



Oklahoma Center for the Advancement of Science and Technology

FY11.2 R&D Faculty and Student Intern Partnerships Supplement Awards

Statement of Intent Deadline:

5 p.m., February 9, 2011

Application Deadline:

5 p.m., March 9, 2011

Target Contract Start Date:

September 1, 2011

Oklahoma Center for the Advancement of Science and Technology
755 Research Parkway, Suite 110
Oklahoma City, OK 73104-3612
Phone: 405-319-8400
Toll Free: 866-265-2215
Website: www.ok.gov/ocast

Information Page

Eligibility: Holders of an active R&D Faculty and Student Intern Partnerships contract who have not received a supplement award for that contract

Eligible interns: Oklahoma undergraduate students and undergraduate teaching faculty

Contract Length: 12 months beyond the end date of current RDIP award

Amendments: This solicitation may be amended by OCAST. Amendments can be found on OCAST's website under the section "Program Support/Solicitation/R&D Intern Partnerships Solicitation Amendments." It is the responsibility of the applicant to review any such amendments and make necessary changes in the application to meet the amended solicitation requirements.

Proposal preparation workshop dates, locations and registration information are available on the OCAST website. Online tools are optional and are not required to prepare an application. This solicitation with editable forms is available at:

www.ocast.ok.gov

This solicitation is intended for informational purposes and reflects current planning; it does not obligate OCAST to make any specific number of awards. Awards under the R&D Faculty and Student Intern Partnerships program are contingent upon the availability of state funds. If there is any inconsistency between the information contained in this solicitation and the terms of any resulting contract, the terms of the contract are controlling.

OCAST CONTACT INFORMATION: 405-319-8400

Tessa North, Program Officer	405-319-8410	tessa.north@ocast.ok.gov
Brad Sutherlin, Contracts Compliance Officer	405-319-8413	brad.sutherlin@ocast.ok.gov
Dan Luton, Director of Programs	405-319-8415	dan.luton@ocast.ok.gov



Oklahoma Center for the Advancement of Science and Technology

FY11.2 R&D FACULTY AND STUDENT INTERN PARTNERSHIPS SUPPLEMENT AWARDS PROPOSAL SOLICITATION

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PROGRAM PURPOSE

OCAST's R&D Faculty and Student Intern Partnerships Supplement program supports the enhancement of active R&D Faculty and Student Intern Partnerships programs to serve additional interns and to benefit more Oklahoma firms.

The supplement program enhances a current project and may include additional intern venues with a minimum of \$2,500 up to \$20,000 of additional OCAST funding. This program provides 12 months of additional funding for internship continuations.

RDIP Supplement awards are different from no-cost modifications. Changes that do not require an increase in OCAST funding are managed via a contract modification form. This form is available on OCAST's website or from the contracts compliance officer. Such changes would include, but are not limited to, no-cost time extensions, changes in mentors or PI, the addition/deletion of an intern venue or a change in match source. These changes must be submitted at least 60 days prior to the requested effective date of the change. In general, these requests require an interim progress report or a required annual report and selected items from this solicitation related to the change.

APPLICANT ELIGIBILITY

Organizations and principal investigators eligible for the Faculty and Student R&D Intern Partnerships Supplement program awards shall be those that have an active R&D Faculty and Student Intern Partnerships contract at the time of supplement application who have not received a supplement award for that contract.

Any PI who has a delinquent progress report or has not responded to other OCAST requests for information, impact survey data or special reports on a previously funded OCAST project will not be eligible to submit an application for new project funding. Any PI who has a delinquent progress report at the time of review will not be eligible for review. Any PI with a delinquent progress report at the time of award will not receive a contract until the progress report has been submitted. In the latter case, if the delinquent report has not been submitted within 60 days of the award date, OCAST will nullify the award.

INTERN ELIGIBILITY

General Intern Eligibility

An undergraduate student or faculty member may intern for up to one year (i.e., 1.0 FTE for 12 months, 0.5 FTE during each of two years; or two summers at 1.0 FTE and the remaining divided over the academic years). The field of study – degree pursued or held – by the undergraduate student and/or faculty interns must be related to the field of use of the applied R&D performed. The degree pursued by the undergraduate student interns (or held by the faculty intern) must be in natural sciences, computer science, materials science, engineering, a biomedical/biotechnical area or in a support area related to building successful Oklahoma high-tech companies.

Faculty Intern Eligibility

Faculty interns shall have a degree in a field related to the field of the applied research. The faculty internship program is designed to offer faculty members at institutions with limited campus facilities for research the opportunity to conduct research at Oklahoma applied research centers. In the proposal, the faculty member will list the benefits from the internship to his or her career, to the classroom students taught and to the home institution of higher education.

Undergraduate Student Eligibility

The program is limited to undergraduate students who anticipate receiving their undergraduate two-, three- or four-year degree from an Oklahoma college. The program requires the field of study of the undergraduate degree being pursued by the undergraduate intern to be related to the field of the R&D performed.

Previous Interns

Interns who were funded under the original RDIP award are allowed to continue their experience under a supplemental award, provided they still meet the original criteria listed above and have not interned for a total of more than one year.

MATCHING REQUIREMENTS

In order to qualify for funding for an R&D Intern Partnerships Supplement award the applicant organization must provide documentation verifying that not less than 50 percent of the total direct cost of the proposed project will be provided by sources other than OCAST and other than state-appropriated money (74 O.S., Section 5060.19).

Eligible matching funds may be only those monies provided specifically for the proposed project. For RDIP projects, cash certified as match must be placed in an account at one of the organizations that is party to the contract. If a collaborating organization elects not to provide the matching monies to the lead applicant who acts as the prime contractor and fiscal agent but chooses to establish a project account within their organization to pay costs of the project, the collaborating organization must sign on as co-applicant and also become a contractor.

Under RDIP, machinery or equipment that is owned by an Oklahoma institution of higher education or a non-profit research center may be used to fulfill part or the entire required match, provided the equipment was not purchased with state funds. Equipment will be considered for match if the applicant organization provides:

- a. Verification that the applicant organization(s) has received the machinery;
- b. Verification that it has been used for nothing more than testing to ensure quality control or for demonstration purposes by a wholesaler or retailer prior to its being received by the applicant(s); and
- c. Verification of (1) the fair market value, if a gift, or (2) the amount paid for the machinery or equipment by the applicant organization(s), as verified by invoice (74 O.S., Section 5060.19).

If a proposal is approved for funding and final verification of receipt of matching monies or a fully executed agreement representing a federal or private grant or contract has not been

submitted to OCAST for at least the first year of the award period, the awardee may have 60 days from the date of the RDIP award letter to submit such documentation.

For subsequent years of an RDIP award, applicants who have not provided documentation of receipt of match for the entire award period at the start of the initial contract must submit such documentation with the required annual progress report.

If an awardee has submitted as part of the application final verification of receipt of matching funds or a fully-executed agreement representing a federal or private grant or contract for the first year of the award period, the initial start date of the contract shall be no later than the first day of the month that immediately follows the 30 day verification of eligibility period which begins on the date on the OCAST award document. The target starting date for an RDIP contract awarded under this funding competition is given on the cover of this solicitation. If, due to special circumstances, the PI anticipates a later start date than specified above, the later date should be requested and carefully justified in the application for reviewer consideration.

APPLICATION GUIDELINES

Requests for a supplement of 12 months with an increase in funding require, in general, a proposal as complete as was presented for the original program.

When the overall R&D project and the partnering organizations are unchanged, an abbreviated supplement application is permitted. If applicable, the use of the abbreviated format is encouraged.

For abbreviated formats: To request additional funding from \$2,500 to \$20,000 to include additional intern experiences at the same venue(s) as in the current program include Items 1-20, Item 21 if a new PI or co-PI is being added, Item 22 if a mentor is being added, Item 23 if a faculty intern is being added, Item 26, and Item 27. Items 24 and 25 are replaced in an abbreviated Supplement application by a three to five page description of the benefits to the program by serving additional interns (Item 27).

Items 19 and 21 through 27 are prepared on 8½ x 11-inch white paper with not less than 0.5-inch margins with a font size not smaller than 10-pt, with single to 1.5 spacing. Fonts for the text of the proposal must be Arial, Helvetica, Palatino, Computer Modern, Times New Roman, or Georgia. Use the presentation order and headings as shown on attachment pages 1-6. Section text length page limitations include text, inserted graphs, charts and figures as part of the total section page length. If a section is not applicable it must be acknowledged by number and title and indicated as "Not Applicable."

SUBMISSION REQUIREMENTS

Statements of Intent

Only those who have submitted an intent form by the deadline are eligible to submit an application. **The Statement of Intent must be received by OCAST by 5:00 PM, February 9, 2011.**

Statements of Intent may be mailed or faxed to OCAST. It is the responsibility of the PI to ensure that the intent is received by OCAST by the deadline; OCAST is not responsible for faxed

intents that were not received for any reason. If faxing an Intent, please do not also mail an additional copy.

After the intent submission deadline, a project number will be e-mailed to the PI whose name appears on the intent form.

Project Numbers

Project numbers will be assigned after the Statement of Intent is received. An OCAST representative will e-mail your project number for tracking purposes. This number must appear at the top right corner of each page of the application package.

Application Packages

The application must be received by one of the OCAST offices below by 5:00 p.m., March 9, 2011. Applications will not be accepted via fax, e-mail or in any electronic format.

**OCAST
Intern Partnerships Program
755 Research Parkway, Suite 110
Oklahoma City, OK 73104-3612**

**OCAST
Intern Partnerships Program
OSU-Tulsa
700 N. Greenwood Ave., Suite 1400
Tulsa, OK 74106**

Project numbers must be placed in the top right corner of each form and attachment page submitted as part of an application. No applications or supplemental materials will be accepted after the submission deadline except at the request of OCAST. OCAST may return applications which are judged as incomplete or inappropriately completed without review.

OCAST will verify receipt of your proposal if you attach a self-addressed stamped postcard to the original.

Each Intern Partnerships application shall include the following materials organized as specified below:

Number of Sets	Contents
1	Original signed paper application marked "original," with appendices attached (fastened with a binder clip in the upper left corner). Prepare required application page forms 1-8 (Items 1-19) as provided. Refer to application pages 9-13 (Items 20-28) for instructions to prepare text sections of application including presentation order and headings.
1	Paper set of the application pages 1-8 (Items 1-19) stapled in the upper left corner.
1 CD	File containing the entire application, including appendices, in PDF format.

Include in each set Items 16-19 for each budget year requested. A CD containing an electronic copy of the entire proposal as a single Adobe PDF file must also be submitted. This file must be

named **APS11–XX LastName**, where XX is the project number assigned and LastName is the surname of the principal investigator. For identification purposes, the face of the CD must be marked by a permanent marker using the above example.

Do not use binders, notebooks, rubber bands or paper clips to secure an application. OCAST recommends a binder clip in the left corner and blank or colored sheets to separate sections of the original proposal.

REVIEW PROCESS

The reviewers first evaluate the interim report (Item 27) to determine the achievements and quality of the current program. Only when the current program is evaluated as “satisfactory” will the reviewers continue the evaluation process using the criteria for the current regular competition.

CONTRACT-RELATED INFORMATION

Supplemental awards will be issued a separate contract from the original R&D Faculty and Student Intern Partnerships contract and all conditions and rules applying to that award are retained for the Supplement award. Funds awarded may not be spent prior to the supplement award contract date.

Oklahoma statute requires that the mechanism for funding RDIP projects be a professional services contract between OCAST and the applicant organization(s). The contractor is the applicant organization(s) which: (1) employs or is affiliated with the PI or co-PI, (2) provides research services and/or facilities for the funded project and (3) executes the contract. If more than one applicant organization is involved, the fiscal agent organization receives and accounts for all funds. The contract shall include commitments on the part of the contractor(s) to perform the activities described in the application and funded by OCAST. However, the obligations of each party to a contract shall be limited to that portion of the contract they have committed to perform.

Any applicant organization or principal investigator who, in OCAST’s judgment, has failed to correct a material breach of contract previously awarded under any of OCAST programs will not be eligible to be awarded a new funding contract.

If a PI under an OARS contract becomes unable to perform the proposed research, the applicant organization must inform OCAST within 10 days. The contractor shall inform OCAST within 10 days of the occurrence of any of the following:

1. Official notification of resignation by the PI as an employee of one of the parties to the contract
2. Official decision to terminate the PI as an employee of one of the parties to the contract
3. Inability of the PI to perform the research described in the application
4. Any occurrence which the contractor or fiscal agent determines will affect the successful completion of the research project
5. PI leaves Oklahoma

6. Majority of the research is not performed in Oklahoma
7. Receipt of notification of award of concurrent funding by the PI or co-PI, which is not part of the approved matching monies requirement to support any portion(s) of the research which is supported by OCAST funds

Any of the conditions in Items 1-7 above may result in the termination of the contract at the discretion of OCAST. If the PI is subsequently employed by another eligible applicant organization in the state of Oklahoma that agrees to support the research project, OCAST may consider issuing a new contract negotiated between OCAST and the new organization. If a PI cannot perform on a contract, the applicant organization may request that OCAST consider continuing the contract with a new PI.

The contractor shall be responsible for the following:

1. Assuring and documenting compliance with state and federal requirements pertaining to human subjects, vertebrate animals, recombinant DNA, radioactive substances, narcotics and dangerous drugs, and/or biological hazards, which require special approval or license, before issuing a subcontract for any portion of the project funded by OCAST.
2. Maintaining records and accounts that properly document and account for the source and application of all project funds. All such records and accounts shall be made available on demand by OCAST for inspection and use in carrying out its responsibilities for administration of the funds.
3. Providing specified documentation of matching expenditures to OCAST with each request for payment. At no time shall the amount invoiced from OCAST exceed the amount of documented matching funds expended. Failure to document the required matching amount could result in a decrease in the OCAST funding amount and/or a termination of all-subsequent OCAST funding.
4. Complying with the audit policy of OCAST and, as OCAST deems necessary, permitting authorized representatives of OCAST and the state of Oklahoma full access, and the right to fully examine, all project records and accounts. The contractor, or designated fiscal agent, shall provide OCAST timely copies of reports on any audits that include funds received from OCAST. The contractor, at OCAST's request, shall provide OCAST with an independent audit report of all funds expended on each contract in which the amount of OCAST funds awarded. In the event an audit results in the determination the contractor or designated fiscal agent has expended contract funds on unallowable costs, the contractor or designated fiscal agent shall reimburse OCAST in full for all such costs.

INSTITUTIONAL REVIEW BOARD AND SAFETY CERTIFICATIONS

Institutional review board and safety certifications, if needed, will be required prior to OCAST issuing a contract. Additional information may be obtained from the OCAST Programs staff.

1. **HUMAN SUBJECTS, HUMAN DERIVED MATERIALS, HUMAN DATA**
 - a. Student interns supported under this program must not be research subjects for any (host site) research venue project that requires IRB approval.

- b. If the (host site) research venue project involves human subjects, human derived materials or human data, before a contract is issued, documentation of IRB review and approval must be supplied to OCAST.

2. RECOMBINANT DNA, VERTEBRATE ANIMALS

If the (host site) research venue project involves recombinant DNA or vertebrate animals, before a contract is issued, documentation of IRB review and approval must be supplied to OCAST.

3. NARCOTICS, DANGEROUS DRUGS, RADIOISOTOPES

If the (host site) research venue project involves narcotics, dangerous drugs and/or radioisotopes, before a contract is issued, documentation of federal regulatory approval for the use of these substances must be supplied to OCAST.

4. BIOLOGICAL HAZARDS

- a. In general, student interns will not work with potential biological hazards.
- b. If the student interns work with potential biological hazards, before a contract is issued, documentation must be provided certifying the facility meets all requirements of the U.S. Centers for Disease Control for containment of infectious agents.

RELEASE OF INFORMATION

OCAST is subject to the Open Meeting and Open Records Acts. However, information submitted to or compiled by OCAST with respect to marketing plans, financial statements, trade secrets, research concepts, methods, products or other proprietary information is confidential unless the person or entity that provided such information consents to disclosure.

OCAST may use the contents from application abstracts and summaries from annual progress reports for the required OCAST annual report or other publications without obtaining permission from the applicant or applicant organization(s).

Public release of information in any proposal or application submitted will be subject to existing statutory and regulatory requirements.

PERFORMANCE EVALUATION

Acceptance of an RDIP contract obligates the PI to submit progress reports that are sent to reviewers for evaluation of project performance. A satisfactory performance evaluation shall be required for the continuation of a project. The issuing of a supplement contract does not change the reporting deadlines and requirements of the original contract.

A final report for the supplement award is due no later than 30 days after the end of the supplement award. Unsatisfactory performance on a supplement award could result in termination of an entire R&D Faculty and Student Intern Partnerships award.

PROJECT REPORTING

Efforts to evaluate the Intern Partnerships program require periodic collection of information from investigators and contractors. The PI and contractor are required to provide OCAST with

the requested information during and after the funding period. This information may include, but is not limited to, impact survey information, site visits, and reverse site visits during which the PI may be required to present his or her RDIP funded project related information to OCAST staff, the OCAST board of directors, members of the Oklahoma legislature and other interested parties.

The fiscal agent organization is required to track the academic and employment status of interns for five years after the award ends. Anecdotal quotes from the interns are also helpful to establish program impact upon the interns.

AUDITS

Oklahoma Center for the Advancement of Science and Technology will perform compliance reviews and audits of contracts executed by the agency for all OCAST programs including the Applied Research Support Program. The acceptance of an R&D Intern Partnerships professional research contract obligates the contractor to permit authorized representatives of OCAST and the state of Oklahoma to have full access to, and the right to fully examine, all such records and documentation pertaining to the project.

ANNUAL CONFERENCE

A required conference student interns as well as for persons named in the proposal is held annually. This one-day event showcases presentations from interns, mentors and PIs describing their research efforts. The location of the conference varies from year to year, and OCAST will contact awarded PIs with attendance information as soon as it becomes available. The proposal may request sufficient travel funds for conference participants.

OPTIONAL POST AWARD MEETING

OCAST will host an optional post award kick off meeting prior to the start of the first year contract for projects awarded during each funding competition. The purpose of the meeting is to explain the mechanism by which projects will be funded and contract requirements (such as progress report due dates, allowable expenses, budget or contract modifications, Request for Payment procedures, records retention, etc.) to the award recipient. The Principal Investigator, Contract Official and Fiscal Agent will be invited to attend. The Contract Official will be notified of the specific kick off meeting day and time in the award letter, which will be sent shortly after the OSTRaD Board approves projects for funding.

THE APPLICATION FORMS BEGIN ON THE NEXT PAGE

R&D Faculty and Student Intern Partnerships Supplement Awards FY11.2 Statement of Intent

The deadline to submit a Statement of Intent is 5:00 p.m., February 9, 2011.

Only those who have submitted a Statement of Intent on or before the intent deadline are eligible to submit an application. A Statement of Intent is required for each proposal submitted. Fax *or* mail the Statement of Intent to the following address:

**Oklahoma Center for the Advancement of Science and Technology (OCAST)
Intern Partnerships Program
755 Research Parkway, Suite 110
Oklahoma City, Oklahoma 73104-3612
Fax: 405-319-8426**

Please be advised that OCAST is not responsible if, for any reason, the fax transmission is not received. If faxing an Intent please do not also mail an original.

1. Principal Investigator. This person will receive an official project number prior to proposal submission

Name of Principal Investigator:	
Organization of Principal Investigator:	
Position or Title:	Terminal Degree:
Address: <i>include department, division or equivalent and zip code</i>	Phone:
	Fax:
E-mail:	
Signature of PI:	Date:

2. Supplementation Request.

Project No. of Program to be Supplemented:	Estimated Request for Funds: <i>Must be between \$2,500 and \$20,000</i>
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Project Number: _____

R&D Faculty and Student Intern Partnerships Supplement Awards FY11.2 PROPOSAL APPLICATION FORM

1. Title

Title of Proposal: _____

2. Original Project Number

Project Number: _____

3. OCAST Funds Requested

(maximum \$20,000) _____

4. Requested Start Date

5. Number of proposed interns

Undergraduate Student Interns: _____	Faculty Interns: _____
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6. Technology Development

Check a single box that *best* describes the research technology to be developed under this award.

<input type="checkbox"/> Advanced Materials	<input type="checkbox"/> Energy	<input type="checkbox"/> Photonics
<input type="checkbox"/> Biotechnology	<input type="checkbox"/> Environmental	<input type="checkbox"/> Subassemblies & Components
<input type="checkbox"/> Chemicals	<input type="checkbox"/> Factory Automation	<input type="checkbox"/> Test & Measurement
<input type="checkbox"/> Computer Hardware	<input type="checkbox"/> Manufacturing	<input type="checkbox"/> Telecommunications & Internet
<input type="checkbox"/> Computer Software	<input type="checkbox"/> Medical	<input type="checkbox"/> Transportation
<input type="checkbox"/> Defense	<input type="checkbox"/> Pharmaceuticals	<input type="checkbox"/> Other _____ <i>(specify)</i>

7. Principal Investigator (PI) Information

Name of Principal Investigator: _____	
Position or Title: _____	Terminal Degree: _____
Address: <i>include department, division or equivalent</i>	Phone: _____
	Fax: _____
E-mail: URL: _____	http:// _____
I hereby accept responsibility for the scientific conduct of the project and for providing the materials required for contract performance evaluation. I give consent for the materials in this application to be viewed, as required by members of the OCAST staff, Board, Applied Research Committee and review panels.	
Signature of PI _____	Date _____

Project Number:

8. Co-Principal Investigator (Co-PI) Information (a co-PI is not required)

Name of Co-Principal Investigator:	
Position or Title:	Terminal Degree:
Address: <i>include department, division or equivalent and zip+4</i>	Phone:
	Fax:
E-mail:	URL: http://
I hereby accept responsibility for the scientific conduct of the project and for providing the materials required for contract performance evaluation. I give consent for the materials in this application to be viewed, as required by members of the OCAST staff, Board, Applied Research Committee and review panels.	
Signature of PI:	Date:

9. Official Acting as Fiscal Agent

If multiple contractors, show official of organization designated as Fiscal Agent. This is the official to whom OCAST will send all contract payments.

Name:	
Title:	
Name of Applicant Organization Acting as Fiscal Agent:	
Mailing Address: <i>include department, division or equivalent zip+4</i>	Phone:
	Fax:
	County:
E-mail:	URL: http://
Organization NAICS Code:	Organization Federal Employee Identification (FEI) Number:

Project Number:

10. Designated Contract Official at Fiscal Agent Organization

Show person designated as the contracting official. This is the official to whom OCAST will send all award of contract correspondence including (1) the award letter, (2) requests for information and documentation, (3) the initiated contract, (4) the executed contract and (5) progress report and performance evaluation information and requests. If multiple applicants, the designated contracting official is responsible for sharing contractual information with all other applicant organizations. This official certifies all student interns are undergraduate students and the interns are legally eligible to work in the U.S.

Name:	
Title:	
Name of Applicant Organization Acting as Designated Contract Official:	
Address:	Phone:
	Fax:
E-mail:	URL: http://

11. Other Applicant Organizations *all applicant organizations agree to be party to the contract*

11a. Name of Official Signing for Other Applicant Organization:	
Title:	
Address: <i>include zip+4</i>	Phone:
	Fax:
E-mail:	URL: http://
11b. Name of Official Signing for Other Applicant Organization:	
Title:	
Address:	Phone:
	Fax:
E-mail:	URL: http://

Project Number: _____

12. Certification of Assurances

I certify that the statements and budget figures herein are true and complete. If an R&D Intern Partnerships Project supplemental contract is awarded, I accept the obligation to comply with the laws of the state of Oklahoma and the policies of the Oklahoma Center for the Advancement of Science and Technology (OCAST) as they pertain to the performance of this project.

Signature of Official Signing for Applicant Organization Acting as Fiscal Agent: <i>same name as in Item 9</i>	Date:
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Signature of Official Signing for Applicant Organization Acting as Designated Contract Official: <i>same name as in Item 10</i>	Date:
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Signature of Official Signing for Other Applicant Organization: <i>same name as in Item 11a</i>	Date:
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Signature of Official Signing for Other Applicant Organization: <i>same name as in Item 11b</i>	Date:
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13. Intern Host Sites

include name and address of organization, as well as the name, telephone number and e-mail address of the research mentor(s)

Project Number:

14. Complete This Page as a Table of Contents (add page numbers that correspond to the application)

Table of Contents	Page
Application Pages 1-4 (Items 1-13)	1
Table of Contents (required attachment Item 14)	5
Abstract (Item 15)	6
Budget Page (Item 16)	8
Source and Amount of Matching Funds (Item 17)	9
Matching Funds Certification (Item 18)	10
Machinery or Equipment Matching Funds (Item 19, if needed)	
Budget Justification (Item 20)	
Biographical Information for PI or co-PI (required attachment Item 21)	
Biographical Information for Mentor(s) (required attachment Item 22)	
Biographical Information for Faculty Intern(s) (required attachment Item 23)	
Commitment of Support and Benefit Analysis (required attachment Item 24)	
Project Plan (required attachment Item 25)	
Interim Report (required attachment Item 26)	
Appendix I. Sample Intern Reports (required attachment for Item 26)	
Appendix II. Sample Evaluation Instruments (required attachment for Item 26)	
Appendix III. Additional Materials (limit to 5 pages) (optional attachment for Item 26)	
Benefits to the Program (Item 27, for abbreviated format)	

15. Abstract

Project Title:
Name and Address of Applicant Organization(s): <i>include Zip+4</i>
Name, Title and Department of Principal Investigator and Co-Principal Investigators:
Benefiting Firm(s): <i>If an Applicant Organization is not a firm, name the benefiting firm(s) and location(s).</i>
Match Summary: <i>Name the match source(s), the percent contribution and the location for each source.</i>

15. Abstract *(continued)*

Include a short description of the research project(s), a summary of the intern partnership program and the benefits to faculty and student interns, to institutions of higher education, to Oklahoma firms or farms and to the state of Oklahoma. Limit to this space; do not use continuation pages.

Five Key Words That Describe the Research Project(s):

Select from the following chart the single research area that best describes the research. Copy the exact name and to this box:

--

Research Area Chart
DO NOT INCLUDE WITH PROPOSAL

<p>BIOTECHNOLOGY</p> <ul style="list-style-type: none">■ Animal and Plant Biotechnology■ Biomolecular and Biomimetic Materials■ Bioprocessing/Biomedical Engineering■ Bioinformatics■ Diagnostic and Therapeutic■ Marine Biology■ Other Biotechnology <p>ELECTRONICS/COMPUTER HARDWARE/ COMMUNICATIONS</p> <ul style="list-style-type: none">■ Semiconductors■ Electronic Systems■ Microelectromechanical Technology■ Computer Hardware■ Microelectronic Fabrication Technology■ Communication for Data, Voice, Video■ Electronic Instrumentation/Sensors and Control Systems■ Optics and Photonics■ Other Electronics <p>INFORMATION TECHNOLOGY</p> <ul style="list-style-type: none">■ Computer Systems and Software Applications■ Computer-Aided Design and Testing Systems■ Imaging and Image Processing■ Cognitive Systems■ Pattern Recognition■ Internet Infrastructure■ Security and Biometrics■ Other Information/Computer Entertainment	<p>MANUFACTURING (DISCRETE)</p> <ul style="list-style-type: none">■ Automobile Manufacturing■ Aircraft Manufacturing■ Other Transportation Manufacturing■ Intelligent Controls■ Machine Tools■ Materials Handling■ Intelligent Manufacturing■ Avionics■ Other Discrete Manufacturing■ Energy Conversion (Motors, Generators, etc.)■ Energy Generation/Distribution <p>ADVANCED MATERIALS/CHEMICALS</p> <ul style="list-style-type: none">■ Abrasives, Adhesives, Ceramics, Coating and Composites■ Computer-Based Design of Chemical/Materials■ Polymers Synthesis and Polymer Fabrication Technologies■ Metals and Alloys■ Building/Construction Materials■ Other Materials■ Separation Technology■ Catalysis/Biocatalysis■ Food Processing and Preservation■ Other Continuous Manufacturing (Pulp/Paper, Textiles)■ Energy Resources/Petroleum■ Energy Storage/Fuel cell, Battery■ Environmental Technologies <p>OTHER</p> <ul style="list-style-type: none">■ Research/Science/Technology area Not Listed Above <p>Specify _____</p>
--	--

Project Number:

16. Project Budget (direct costs only) Prepare and attach a budget page. In addition, prepare a budget justification (see Item 19).

Personnel Applicant Organization(s) Only		Effort	Amount Requested <i>in dollars only</i>		
Name:	Title or Position:	HR/WK:	OCAST:	Matching:	TOTALS:
Subtotal:					
Travel:					
Subtotal					
Supplies: <i>itemize by category</i>					
Subtotal:					
Equipment: <i>list items over \$500</i>					
Subtotal:					
Contractual Services: <i>itemize</i>					
Subtotal:					
Other Direct Costs: <i>itemize</i>					
Subtotal:					
TOTAL DIRECT COSTS:					

OCAST APPROVAL:	DATE:
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Project Number:

17. Source and Amount of Matching Funds

NOTE: The PI must submit this form for each project year for which *cash* and/or a *grant(s)* or *contract(s)* will be provided as match. Monies certified as match must be placed in an account held by an organization that is a party to the contract.

Source of Cash Match	Date Received	Contracting Organization Holding Matching Account	Account Number	Amount
Subtotal:				
Source of Grant(s) or Contract(s) Match	Inclusive Dates of Award	Contracting Organization Holding Matching Account	Account Number	Amount
Subtotal:				
Total Match:				

OCAST APPROVAL:	DATE:
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Project Number:

18. Matching Funds Certification

Organization 1:	
Organization 2:	
Organization 3:	
Amount of Cash Total to Be Provided for Match:	
Dollar Amount of Grant(s) or Contract(s) Total to Be Provided for Match:	
Dollar Value of Machinery or Equipment Total to Be Provided for Match:	
<p>IMPORTANT: ONLY INSTITUTIONS OF HIGHER EDUCATION OR NONPROFIT RESEARCH FOUNDATIONS ARE ELIGIBLE TO USE EQUIPMENT OR MACHINERY FOR MATCHING FUNDS REQUIREMENTS. IN SUCH INSTANCES, THE EQUIPMENT OR MACHINERY MUST ORIGINATE FROM SOURCES OTHER THAN STATE-APPROPRIATED FUNDS AND THE REQUIRED DOCUMENTATION RELATED TO THE ALLOWABLE VALUATION MUST BE SUBMITTED WITH THE ORIGINAL PROPOSAL.</p>	
MATCH AMOUNT TOTAL:	
<p>I certify that the monies, grants and contracts, and/or machinery or equipment, described on this form and detailed on the following RDIP Matching Funds Documentation for the project year designated above will be available for use on this project as of the contract start date.</p> <p>I certify that if machinery or equipment is being used as matching funds, that each item of machinery or equipment provided for match (1) has been received by the institution of higher education or non-profit research organization, (2) if donated to the institution of higher education or non-profit research organization, has been used only in testing to ensure quality control or for demonstration purposes by a wholesaler or retailer and the fair market value on the date of the gift, and if purchased by the institution, the amount paid is certified by an invoice held by the institution.</p>	
Name of Principal Investigator:	
Signature of Principal Investigator:	Date:
Name of Designated Contracting Official:	
Signature of Designated Contracting Official:	Date:

OCAST APPROVAL:	DATE:
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Project Number:

19. Machinery or Equipment Matching Funds

NOTE: Only higher education institutions and nonprofit research foundations are eligible to use machinery or equipment as matching funds

Description of the Equipment:

Justification of the Use of the Equipment for the Project:

If the equipment has been donated, indicate the fair market value on the date of the gift.

If the equipment was purchased by the institution, indicate the amount as verified by the invoice held by the institution.

Justification of the value of the equipment for the project. The evaluation should be based upon (a) the fair market value, if a gift, or the amount paid for the machinery or equipment by the applicant or organization as verified by invoice (74 O.S., Section 5060.19); (b) the useful life of the equipment relative to the term of the project; (c) the relevance and intensity of the proposed use of the equipment in the project and (d) the predicted value of the equipment at the end of the project.

Proposed Matching Value of the Equipment:

REQUIRED ATTACHMENTS GUIDELINES

IMPORTANT NOTE: Items 20-27 below are prepared on 8 ½ x 11-inch white paper with not less than 0.5-inch margins with a font size not smaller than 10-pt and single to 1.5 spacing. Fonts for the text of the proposal must be Arial, Helvetica, Palatino, Computer Modern, Times New Roman or Georgia. Use the presentation order and headings as shown below. Section text length page limitations include text, graphs, charts and figures. If a section is not applicable it must be acknowledged and indicated as not applicable. Proposals that are not in the required format may be returned without review.

20. Required Attachment Budget Justification

Prepare an explanation and justification for the budget (four page maximum). Incomplete explanations may result in a requested item not being approved or the entire project not recommended for funding. **IMPORTANT:** Prepare on 8 ½ x 11-inch white paper with not less than 0.5-inch margins with a font size not smaller than 10-pt and single to 1.5 spacing. Fonts for the text must be Arial, Helvetica, Palatino, Computer Modern or Georgia.

Project Budget Complete the required budget information. Account for all project funds – both monies requested from OCAST and the proposed matching funds. All amounts should be in dollars. The approved budget amount is established by the reviewers and cannot be increased after the date of the award. If obvious budget items are omitted, provide information regarding the alternative resources available to provide for these items in the budget justification. Budgeting is discussed at the proposal preparation workshops.

Personnel List the names and positions of all personnel involved in the project, both professional and nonprofessional, whether or not salaries are requested. For each participant estimate hours per week in relation to total professional activity commitment to the applicant organization. In computing estimated salary charges to an RDIP contract, an individual's base salary must represent the total authorized annual compensation an applicant organization would be prepared to pay for a specified work period. The base salary must exclude income that an individual may be permitted to earn outside of full-time duties to the applicant organization and may not be augmented or supplemented by funds from a professional service contract. Fringe benefits may be requested to the extent that they are treated consistently by the applicant organization as a direct cost to all sponsors. The salary requests typically support the interns with a combination of OCAST and Match funds for intern salary and fringe benefits.

Travel Describe the purpose of any travel, giving the number of trips and the professional activities involved, the destination(s) and the number of individuals for whom funds are requested. The amount requested for travel must be fully explained in the budget justification. The amount of travel approved by the reviewers cannot be increased after the date of the RDIP Supplement award. Include travel for the annual conference.

Supplies List supplies needed to manage the internship program. In general, the intern host organization provides the research supplies as a normal part of the research activity at no charge. Therefore, explain fully the unique aspects of this program when research supplies are included as a part of the budget.

Equipment List equipment needed to manage the internship program. In general the intern host organization provides the research equipment as a normal part of the research activity. Explain

fully the unique aspects of this program when research equipment is included as a part of the budget. List separately each item of equipment with a unit acquisition cost of \$500 or more. Fully explain the purchase of computers since, in most cases, reviewers have denied requests for computers not dedicated to RDIP research.

Contractual Services Itemize and provide detailed description. Such charges would be unusual for this program.

Other Expenses Itemize other expenses, such as office supplies, telephone/fax charges and costs of supplies for intern presentations at poster sessions or meetings.

Indirect Costs Are Not Allowable as a Budget Item If an organization requires direct cost reimbursement for project specific utility or compliance costs these should appear as line items in the budget along with both the method of calculation and an explanation for their inclusion.

21. Principal Investigator and Co-Principal Investigator Biographical Information

Required Attachment if a new PI or Co-PI is being added When a firm is the fiscal agent, the co-principal investigator would be the person who coordinates intern activities on a college campus. A co-PI is not required. Two page maximum for each professional.

- A. Name
- B. Title
- C. Education (provide education, baccalaureate through postdoctoral; include institution and location, degree and year conferred and field of study with the most recent first)
- D. Describe experience at managing programs similar to this intern program
- E. Provide research and professional experience. Beginning with the present position, list in chronological order, previous employment, experience and honors. List in chronological order beginning with the most recent, the titles and complete references to recent representative publications, especially those most pertinent to this application.
- F. Describe previous OCAST support; include project number and results.

22. Mentor Biographical Information

Required Attachment if a new mentor is being added The mentor is the person at the intern host site who works most closely with the interns on the research project. Two page maximum for each mentor.

- A. Name
- B. Title
- C. Education (provide education, baccalaureate through postdoctoral; include institution and location, degree year conferred and field of study with the most recent first)
- D. Describe experience at mentoring beginning technically trained coworkers and subordinates. The reviewers critically evaluate the suitability of the mentor(s).
- E. Provide applied research and professional experience. Beginning with the present position, list in chronological order, previous employment, experience and honors. List in

chronological order beginning with the most recent, the titles and complete references to recent representative publications, especially those most pertinent to this application.

- F. Describe previous OCAST support; include project number and results.

23. Faculty Intern Biographical Information

Required Attachment if a faculty intern is being added For a project with a faculty intern, the faculty intern may be the PI or co-PI. Two page maximum for each faculty intern

- A. Name
- B. Title
- C. Statement of anticipated benefits from being a faculty intern
- D. Education (provide education, baccalaureate through postdoctoral; include institution and location, degree year conferred and field of study with the most recent first)
- E. Provide research and professional experience. Beginning with the present position, list in chronological order, previous employment, experience and honors. List in chronological order beginning with the most recent, the titles and complete references to recent representative publications, especially those most pertinent to this application.
- F. Describe previous OCAST support; include project number and results.

24. Letters of Commitment and Benefit

Required Attachment if a new organization is being added The reviewers critically review these one or two page letters. These letters must be specific to the application and not a generalization.

1. Letter of commitment and benefit signed by an official of the fiscal agent organization that is the lead applicant organization is required.
2. Letter of commitment and benefit signed by an official of a collaborating Oklahoma firm, non-profit research organization, college or university that is an additional applicant organization is required. Note: Organizations providing matching monies often sign as an additional applicant (and contractor, if awarded) to allow the organization to set up a project account for matching monies rather than provide match through the lead organization.
3. Letter of commitment and benefit from a collaborating Oklahoma firm, nonprofit research organization, college or university that is not an applicant or additional applicant may be included. Such organizations will include Items A, B and C below as appropriate or may include other information to aid the reviewers. Reviewers find it helpful to understand the relationship between all parties and their commitment to the program. For example, in an application from a company, you may include a letter from a faculty member assisting you to recruit students and/or the dean /department chair/head of the school acknowledging the importance of the program to the students. Letters from the CEO or president of benefiting organizations beyond the educational organizations and research sites, such as Oklahoma farm and ranch associations may be included in this section.

- A. Include an assessment of the potential for attracting future federal or private funds to continue the internship program beyond this RDIP project. How will the applicant use this support to create a sustainable internship program that does not need RDIP support? (required for all applicant organization letters)
- B. Include (1) a specific organizational commitments to the project for such items as equipment, computer services, facilities, re lease time for key personnel, secretarial support and technical support, (2) a statement of organizational commitment to the proposed project beyond the required matching monies, and (3) a summary of plans to continue the internship program beyond the project. (required for all applicant organization letters)
- C. For the R&D sites, also briefly discuss how the applied R&D performed by the company, or on behalf of the company by another organization (e.g., a non-profit research organization or a college), (1) will lead to innovation, new knowledge or technology and is not training or technical assistance for the business, (2) has a reasonable probability to enhance employment opportunities within Oklahoma and (3) is technically sound and will lead to a measurable result. Include a specific estimate of the potential economic gain the research will give the company. Examples of economic gain include increased payroll, jobs created or retained, increase in gross sales, cost avoidance, productivity and federal contracts won. (required for all R&D site letters)

25. Project Plan *this section typically takes 8-10 pages*

Required Attachment if the original project scope is altered The applicant must complete all of the following in this order and begin each section with a section heading:

- A. **R&D Performed:** Describe the general nature of the applied R&D to be performed without including proprietary information. Include a list of research objectives. *Typically this will be one page for each research project.*
- B. **R&D Facility:** Describe the applied R&D facility(ies) where the student and/or faculty interns will work. Show that adequate equipment and supplies are available for the project. *Typically this will be one page for each venue.*
- C. **Intern Work Description:** Generally describe the work the student interns will perform and how the interns contribute to meeting the research objectives. When there is a faculty intern, describe the work the faculty intern will perform and how it meets the research objectives. In particular, describe the activities of the intern during the first two weeks of the internship. *Typically this will be one to two pages for each project/venue.*
- D. **IRB and Hazardous Substances Notification:** Indicate in this section if the research project involves any of the research components listed on Instruction Pages 6 and 7 and how the appropriate certifications/approvals will be obtained. Mark this item Not Applicable if these components are not a part of the research project. Student interns supported under this program must not be research subjects for any research project that requires IRB approval. After an award is made applicants will be required to provide certification that all regulations have been satisfied. *Typically this will be one page for each project/venue.*
- E. **Mentor's Role:** Describe the role and duties of the internship mentor(s). If a mentor's principal employer is a non-profit research organization, college or university, describe

each mentor's experience in performing applied R&D that has led to commercialized products, processes or services. *Typically this will be one to two pages.*

- F. **PI Role:** Describe the role and duties of the principal investigator and co-PI. *Typically this will be one page.*
- G. **Non-Business Internship Location:** If all or part of the intern experience is at a non-profit research organization, college or university, describe the specific relationship between each participating company and the non-profit or university laboratory. Fully explain why the internship is not at the participating company site. *Typically this will be one to two pages.*
- H. **Intern Selection Plan:** Carefully explain the plan for selecting and assigning the interns. R&D Intern Partnerships projects must involve one or more students and/or faculty working at an R&D facility(ies) located in Oklahoma. Describe the potential intern pool. When a college or university is not a formal partner, include the process for contacting potential interns and the relationship between the applicant organization and Oklahoma colleges and universities. *Typically this will be one to two pages.*
- I. **Performance Monitoring:** For faculty and student interns, describe the process that will be used to monitor the intern work performance and to evaluate performance. Include evaluation instruments in Item 27, Appendix II. *Typically this will be one page plus the sample instrument(s).*
- J. **Intern Reporting:** Describe the process to be used for the intern to prepare reports. In general terms, without including proprietary information, the intern should describe the work done, the skills acquired and the benefits accrued. The intern should use the style guide of the company or of the institution of higher education to prepare each report that describes the internship experience. A minimum of monthly progress reports should be a part of the internship experience. The PI, as part of the annual progress report will include sample reports. *Typically this will be one to two pages.*
- K. **Intern Tracking:** Describe the process the fiscal agent organization will use to track the academic and professional progress of each intern for five years after the internship is served. This information will be reported to OCAST as a part of the annual impact report request for information that is required of all contractors. Information required, as a minimum, will be institutions of higher education attended, degrees earned, where employed and a current address for the intern. *Typically this will be one page.*

26. Benefit of Program Supplementation

Required Attachment for abbreviated applications Include a three to five page description of the benefits to the program by lengthening the current internship program.

27. Interim Report

Required Attachment

- I. COVER PAGE Provide the following information on the report cover page:
 - A. Project number
 - B. Interim report

- C. Project title
- D. PI name and lead applicant organization (location)
- E. Co-PI name and organization
- F. Intern mentor(s) and location(s) of intern performance
- G. Benefiting firm(s) and location
- H. Other organizations providing project resources (list in order of decreasing support level)
- I. Current funding period (e.g., September 1, 2007 – August 31, 2008); if the year has been extended, show final date of the extension, e.g., September 1, 2007 – September 30, 2008)
- J. Overall funding period
- K. Dates the report covers

II. EXECUTIVE SUMMARY (one page maximum)

- A. Briefly summarize work-to-date for a lay reader; do not include details that must be kept proprietary. The executive summary and the cover page should be produced for duplication and distribution in response to citizen, legislative, gubernatorial or other state organization requests. This summary is public information.
- B. Describe the benefits of the intern experience to student and faculty interns, the involved industry, the institution of higher education in institution and the state of Oklahoma of this OCAST funded research project.
- C. State the number of interns and their Oklahoma hometown, the name and location of the organizations hosting the interns and the name and location of the benefiting firms.
- D. Describe the research objectives reached by each intern.

- III. ORGANIZATION PARTICIPANTS List the organizations currently participating in the project, state the type of organization for each – business/industry, university, non-profit – and describe the type and level of involvement of each organization.
- IV. INTERN SELECTION PROCESS Describe the steps used to obtain a pool of potential interns as well as the intern selection process. Describe how the interns were assigned and their progress monitored. Include in an appendix copies of handouts, flyers and posters.
- V. INTERN CHARACTERISTICS AND REPORTS State the number of interns and their Oklahoma hometown, the name and location of the organizations hosting the interns and the name and location of the benefiting firms. Indicate field of study, degree pursued or held, by the student and/or faculty intern. Describe intern future plans which have been influenced by the internship experience. Briefly summarize selected intern prepared reports and attach the report(s) as Appendix I. Remove any “grade mark” from the report. Include a copy of instruments used to evaluate intern/mentor/program performance in Appendix II.
- VI. WORK ACCOMPLISHED Discuss the research completed on the project during the current funding year; specifically, assess (A) the significant technical achievements, (B) the notable technical achievements and (C) the success in achieving the project objectives in the time projected including comment on any planned but unachieved objectives.

- VII. PUBLICATIONS List journal articles and other publications, which have been submitted and/or published during the funding period, that incorporates any portion of the work supported by the OCAST contract; categorize under the headings of referred, non-referred, books, chapters, abstracts and presentations. List with bibliographic information any newspaper articles or other descriptions of the research in newsletters, lay magazines, etc. and attach a copy to the report as an appendix.
- VIII. BENEFITS AND ECONOMIC IMPACT Describe the benefits of the intern experience to student and faculty interns, the involved industry, the institution of higher education and the state of Oklahoma of this OCAST funded research project. Include benefits to other students and faculty members who were not formally a part of the internship program. The PI should make an effort to also include letters or statements from businesses which have collaborated on the project that quantify the economic benefits, actual or projected, as a result of the project. The quantification could include: jobs created or retained, percent increase of market share, dollar amount of increase in sales, dollar savings in cost-containment or percent increase in productivity. State the plans to build a sustainable internship program.
- IX. INTERN PROFESSIONAL PROGRESS Describe the process that is used to track the academic and professional progress of each intern for five years after the internship is served. This information will be reported to OCAST as a part of the annual impact report request for information that is required of all contractors. Information required, as a minimum, will be institutions of higher education attended, degrees earned, where employed and a current address for the intern.
- X. APPENDICES
- A. Appendix I. Sample Intern Reports
 - B. Appendix II. Sample Evaluation Instruments
 - C. Appendix III. Additional Materials (limit five pages)