Oil Spill Recovery Institute

Graduate Research Fellowship

Program Description and Application Information
Graduate Research Fellowship Program of the
Oil Spill Recovery Institute
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Graduate Research Fellowship Program of the
Oil Spill Recovery Institute

I. Introduction
The Oil Spill Recovery Institute (OSRI), at the Prince William Sound Science Center (PWSSC) in Cordova, Alaska will annually solicit proposals for the Graduate Research Fellowship Program subject to available funding. Grants are available on a competitive basis to students admitted to or enrolled in a full-time doctoral or masters program at accredited colleges and universities. Fellowships may be funded for up to two years to support masters or up to four years to support doctoral level research.

OSRI’s mission is to fund research, demonstration, and education projects that improve understanding and response to oil spills in Arctic and sub-Arctic marine environments. For more information about OSRI see http://www.pws-osri.org/.

II. Funding Opportunity Description

A. Program Objective:
The OSRI funds are provided to support research projects connected to OSRI’s mission that will enhance scientific understanding of the marine ecosystem, provide information needed by managers and decision-makers for oil spill response and recovery, and improve public awareness and understanding of marine and estuarine ecosystems. The OSRI Graduate Research Fellowship (GRF) Program offers qualified masters and doctoral students the opportunity to address scientific questions of significance to Arctic and sub-Arctic regions.

B. Research Focus Areas:
The Oil Spill Recovery Institute is focusing on research within Arctic and sub-Arctic areas at risk from oil and gas activities. Proposed projects should address research areas identified in the current OSRI Research Plan that can be found on the OSRI website.
III. Award Information

A. Funding Availability
The Prince William Sound Oil Spill Recovery Institute provides funding for a Graduate Research Fellowship (GRF) program. The GRF will be competitively awarded to qualified graduate students whose research on a physical, chemical, geological, biological, or interdisciplinary components of Arctic and sub-Arctic marine ecosystems, or engineering, or social science is relevant to oil spill response or recovery. The amount of the fellowship is $30,000 with a match requirement of at least 25% of the total project cost provided by the applicant (i.e. to obtain the full $30,000 in OSRI funds, the project would need to total $40,000, and a match of $10,000 would be required). Up to 25% of the OSRI funded portion may be used for indirect costs.

B. Project Award Period
This program announcement is for projects to be conducted by students enrolled in an accredited college or university graduate school program. Masters candidates can apply for up to two years of funding, and doctoral students are eligible to apply for up to four years of funding. Annual renewal of fellowships will be granted contingent upon the applicant’s successful progress in the degree program and compliance with other OSRI GRF Program requirements in Sections IV.C and VII. Applicants should state the maximum number of years in their original proposal for which they might require support (1, 2, 3, or 4 years). If applicants apply for fewer than the maximum allowable period of support and decide in later years that they need further support up to the maximum allowable period (2 or 4 years), their application will be treated as a new application.

C. Funding Instrument
The funding instrument for the OSRI graduate research fellowship awards will be a grant.
IV. Eligibility Information

A. Eligible Applicants
Funds are to be available on a competitive basis to qualified graduate students for research leading to a graduate degree. Applicants must be admitted to or enrolled in a full-time masters or doctoral program at an accredited college or university in order to be eligible to apply. Applicants should have completed a majority of their graduate course work and have an approved thesis research program. Therefore, applicants are encouraged to apply after their first year of course work is completed.

B. Cost Sharing or Matching Requirement
Requested OSRI funds must be matched by at least 25 percent of the TOTAL cost of the project (i.e. $10,000 match for $30,000 in OSRI funds for a total project cost of $40,000). Waived indirect costs, in-kind match of salaries, and services may be used as match. OSRI recommends that all applicants work with the applicant’s institution during the development of their budget to ensure concurrence on budgetary issues (e.g. the use of salary and fringe benefits as match).

C. Other Requirements
The fellowship is intended to provide any combination of research support, salary, tuition, supplies, or other costs as needed. Graduate student fellows who are selected for funding will be expected to: 1) coordinate with the OSRI Research Program Manager to participate in relevant OSRI programs and meetings; 2) submit quarterly reports and financial statements, and annual progress reports to OSRI; and 3) acknowledge OSRI support in all relevant scientific presentations and publications; 4) publish their results in peer-reviewed literature and make presentations at national and international scientific meetings.
V. Application and Submission Information

A. Address to Request Additional Information
For additional program and application information, contact W. Scott Pegau, OSRI Research Program Manager at (907) 424-5800 ext. 222 or via internet at wspegau@pwssc.org. Information on other OSRI programs can be viewed at: www.pws-osri.org.

B. Content of Application Submission
1. Proposals
Applications must be submitted by the date on the request for proposals to OSRI Research Program Manager Prince William Sound Science Center; P.O. Box 705, 300 Breakwater Ave, Cordova, AK, 99574. Electronic submission of materials to wspegau@pwssc.org is preferred. If there are specific questions about the program and/or application process, applicants may contact W. Scott Pegau at wspegau@pwssc.org or (907) 424-5800 ext. 222.

Receipt of all applications will be acknowledged via email. Upon receipt of the proposal, the OSRI Research Program Manager will ensure the application is complete and coordinate a technical peer review of the proposal.

2. Required Elements

1. **Academic resume or curriculum vitae** that includes all graduate and undergraduate institutions (department or area of study, degree, and year of graduation), all publications (including undergraduate and graduate theses), awards or fellowships, and work/research experience.

2. **Cover letter** indicating current academic status, research interests, career goals, and how the proposed research fits into their degree program and it addresses OSRI’s mission. It is strongly suggested that the results of discussions with the
OSRI Research Program Manager regarding potential contributions to the OSRI focus research areas be included in the letter.

3. **Unofficial copy of all undergraduate and graduate transcripts.**

4. **Signed letter of support** from the applicant's graduate advisor indicating the advisor's contribution (financial and otherwise) to the applicant's graduate studies, and an assurance that the student is in good academic standing and capable of the proposed research.

5. **Two signed letters of recommendation** from other than the applicant's graduate advisor sent directly from their source. Signed electronically transmitted letters of support, on university letterhead, are acceptable.

6. **Research proposals** must follow the instructions in the Grant Application Packet (Grant Policy Manual Appendix D). In addition the application must include a title page as described below. A more detailed description of the materials that should be included within the proposal are described below.

   a. **Title page** which must include the items below in the following order:

      i. project title;
      ii. name, address, telephone and fax number, email address, date, and signature of applicant;
      iii. amount of funding requested;
      iv. name of institution providing matching funds and amount of matching funds;
      v. degree being sought;
      vi. name, address, telephone number and fax number, email address, date, and signature of graduate advisor;
      vii. number of years of requested support;
      viii. focus area that research proposal is addressing

   b. **Project Summary.** The abstract must state the research objectives, the connection to OSRI’s mission, scientific methods to be used, and the significance of the project to a particular research focus.
c. **Project Description.** The main body of the proposal must include a detailed statement of the work to be undertaken and the following components:

i. **Introduction.** This section should include a brief review of pertinent literature and describe the research problem. This section should explicitly identify the primary hypotheses, as well as any additional or component hypotheses that will be addressed by the research project. It should also clearly articulate the connection between the proposed research and OSRI’s current mission statement and Science Plan.

ii. **Methods.** This section should state the method(s) to be used to accomplish the specific research objectives, including a systematic discussion of what, when, where, and how the data are to be collected, analyzed, and reported. Field and laboratory methods should be scientifically valid and reliable and should be accompanied by a statistically sound sampling scheme. Methods chosen should be justified and compared with other methods employed for similar work.

- Techniques should allow the testing of the hypotheses. Methods should be described concisely and techniques should be reliable enough to allow comparison with those made at different sites and times by different investigators. For ecological data, a power analysis is highly recommended to show that objectives of statistical rigor can be achieved.

- Analytical methods and statistical tests applied to the data should be documented, thus providing a rationale for choosing one set of methods over alternatives. Quality control measures also should be documented (e.g., statistical confidence levels, standards of reference,
performance requirements, internal evaluation criteria). The proposal should indicate by way of discussion how data are to be synthesized, interpreted and integrated into final work products.

- Social science applicants should describe the sampling and or data collection methods including surveys, evaluation research, interviews (focus group and/or personal), participant observation, questionnaires, etc. Applicants should also describe the research design (experimental and quasi-experimental) and methods for data analysis. Any proposal must follow the appropriate human subjects protocols.

iii. Location. When appropriate, a map clearly showing the study location and any other features of interest should be included; a U.S. Geological Survey topographic map, or an equivalent, is suggested for this purpose.

iv. Project Significance. This section must discuss the relation of the proposed research to the research focus areas stated in Section I. Applicability of research findings to other high latitude cold climate coastal areas should also be mentioned. In addition, if the proposed research is part of a larger research project, the relationship between the two should be described.

d. Milestone schedule. This schedule should show, in table form, anticipated dates for completing fieldwork, data collection, data analysis, reporting and other related activities in terms of the OSRI fiscal year: First quarter (Oct-Dec), Second quarter (Jan-Mar, Third quarter (Apr-Jun), Fourth quarter (Jul-Sep).

e. Personnel and Project Management. The proposal must include a description of how the project will be managed, including the names and expertise of faculty advisors and other team members. Evidence of ability
to successfully complete the proposed research should be supported by reference to similar efforts previously performed.

f. Literature Cited. This section should provide complete references for literature, research, and other appropriate published and unpublished documents cited in the text of the proposal.

g. Proposed budget and budget justification. The applicant must match the amount of OSRI funds requested by at least 25% of the total project cost (i.e. $10,000 match for $30,000 in OSRI funds for a total project cost of $40,000). Cash or in-kind contributions directly benefiting the research project may be used to satisfy the matching requirements. Waived indirect costs may also be used as match. Up to 25% of the OSRI funded portion may be used for indirect costs ($7,500 of a $30,000 request). OSRI encourages all applicants to work with their institution’s sponsored programs office to develop their budget.

The applicant may request funds under any of the following categories as long as the costs are reasonable and necessary to perform research: personnel, fringe benefits, travel, equipment, supplies, contractual, construction, other, and indirect. The budget should contain itemized costs with appropriate narratives justifying proposed expenditures. Applicants must supply a table in the budget justification showing allocations using budget categories listed below. The OSRI and match portion should be listed side by side for each year of requested funding. Please see below for further details.

--Personnel. Salaries requested must be consistent with the institution's regular practices.

--Fringe Benefits. Fringe benefits (i.e., social security, insurance, retirement) may be treated as direct costs as long as this is consistent with the institution's regular practices.

--Travel. The type, extent, and estimated cost of travel should be explained and justified in relation to the proposed research; the justification should also identify the person traveling. Travel expenses are limited to round trip travel to field
research locations and professional meetings to present the research results and should not exceed 40 percent of total award.

---**Equipment.** Fellowship funds may be approved for the purchase of equipment only if the following conditions are met: (a) a lease versus purchase analysis has been conducted by the applicant or the applicant's institution for equipment that costs greater than $5000 and the analyses indicate that purchase is the most economical method of procurement; (b) the equipment does not exist at the recipient's institution or at the PWSSC; and, the equipment is essential for the successful completion of the project.

The justification must address each of these criteria. It must also describe the purpose of the equipment and provide a justification for its use. Additionally, it must include a list of equipment to be purchased, leased, or rented by model number and manufacturer, where known. At the termination of the fellowship, disposition of equipment will be determined by OSRI.

---**Supplies.** The budget should indicate in general terms the types of expendable materials and supplies (items that cost less than $5,000) required and their estimated costs.

---**Requests for PWSSC support services.** On-site PWSSC personnel sometimes can provide limited logistical support for research projects in the form of manpower, equipment, supplies, etc. If applicable, any request for PWSSC support services should be approved by the OSRI Research Program Manager prior to application submission and be included as part of the application package in the form of written correspondence. PWSSC resources are not eligible to be used as match.

---**Coordination with other research in progress or proposed.** OSRI encourages collaboration and cost sharing with other investigators to enhance scientific capabilities and avoid unnecessary duplication of effort. Applications should include a description of how the research will be coordinated with other research projects that are in progress or proposed, if applicable.
Permits. The applicant must apply for any applicable local, tribal, state or federal permits. A copy of any permit applications and supporting documentation should be attached to the application as appendices. OSRI must receive notification of the approval of the permit application before funding can be approved. Please note if not applicable.

C. Submission Instructions
All materials must be submitted electronically by the date on the request for proposals. Proposals must be submitted to W. Scott Pegau, OSRI Research Program Manager at wspegau@pwssc.org. The electronic materials must be in PDF, MS Word, or MS Excel format.

D. Funding Restrictions
Up to 25% of the OSRI funded portion can be used for indirect costs for these awards.

VI. Award Administration Information

A. Proposal Review and Ranking Process
Once the OSRI Research Program Manager has received a full application, an initial administrative review is conducted to determine compliance with requirements and completeness of the application. No less than three reviewers representing the appropriate scientific discipline will evaluate all applications for scientific merit. The OSRI Research Program Manager will oversee the review process. Efforts will be taken to avoid conflicts of interest, therefore, it is permissible for applicants to suggest those people whom they feel would have a conflict of interest and are not appropriate to review their proposal. The merit reviewer's ratings are used to produce a rank order of the proposals based on the following criteria:

1. Academic record (5 percent)
2. Quality of the proposed research (85 percent)
3. Recommendations/endorsements (5 percent)
4. Reasonable and justified project costs (5)
B. Final Selection Process
The OSRI Scientific and Technical Committee (STC) will then be convened to select and recommend an award based on the peer reviews and materials in the application.

VII. Fellowship Requirements

A. Developing the annual work plan
Projects related to the OSRI research program should be coordinated annually with the OSRI Research Program Manager. Therefore, by March 31 of each year, the fellow shall contact the OSRI Research Program Manager to coordinate any aspects of the project related to PWS or the PWSSC (if applicable), including, the location and establishment of sampling sites, projected field sampling dates, accommodation reservations, and the need and timing for personnel and logistical support. Fellows are responsible for meeting with other PWSSC staff as needed to coordinate this work plan. Information about developing the work plan component of the fellowship must be included in the annual progress reports.

B. Quarterly reports
Financial statements from the Grants and Contracting Office must be submitted to OSRI within 30 days after the end of each quarter: December 31, March 31, June 30, and September 30. A quarterly report including a brief description of work completed or listing of milestones achieved should be included. Please explain any existing or potential problems and if a change in budget or scope of work is required. Include a budget summary report detailing expenses by categories explained in the original proposal, the amount remaining, and cumulative subtotals for project expenses and indirect costs. See Appendix A for an example format. Failure to submit this report by the last day of the quarter may result in:

1. Suspension of all future payments;
2. Close-out of expired grants based on previously reported disbursements; suspension of current grants; and
3. Suspension of review and processing of new proposals.
Quarterly financial statements must be sent to the OSRI Research Program Manager by email at wspegau@pwssc.org, and copied to the PWSSC Finance Assistant at poswalt@pwssc.org.

C. Annual progress reports
Fellows are required to submit Annual Progress Reports (APR) to the OSRI Research Program Manager 30 days prior to the completion of every annual award cycle unless it is the last year of the award. Please use annual report format given in the OSRI Grant Policy Manual Appendix J. Annual progress reports should be submitted to W. Scott Pegau at wspegau@pwssc.org. Fellows must copy their advisor on all reports. Reports should be submitted electronically.

D. Data management
OSRI participates in an annual project to catalog all research conducted in the PWS and Gulf of Alaska. OSRI fellows conducting research in these areas will be required to contribute metadata, along with a map of the project location to the OSRI Research Program Manager. In addition, any data or databases developed under this award will be transferred to a CD or DVD and provided free of charge to OSRI.

E. Published journal articles
Manuscripts resulting from the OSRI sponsored fellowship that are submitted to refereed scientific journals for publication in open literature shall acknowledge that the research was conducted under an award from the Prince William Sound Oil Spill Recovery Institute.

VIII. Guidelines for preparing final reports
Final reports are required for all research funded through grants from The Prince William Sound Oil Spill Recovery Institute. The purpose of the final report is to describe the activities and summarize the results of the project funded during the award period. These reports should be submitted to W. Scott Pegau; Prince William Sound Science Center, Oil Spill Recovery Institute; P.O. Box 705, 300 Breakwater Ave. Cordova, Alaska 99574. Reports must be submitted electronically via email, CD or DVD. A copy of the student’s thesis or dissertation, or a published manuscript may serve as the final report. The final report is due 45 days after the expiration of the award. If the thesis or dissertation is not completed 45 days after the expiration of the award, then a final report must be submitted. Students are encouraged to submit a copy of their thesis or dissertation to the Prince William Sound Science Center upon graduation. Students are encouraged to submit publications resulting from their research fellowship at any time.

1. **Title page:** The title of the project should be followed by the name(s) and address(es) of the investigator(s)/author(s), the date (month and year) of submission, where the work was conducted, and the grant number. The title may be other than was given to the project upon application for funding, as long as it accurately describes the project.

2. **Table of contents:** The table of contents should list all the sections and sub-sections as they appear in the text, with the corresponding page numbers. Lists of figures and tables should also be provided.

3. **Abstract and key words:** A one paragraph abstract, of no more than 200 words, should be included on a separate page. The abstract should summarize the project, including the problem, the methods, the results, and any conclusions, particularly as they may be applied to oil spills. The author(s) should bear in mind that the abstract may be posted on the OSRI web page.

4. **Text:** The text should be divided into Introduction, Materials and Methods, Results, Discussion, Conclusion, Acknowledgments, and Literature Cited sections. Sub-sections may be used as needed. Technical terms, acronyms and abbreviations should be
explained in full when first presented. Scientific species names should be given in full when first mentioned and underlined or italicized. All measurements should be expressed in SI units, as defined in Standard 1000, *SI Units and Recommendations for the Use of their Multiples and Certain Other Units*, available through the American National Standard Institute, 1430 Broadway, New York, NY 10018. The report should give a more complete and thorough presentation of the work than one would expect in a typical peer-reviewed scientific journal. Specifically, a full description of methods, in-depth literature review, and a greater elaboration of significance of results should be included.

5. Literature cited: Referenced literature should be cited in the text by author and year of publication. Multiple citations at the same point in the text should be listed chronologically (e.g. Burbank, 1967; Abbott, 1974; Crosby, 1985; Crosby et al., 1990; Crosby & Roberts, 1990; Golde et al., in review). Journal titles should be abbreviated as recommended in the *American Standard for Periodical Title Abbreviations*, available through the American National Standard Institute, 1430 Broadway, New York, NY 10018. Full citations in the Literature Cited section should be listed alphabetically using the *Ocean and Coastal Management* journal format.

6. Figures and tables: Figures and tables should be used to clarify text and summarize data. Figures and tables should appear on separate pages (numbered in sequence with the rest of the text) immediately following the page where they are first mentioned. Each figure or table should be clearly labeled with an appropriate descriptive legend.

7. Appendices: Appendices should be used to present actual data and measurements made during the study. Only summaries of the data should be presented in the text. In addition, any additional materials not appropriate for inclusion in the main text, such as computer programs or models generated, should be appended to the report. Again, as much data as possible should be given.

8. Publication: To insure that the results of OSRI-sponsored projects reach as many interested parties as possible, OSRI strongly encourages fellows to submit the results of
their work to peer reviewed journals for publication. Manuscripts submitted for publication must acknowledge that the work was supported by a grant from the Prince William Sound Oil Spill Recovery Institute, and a copy of each publication must be provided to OSRI at the address below. When submitting final reports, investigators should indicate that they are submitting a manuscript to a journal.

**IX. Additional information**

Questions regarding submission of research reports should be directed to W. Scott Pegau at (907) 424-5800 extension 222 or wspegau@pwssc.org.
GRF Appendix A

Graduate Research Fellowship Program of the
Spill Recovery Institute
Quarterly Financial Report Form

This report shall be e-mailed to

wspegau@pwssc.org and poswalt@pwssc.org

Deadline for this report: OSRI Graduate Research Fellows shall submit this report within 30 days of the end of each fiscal quarter (e.g. Dec. 31, Mar. 31, Jun. 30, Sep. 30).

Today's date:

Name of Graduate Research Fellow and home institution:

Project title:

This report covers:  _____ Oct-Dec 1st quarter
                   _____ Jan-Mar 2nd quarter
                   _____ Apr-Jun 3rd quarter
                   _____ Jul-Sep 4th quarter

PART I - Progress Report on Activities

In a short paragraph (3-10 sentences), please describe project activities since your last report.

Describe any existing or potential problems with the project. If a change in budget or scope of work is required, please explain.
Part II - Budget Report

Quarter Cumulative Balance:

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<th>Budget Category</th>
<th>Budget Expenses</th>
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