This means that all of the required fields have been completed).

Number 3 – The third notice is an acknowledgment of receipt in email form from ONR within ten days from the proposal due date. The email is sent to the authorized representative for the institution. The email notes that the proposal has been received and provides the assigned tracking number.

NOTE: Any proposal, modification, or revision submitted through Grants.Gov where the time and date for submission (e-mail Number #1) is after the deadline for proposal submission will be late and will not be considered for a FY09 YIP award.

V. EVALUATION INFORMATION

1. Evaluation Criteria

Proposals will be evaluated using the following criteria:
A. Past performance and experience of the Principal Investigator, demonstrated by the significance and impact of previous research, publications, professional activities, awards and other recognition, etc.;
B. A creative research proposal, demonstrating the potential for making progress in a listed, ONR priority research area; and
C. A long-term commitment by the University to the applicant and the research.

2. Evaluation Process

The evaluation of proposals will be performed by the cognizant ONR Program Officer and other Naval and Defense activities/agencies personnel, as needed. The Government may use selected support contractor personnel to assist in the administrative processing of the proposals arising from this announcement; these support contractors will be bound by appropriate non-disclosure agreements to protect proprietary and source-selection information.

VI. AWARD ADMINISTRATION INFORMATION

1. Reporting

The following deliverables, primarily in contractor format, are anticipated as necessary. However, specific deliverables should be proposed by each Offeror and finalized with the contracting agent:

- Technical and Financial Progress Reports
- Presentation Material
- Other Documents or Reports
- Final Report

VII. OTHER INFORMATION

1. Government Property/Government Furnished Equipment (GFE) and Facilities

Each Offeror must provide a very specific description of any equipment/hardware that it needs to acquire to perform the work. This description should identify the component, nomenclature, and configuration of the equipment/hardware that it proposes to purchase for this effort. Government research facilities may be available and should be considered as potential government furnished equipment/facilities.

2. Use of Animals and Human Subjects in Research

If animals are to be utilized in the research effort proposed, the Offeror must complete a DoD Animal Use Protocol with supporting documentation (copies of AAALAC accreditation and/or NIH assurance, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. Similarly, for any proposal that involves the experimental use of human subjects, the Offeror must obtain approval from the Offeror’s committee for protection of human subjects (normally referred to as an Institutional Review Board, (IRB)). The Offeror must also provide NIH (OHRP/DHHS) documentation of a Federal Wide Assurance that covers the proposed human subjects study. If the Offeror does not have a Federal Wide Assurance, a DoD Single Project Assurance for that work must be completed.
prior to award. Please contact the ONR Animal/Human Use Administrator at (703) 696-4046 or please refer to http://www.onr.navy.mil/sci_tech/ahd_usage.asp for further information.

3. Department of Defense High Performance Computing Program
The DoD High Performance Computing Program (HPCMP) furnishes the DoD S&T and DT&E communities with use-access to very powerful high performance computing systems. Awardees of ONR contracts, grants, and assistance instruments may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer approval is obtained and if security/screening requirements are favorably completed. Additional information and an application may be found at http://www.hpcmo.hpc.mil/.