



FY08 BASIC AND APPLIED RESEARCH IN UNDER SEA MEDICINE BROAD AGENCY ANNOUNCEMENT (BAA)

INTRODUCTION:

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d)(2) and the Department of Defense Grants and Agreements (DoDGARS) Subpart 22.315(a). 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 in response to this announcement. The ONR reserves the right to fund all, some or none of the proposals received under 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,
One Liberty Center
875 North Randolph Street
Arlington, VA 22203-1995

2. Research Opportunity Title –

3. Research Opportunity Number -

ONR BAA 07-016

4. Response Date –

Pre-proposals: 30 April 2007

Full Proposals: 9 July 2007

5. Research Opportunity Description -

The Office of Naval Research (ONR 342) is soliciting pre-proposals and proposals in the following topic area within the Naval Warrior Applications Division. This Division includes basic research and applied research components.

Undersea Medicine. The field of Undersea Medicine covers a broad area of research topics in need of multidisciplinary approaches to understanding basic mechanisms and developing solutions. Investigators in such research disciplines as molecular biology, immunology, biochemistry, physiology, stress physiology, environmental physiology, neuroscience, psychology, computational fluid dynamics, and others are invited and encouraged to bring their expertise to bear on the issues outlined below. The goal of this effort is to encourage new thinking that will lead to the elucidation of the physiological and biochemical (molecular) mechanisms underlying the effects of stressors experienced by Navy and Marine Corps divers and Navy submarine personnel. Research proposals in the following areas are requested:

1) Studies of the pathophysiology of decompression sickness (DCS) and arterial gas embolism (AGE), with an emphasis on characterizing a) cellular (gene activation) and molecular (enzymes, receptors or signaling systems) interactions with nitrogen gas emboli, b) how these interactions influence DCS/AGE risk (including molecular and cellular pathology), c) methods to improve prediction and diagnosis of DCS/AGE using non-invasive imaging techniques and/or by use of specific cellular and molecular processes, d) improved therapeutic (non-recompressive) interventions to mitigate DCS and AGE, e) novel methods to remove excess gases from tissues and f) greater understanding of how exposure to thermal stress can influence DCS risk, f) mathematical modeling of fluid dynamics that may influence DCS incidence;

2) Studies to elucidate the cellular (gene activation) and molecular (enzymes, receptors or signaling systems) pathology of hyperbaric oxygen toxicity (HBO) to include: a) determination of those specific perturbations of metabolic processes by hyperbaric oxygen that are demonstrably and causally related to HBO (using the tools of metabolomics, proteomics, and genomics, and leading to a functional understanding of these responses at the molecular and cellular level), b) molecular and cellular details of the pathology associated with HBO, c) studies to develop prophylactic therapeutics for

HBO toxicity (e.g., central nervous system, pulmonary, and ocular pathology) and d) methods to detect in real time the development of oxidative injury in situ;

3) Studies to elucidate the acute effects of heat and cold stress on performance as well as the physiologic adaptive mechanisms to heat and cold stress, including the mechanisms of these responses at the cellular (gene activation) and molecular (enzymes, receptors and signaling systems) level;

4) Studies on the effects of high and low frequency sound on human divers at the organism, organ, cellular, and molecular levels;

5) Studies on the identification and mitigation of operational stressors, including an understanding of these stressors at the molecular, cellular and pharmacologic level, experienced by submariners, including technologies to improve operator performance in submarines in the littoral battle space and to improve the survival of submariners during submarine rescue operations;

6) Studies on the management of trauma in the undersea environment;

7) Studies in the area of diving medicine such as fitness to dive, longitudinal medical effects, barotraumas and immersion stress;

8) Studies of high pressure nervous syndrome (HPNS) at the organism, organ, cellular and molecular level.

In order to foster the development of young investigators in the field, up to two of the awards under this program may be Postdoctoral Awards (see *paragraph 7 - Instrument Type(s)* for details). Pre-proposals and Proposals submitted designated as "Postdoctoral" will be evaluated (using the same criteria as Primary Awards) as a separate category. Available funds not applied to Postdoctoral Awards will be applied to Primary Awards.

It is not the intent of this solicitation to establish new facilities; investigators should be able to demonstrate that they have the required research capability and access to the necessary facilities. Pre-proposals and proposals whose main objectives are to conduct analyses, literature reviews, or program evaluations are not encouraged.

6. Point(s) of Contact -

Questions of a technical nature shall be directed to the cognizant Technical Point of Contact, as specified below:

CDR Elizabeth A. Montcalm-Smith
Program Officer
Naval Warrior Applications
ONR Code 342
Office of Naval Research
One Liberty Center
875 North Randolph Street
Arlington, VA 22203-1995
Telephone Number: 703-696-2580
Facsimile Number: 703-696-0332

Questions of a business nature shall be directed to the cognizant Contract Specialist, as specified below:

Matt Ferebee
Contract Specialist
Contract & Grants Awards, Management
Code ONR 251
Office of Naval Research
One Liberty Center
875 North Randolph Street
Arlington, VA 22203-1995
Telephone Number: (703)-696-1474
Facsimile Number: (703)-696-3365
E-mail: FEREBEM@onr.navy.mil

7. Instrument Type(s) -

a) Primary Awards: ONR anticipates that basic research (6.1) and applied research (6.2) funding will be available to make awards. Awards will primarily be in the form of grants and cost-plus-fixed-fee (CPFF) contracts. However, the Government reserves the right to award cooperative agreements or other transaction agreements to appropriate parties, should the situation warrant use of an instrument other than a grant or contract.

b) Postdoctoral Awards: ONR anticipates that basic research (6.1) and applied research (6.2) funding will be available to make a maximum of two (2) postdoctoral awards. Each postdoctoral award will have a maximum amount of \$115K per year (including indirect costs) for no longer than 3 years. Awards are made to Postdoctoral Associates (within 5 years of the doctorate). Postdoctoral Awards will primarily be in the form of grants and cost-plus-fixed-fee (CPFF) contracts. However, the Government reserves the right to award cooperative agreements or other transaction agreements to appropriate parties, should the situation warrant use of an instrument other than a grant or contract. Any person awarded a postdoctoral award will be ineligible for primary award as a principal investigator under this BAA.

Submission of either primary or postdoctoral pre-proposals and full proposals should follow the same guidelines (dates, format) for submission outlined in the following section. In addition, a postdoctoral full proposal submission, if submitted by the postdoctoral candidate, should be accompanied by a letter from a suitable mentor indicating agreement to serve in that capacity.

8. Catalog of Federal Domestic Assistance (CFDA) Numbers -

12.300

9. Catalog of Federal Domestic Assistance (CFDA) Titles -

DOD Basic and Applied Scientific Research

10. Other Information

Additional information concerning ONR can be found at the ONR website at:
www.onr.navy.mil.

II. AWARD INFORMATION

ONR anticipates a budget of approximately \$2,000,000 for this program. ONR plans to fund 4 – 9 awards with the anticipated range of individual award amounts of \$100,000 - \$350,000 annually. The period of performance for the projects will be 2-3 years with an estimated start date of 15 October 2007, subject to date of final award and availability of new fiscal year funds.

NOTE: Internal US Navy laboratories may compete for a portion of these funds via a parallel (non-BAA) announcement.

III. ELIGIBILITY INFORMATION

All responsible sources may submit proposals, which shall be considered by the Government. Foreign companies/entities may be considered under this announcement. Submissions by Federally Funded Research and Development Centers are not eligible. Independent organizations and teams are encouraged to submit proposals in any or all research areas. However, Offerors must be willing to cooperate and exchange software, data and other information in an integrated program with other contractors, as well as with system integrators, selected by ONR. There are no International Traffic in Arms Regulations (ITAR) restrictions.

Teaming Arrangements

ONR encourages partner or teaming arrangements, but only one entity should be designated the technical and business Point of Contact for a team/partnership. That entity will be responsible for proposal submission, communications, and subsequent negotiations (if any).

IV. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process -

Pre-proposals are required prior to submitting a Full Proposal –

The due date for pre-proposals is no later than 4 p.m. (Eastern Daylight Time) on 30 April 2007. The Navy's initial evaluation of the pre-proposals should give Offerors some indication of whether a Full Proposal might result in an award. Initial Navy evaluations of the pre-proposals will be issued via E-mail or a letter on or about 4 June 2007. Detailed technical and cost proposals will be subsequently encouraged from those

Offerors whose proposed technologies have been identified through the above-referenced E-mail or letter as being of “particular value” to the Navy. However, any such encouragement does not assure a subsequent award. Any Offeror may submit a Full Proposal even if its pre-proposal was not identified as being of “particular value” or even if no pre-proposal was submitted.

Full Proposals - The due date for receipt of Full Proposals is 4 p.m. (Eastern Daylight Time) on 9 July 2007. It is anticipated that final selections will be made by 27 August 2007. Proposals received after the published due date may be considered for funding at a later time if funding is available. As soon as the final proposal evaluation process is completed, the Offeror will be notified via email or letter of its selection or non-selection for an award. Proposals exceeding the page limit may not be evaluated.

2. Content and Format of Pre-Proposals/Full Proposals -

The Proposals submitted under this BAA are expected to be unclassified. However, classified proposals are permitted. Classified proposal submissions will be protected from unauthorized disclosure in accordance with FAR 15.207, applicable law, and DoD/DoN regulations. In addition, Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

Pre-proposal 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 – No more than 4 single-sided pages (excluding cover page and resumes). Resumes must follow the NIH biographical sketch format and each resume may not exceed 2 pages. Copies of the NIH biographical sketch may be found at: <http://grants.nih.gov/grants/funding/phs398/biosketch.pdf>. Pre-proposals exceeding the page limit may not be evaluated.
- Copies – one (1) original, 4 copies, and one electronic copy on a CD-ROM (in MS Word and Excel compatible).

Full Proposal Format – Volume 1 - Technical and Volume 2 - Cost Proposal

- 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 – Volume 1 is limited to no more than 12 pages. Volume 2 does not have any page limitations. Limitations within sections of the proposal are indicated in the individual descriptions shown below. The cover page, table of contents, and resumes are excluded from the page limitations. Resumes must

follow the NIH biographical sketch format and each resume may not exceed 2 pages. Copies of the NIH biographical sketch may be found at <http://grants.nih.gov/grants/funding/phs398/biosketch.pdf> under additional format pages. Full Proposals exceeding the page limit may not be evaluated.

- Copies – one (1) original, five (5) copies and one electronic copy on a CD-ROM, (in MS Word and Excel compatible), or if it is a grant proposals may be submitted electronically to <http://www.grants.gov/> as delineated below.

Pre-proposal Content

- **Cover Page** – The Cover Page shall be labeled “PRE-PROPOSAL” (or, in the case of postdoctoral submissions, “POSTDOCTORAL PRE-PROPOSAL”), and shall include the BAA number, proposed title, Offeror’s administrative and technical points of contact, with telephone numbers, facsimile numbers, and Internet and mailing addresses, and shall be signed by an authorized officer.

- **Main Body:** There is considerable freedom to formulate the main body of the pre-proposal (not to exceed 3 pages) as the offeror sees fit. Here is some general guidance on what may be included: a description of the project objectives, problem being solved, technical approach and relevance to the Navy.

- **Costs:** A one (1) page summary of costs segregated by year.

- **Resume:** Resumes of the primary investigator and any co-associate investigators should be submitted and must follow the NIH biographical sketch format. Each resume may not exceed 2 pages. Copies of the NIH biographical sketch may be found at <http://grants.nih.gov/grants/funding/phs398/biosketch.pdf> under additional format pages.

Full Proposal Content

Volume 1: Technical Proposal

- **Cover Page:** (Not included in page limitations) This should include the words “TECHNICAL PROPOSAL” (or, in the case of postdoctoral submissions, “POSTDOCTORAL TECHNICAL PROPOSAL”) and the following:

- 1) BAA number (BAA 07-016);
- 2) Title of Proposal;
- 3) Identity of prime Offeror and complete list of subcontractors, if applicable;
- 4) Technical contact/Principal Investigator (name, address, phone/fax, electronic mail address)
- 5) Administrative/business contact (name, address, phone/fax, electronic mail address) and;
- 6) Duration of effort (differentiate basic effort and any proposed options)
- 7) Use of human subjects (Y/N):
- 8) IRB approval letter attached(not included in page limitations) (Y/N):
- 9) Use of animals (Y/N):

Approved DoD animal use protocol attached (not included in page limitations) (Y/N):

Type of animal:

10) Recombinant DNA research (Y/N):

11) Budget summary (fiscal year and total requested):

- **Table of Contents** (not included in page limitations)

- **Statement of Work:** (≤5 pages) A Statement of Work (SOW) clearly detailing the scope and objectives of the effort and the technical approach. It is anticipated that the proposed SOW will be incorporated as an attachment to the resultant award instrument. Proposals must thus include a severable, self-standing SOW without any proprietary restrictions, which can be attached to the contract or agreement award. Include a detailed listing of the technical tasks/subtasks organized by year.

- **Project Schedule and Milestones:** (1 page) A summary of the schedule of events and milestones.

Assertion of Data Rights and or Rights in Computer Software: (Not included in page limitations) For a contract award an Offeror may provide with its proposal assertions to restrict use, release or disclosure of data and/or computer software that will be provided in the course of contract performance. The rules governing these assertions are prescribed in Defense Federal Acquisition Regulation Supplement (DFARS) clauses 252.227-7013, -7014 and -7017. These clauses may be accessed at the following web address: <http://farsite.hill.af.mil/VFDFARA.HTM>

The Government may challenge assertions that are provided in improper format or that do not properly acknowledge earlier federal funding of related research by the Offeror.

- **Deliverables:** A detailed description of the results and products to be delivered inclusive of the time frame in which they will be delivered.
- **Management Approach:** (≤5 pages) A discussion of the overall approach to the management of this effort, including brief discussions of the total organization; use of personnel; project/function/subcontractor relationships; government research interfaces; and planning, scheduling and control practice. Identify which personnel and subcontractors (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any Government Furnished Equipment/Hardware/Software/Information required, by version and/or configuration.

Volume 2: Cost Proposal

The Cost Proposal shall consist of a cover page and two parts, Part 1 will provide a detailed cost breakdown of all costs by cost category, by calendar, or Government fiscal

year and Part 2 will provide a cost breakdown by task/sub-task corresponding to the task numbers in the proposed Statement of Work. Options must be separately priced.

Although not required, but provided for informational purposes only, detailed instructions, entitled “Instructions for Preparing Cost Proposals for Contracts and Agreements”, including a sample template for preparing costs proposals for contracts and agreements may be found at ONR’s website listed under the ‘Acquisition Department – Contracts & Grants Submitting a Proposal’ link at:
http://www.onr.navy.mil/02/how_to.asp

• **Cover Page:** The use of the SF 1411, Contract Pricing Proposal is optional. The words “Cost Proposal” should appear on the cover page in addition to the following information:

- 1) BAA number (BAA 07-016);
- 2) Title of Proposal;
- 3) Identity of prime Offeror and complete list of subcontractors, if applicable;
- 4) Technical contact (name, address, phone/fax, electronic mail address)
- 5) Administrative/business contact (name, address, phone/fax, electronic mail address) and;
- 6) Duration of effort (differentiate basic effort and any proposed options)
- 7) Summary statement of proposed costs.

Part 1: Detailed breakdown of all costs by cost category by calendar or Government fiscal year:

- 1) Direct Labor – Individual labor category or person, with associated labor hours and unburdened direct labor rates
- 2) Indirect Costs – Fringe Benefits, Overhead, G&A, COM, etc. (Must show base amount and rate)
- 3) Travel – Number of trips, destination, duration, etc
- 4) Subcontract – A cost proposal as detailed as the Offeror’s cost proposal will be required to be submitted by the subcontractor. The subcontractor’s cost proposal can be provided in a sealed envelope with the Offeror’s cost proposal or will be obtained from the subcontractor before contract award
- 5) Consultant – Provide consultant agreement or other document which verifies the proposed loaded daily/hourly rate
- 6) Materials – Materials should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a brief description of the Offeror's procurement method to be used (Competition, engineering estimate, market survey, etc.)
- 7) Other Directs Costs – Other Directs Costs, particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the contractor/recipient. (Justifications must be provided

when Government funding for such items is sought). Include a brief description of the Offeror's procurement method to be used (Competition, engineering estimate, market survey, etc.)

8) Proposed Fee/Profit; including fee percentage (contract proposals only).

Postdoctoral submissions, if submitted by the postdoctoral candidate, should be accompanied by a letter from a suitable mentor indicating agreement to serve in that capacity.

- **Part 2** : Cost breakdown by task/sub-task using the same task numbers in the Statement of Work.

3. Significant Dates and Times -

Schedule of Events		
Event	Date (MM/DD/YEAR)	Time (Eastern Daylight Time)
Pre-proposal Due Date	04/30/07	4 P.M.
Notification of Initial Navy Evaluations of Pre-proposals*	06/4/07	_____
Full Proposals Due Date	07/9/07	4 P.M.
Notification of Selection for Award *	08/27/07	_____
Contract Awards*	10/15/07	_____

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

4. Submission of Late Proposals –

If the requirement is a contract, any proposal, modification, or revision, that is received at the designated Government office after the exact time specified for receipt of proposals is “late” and may be considered for funding at a later time if funding is available and the contracting officer determines that accepting the late proposal would not unduly delay the acquisition and

- (a) If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

- (b) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government's control prior to the time set for receipt of proposals; or
- (c) It was the only proposal received.

However, a late modification of an otherwise timely and successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time or receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the Government office designated for receipt of proposals by the exact time specified in the announcement, and urgent Government requirements preclude amendment of the announcement closing date, the time specified for receipt of proposals will be deemed to extend to the same time of day specified in the announcement on the first work day on which normal Government processes resume.

The contracting officer must promptly notify any offeror if its proposal, modifications, or revision was received late and must inform the offeror whether its proposal will be considered.

5. Submission of Grant Proposals to Grants.gov

Grant proposals may be submitted through Grants.gov or by hard copy. Regardless of whether Grants.gov is used or "hardcopy" submission, the offeror must use the Grants.gov forms from the application package template associated with the BAA on the Grants.gov website. To be considered for award, applicants must include the ONR Department Code in Block 4 entitled 'Federal Identifier' of the Standard Form (SF) 424 R&R. **The appropriate code for this solicitation is Code 342.**

However, it should be noted that pre-proposals should not be submitted through Grants.gov Apply process; the only acceptable media will be hard copy. Pre-proposals may be submitted in hard copy directly to the cognizant ONR Science and Technology Department. Pre-proposal submissions must be mailed directly to the appropriate ONR Program Officer/Program Manager (refer to Section 2, Pre-Proposal Format for formatting directions).

For electronic submission (grants only), there are several one-time actions that must be completed 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, specifically www.grants.gov/GetStarted.

Use the Grants.gov Organization Registration Checklist at <http://www.grants.gov/assets/OrganizationRegCheck..doc> http://www.grants.gov/applicants/register_your_organization.jsp which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called '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 to complete these requirements. It is suggested that the process be started as soon as possible. Additionally, in order to download the application package, applicants will need to install PureEdgeViewer. This small, free program will allow applicants to access, complete and submit applications electronically and securely. For a free version of the software, visit the following website: www.grants.gov/DownloadViewer. If any questions that may arise 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 support@grants.gov.

Detailed instructions entitled, "Grants.Gov Electronic Application and Submission Information", on how to submit a Grant proposal through Grants.gov may be found at the ONR website listed under the 'Acquisition Department – Contracts & Grants Submitting a Proposal' link at: http://www.onr.navy.mil/02/how_to.asp

6. Address for the Submission of Pre-Proposals and Full Proposals if applicable, –

For U.S. Mail:

Office of Naval Research
One Liberty Center
Attn: CDR Elizabeth A. Montcalm-Smith, ONR 342
875 North Randolph Street Suite 1035
Arlington, VA 22203-1995

For FedEx or UPS:

Office of Naval Research
One Liberty Center
Attn: CDR Elizabeth A. Montcalm-Smith, ONR 342
875 North Randolph Street Office 1035
Arlington, VA 22203-1995

For express mail purposes use CDR Elizabeth A. Montcalm-Smith
Telephone Number: 703-696-2580

PROPOSALS SENT BY FAX OR E-MAIL WILL NOT BE CONSIDERED. ALL CONTRACT PROPOSALS MUST BE SUBMITTED IN HARD COPY. REFER TO SECTION 2 FOR THE NUMBER OF COPIES TO BE SENT.

NOTE: Due to changes in security procedures since September 11, 2001, the time required for hard-copy written materials to be received at the Office of Naval Research

has increased. Thus it is recommended that any hard-copy proposal be mailed several days before the deadline established in the solicitation so that it will not be received late and thus be ineligible for award consideration.

V. EVALUATION INFORMATION

1. Evaluation Criteria –

Undersea Medicine

The following evaluation criteria apply to both the Pre Proposals and the Full Proposals. Proposals will be selected through a technical/scientific/business decision process with technical and scientific considerations being most important. Criteria A-C are listed in descending order of priority. Any subcriteria listed under a particular criterion are of equal importance to each other.

- A. Overall scientific and technical merits of the proposal
 - 1. The degree of innovation
 - 2. The soundness of technical concept
 - 3. The Offeror's awareness of the state-of-the-art and understanding of the scope of the problem and the technical effort needed to address it
- B. Potential naval relevance and contributions of the effort to the agency's specific mission.
- C. Offeror's capabilities, related experience, and past performance, including the qualifications, capabilities and experience of the proposed principal investigator and personnel.
 - 1. The quality of technical personnel proposed;
 - 2. The Offeror's experience in relevant efforts with similar resources
 - 3. The ability to manage the proposed effort
- D. The realism of the proposed cost
 - 1. Total cost relative to benefit
 - 2. Realism of cost levels for facilities and staffing
 - 3. Realism of the proposed cost and extent to which the cost effectiveness of the proposed research is diminished by expenditures for excessive administrative and overhead expenses

Young Investigator Post-Doctoral Proposals in Undersea Medicine

The following evaluation criteria apply to both the Post-doctoral Pre Proposals and the Full Proposals. Proposals will be selected through a technical/scientific/business decision process with technical and scientific considerations being most important. Criteria A-D

are listed in descending order of priority. Any subcriteria listed under a particular criterion are of equal importance to each other.

- A. Overall scientific and technical merits of the proposal
 - 1. The degree of innovation
 - 2. The soundness of technical concept
 - 3. The Offeror's awareness of the state-of-the-art and understanding of the scope of the problem and the technical effort needed to address it
 - 4. The likelihood to provide a robust training environment capable of producing the next generation of undersea medicine researchers.

- B. Potential naval relevance and contributions of the effort to the agency's specific mission.

- C. Offeror's capabilities, related experience, and past performance, including the qualifications, capabilities and experience of the proposed principal investigator and personnel.
 - 1. The quality of the proposed training experience.
 - 2. The quality of technical personnel proposed;
 - 3. The Offeror's experience in relevant efforts with similar resources
 - 4. The ability to manage the proposed effort

- D. The quality of the training environment:
 - 1. The likelihood to provide a robust training environment capable of producing the next generation of undersea medicine researchers
 - 2. The quality of the proposed training experience
 - 3. Mentor's scientific and educational experience
 - 4. Existence of training facilities
 - 5. Teaching opportunities for postdoctoral candidates
 - 6. Access to collaborative and interdisciplinary scientific approaches

- E. The realism of the proposed cost
 - 1. Total cost relative to benefit
 - 2. Realism of cost levels for facilities and staffing
 - 3. Realism of the proposed cost and extent to which the cost effectiveness of the proposed research is diminished by expenditures for excessive administrative and overhead expenses

Evaluation of Options – The Government will evaluate for award purposes by adding the total cost for all options to the total cost for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

For proposed awards to be made as contracts to large businesses, the socio-economic merits of each proposal will be evaluated based on the extent of the Offeror's commitment in providing meaningful subcontracting opportunities for small businesses, small disadvantaged businesses, woman-owned small businesses, HUBZone small

businesses, veteran-owned small businesses, service disabled veteran-owned small businesses, historically black colleges and universities, and minority institutions.

ONR highly encourages partnering among industry, academia, and/or Government with a view toward speeding the incorporation of new science and technology into fielded systems. Government partners may include naval systems commands, naval laboratories or centers, or fleet/force commands. Proposals that use industry-academic-Government partnering which enhances the development of novel Science and Technology advances will be given favorable consideration.

2. Evaluation Panel -

The evaluation of proposals will be performed by government technical experts from the Office of Naval Research and possibly other Federal entities. The Government may use selected non-government personnel to assist the evaluators on technical issues and to help with the administration of pre-proposals and proposals issuing from this solicitation. Such non-government personnel will be bound by appropriate non-disclosure agreements to protect proprietary and source-selection information.

VI. AWARD ADMINISTRATION INFORMATION

1. Administrative Requirements –

- The North American Industry Classification System (NAICS) code – The North American Industry Classification System (NAICS) code for this announcement is 541710 with a small business size standard of 500.
- CCR - Successful Offerors not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to award of any grant, contract, cooperative agreement, or other transaction agreement. Information on CCR registration is available at <http://www.ccr.gov>.
- Certifications – Proposals for contracts and assistance agreements should be accompanied by a completed certification package which can be accessed on the ONR Home Page at Contracts & Grants located at http://www.onr.navy.mil/02/rep_cert.asp.

For contracts, in accordance with FAR 4.1201, prospective contractors shall complete electronic annual representations and certifications at <http://orca.bpn.gov>. The Online Representations and Certifications Application (ORCA) must be supplemented by DFARS and contract specific representations and certifications found at http://www.onr.navy.mil/02/rep_cert.asp.

For grant proposals and proposals for cooperative agreements or other transaction agreements (other than for prototypes), the certification package is entitled,

"Certifications for Grants and Agreements."

- Subcontracting Plans - Successful contract proposals that exceed \$550,000, submitted by all but small business concerns, will be required to submit a Small Business Subcontracting Plan in accordance with FAR 52.219-9, prior to award.

2. 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

Additional data deliverables and software and hardware deliverables may be proposed by each offeror and finalized during negotiations. Research performed under contracts may also include the delivery of prototypes.

RESTRICTION ON DISCLOSURE AND USE OF DATA: Offerors will apply the restrictive notice prescription of FAR 52.215-1, Instructions to Offerors -- Competitive Acquisition, to trade secrets or privileged commercial and financial information contained in their proposals.

VII. OTHER INFORMATION

Offerors are advised that only Contracting Officers are legally authorized to contractually bind or otherwise commit the Government. ONR's goal is to have awarded instruments in place by the end of calendar year 2007.

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

Each proposer must provide a very specific description of any equipment/hardware that it needs to acquire to perform the work. This description should indicate whether or not each particular piece of equipment/hardware will be included as part of a deliverable item under the resulting award. Also, this description should identify the component, nomenclature, and configuration of the equipment/hardware that it proposes to purchase for this effort. It is the Government's desire to have the contractors purchase the equipment/hardware for deliverable items under their contract. The purchase on a direct reimbursement basis of special test equipment or other equipment that is not included in a deliverable item will be evaluated for allowability on a case-by-case basis. Maximum

use of Government integration, test, and experiment facilities is encouraged in each of the Offeror's proposals.

Government research facilities and operational military units are available and should be considered as potential government furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for the BASIC AND APPLIED RESEARCH IN UNDERSEA MEDICINE. The use of these facilities and resources will be negotiated as the program unfolds. Offerors should explain which of these facilities they recommend.

2. Security Classification

In order to facilitate intra-program collaboration and technology transfer, the Government will attempt to enable technology developers to work at the unclassified level to the maximum extent possible. If access to classified material will be required at any point during performance, the Offeror must clearly identify such need prominently in its proposal.

3. Use of Animals and Human Subjects in Research

If animals are to be utilized in the research effort proposed, the Offeror must submit a completed 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. Please see <http://www.onr.navy.mil/sci%5Ftech/ahd%5Fusage.asp> for further information.

Similarly, for any proposal that involves the experimental use of human subjects, the Offeror must submit copies of the following documents: 1) approval documentation from the Offeror's committee for protection of human subjects (normally referred to as an Institutional Review Board, (IRB)) 2) approved informed consent form, 3) documentation of completion of human research protection training 4) copies of the NIH (OHRP/DHHS) documentation of a Federal Wide Assurance. 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 see http://www.onr.navy.mil/sci_tech/34/343/ for further information.

4. Recombinant DNA – Special information that is needed when experiments will be performed using recombinant DNA: proposals using recombinant DNA must include documentation of compliance with DHHS recombinant DNA regulations, approval of the Institutional Biosafety Committee (IBC), and copies of the DHHS Approval of the IBC letter.

5. 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/>.