



Oklahoma Center for the Advancement of Science and Technology

FY12 Oklahoma Applied Research Support Workshop

OCAST ROI

- \$17.6 million awarded in FY10
- \$368.9 million leveraged
- 20.9:1 return to Oklahoma
- 2,258 projects funded since 1987
- \$3.9 billion leveraged since 1987
- 19.94:1 cumulative leverage ratio

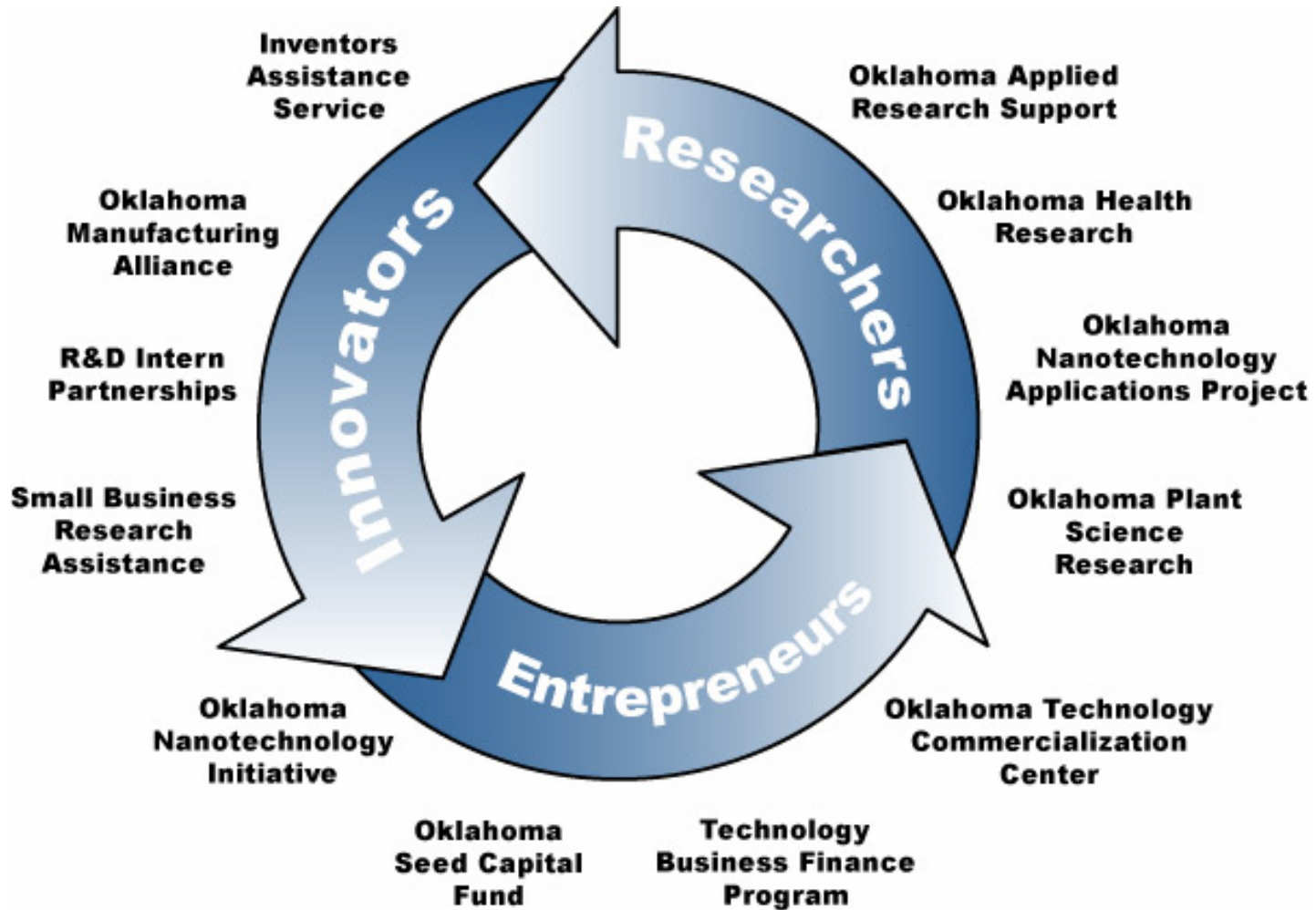
OARS ROI

- \$4.2 million awarded in FY10
- \$91 million leveraged
- 21.5:1 return to Oklahoma
- \$1.2 billion leveraged since 1987
- 16.3:1 cumulative leverage ratio

OARS Historical Data

- FY11.2 received 23 applications
 - 20 Accelerated
 - 3 Proof-of-Concept
 - 52% approved for funding
 - 70% of approved projects were awarded

Funding Programs



Applied Research Purpose

- Provides state matching funds for R&D projects
- Reasonable probability to enhance employment opportunities within Oklahoma
- Must have a high probability of producing new or improved commercially successful product, process or service.

Applied Research Awards

- Proof-of-Concept supports early stage applied research & development
 - \$10,000 minimum budget for each year
 - \$45,000 maximum each year up to two years
 - One-to-one matching requirements
- Accelerated supports later stage applied research & development
 - \$10,000 minimum budget for each year
 - \$300,000 maximum each year up to two years
 - One-to-one matching requirements

Comparison	OARS	
	Proof-of-Concept	Accelerated
Matching	1:1	1:1
Yearly Award		
<i>Minimum</i>	\$10,000	\$10,000
<i>Maximum</i>	\$45,000	\$300,000
Funding Years	1-2 years	1-3 years
Collaboration	Strongly Encouraged	Strongly Encouraged
Economic Impact	Must lead to commercialization	Must lead to commercialization

Eligible Organizations

- Oklahoma institutions of higher education
- Oklahoma non-profit research foundations
- Oklahoma firms with their principal place of business in Oklahoma
- Oklahoma businesses and farms

What Can I Research?

Anything!

As long as there's a reasonable potential for
commercialization

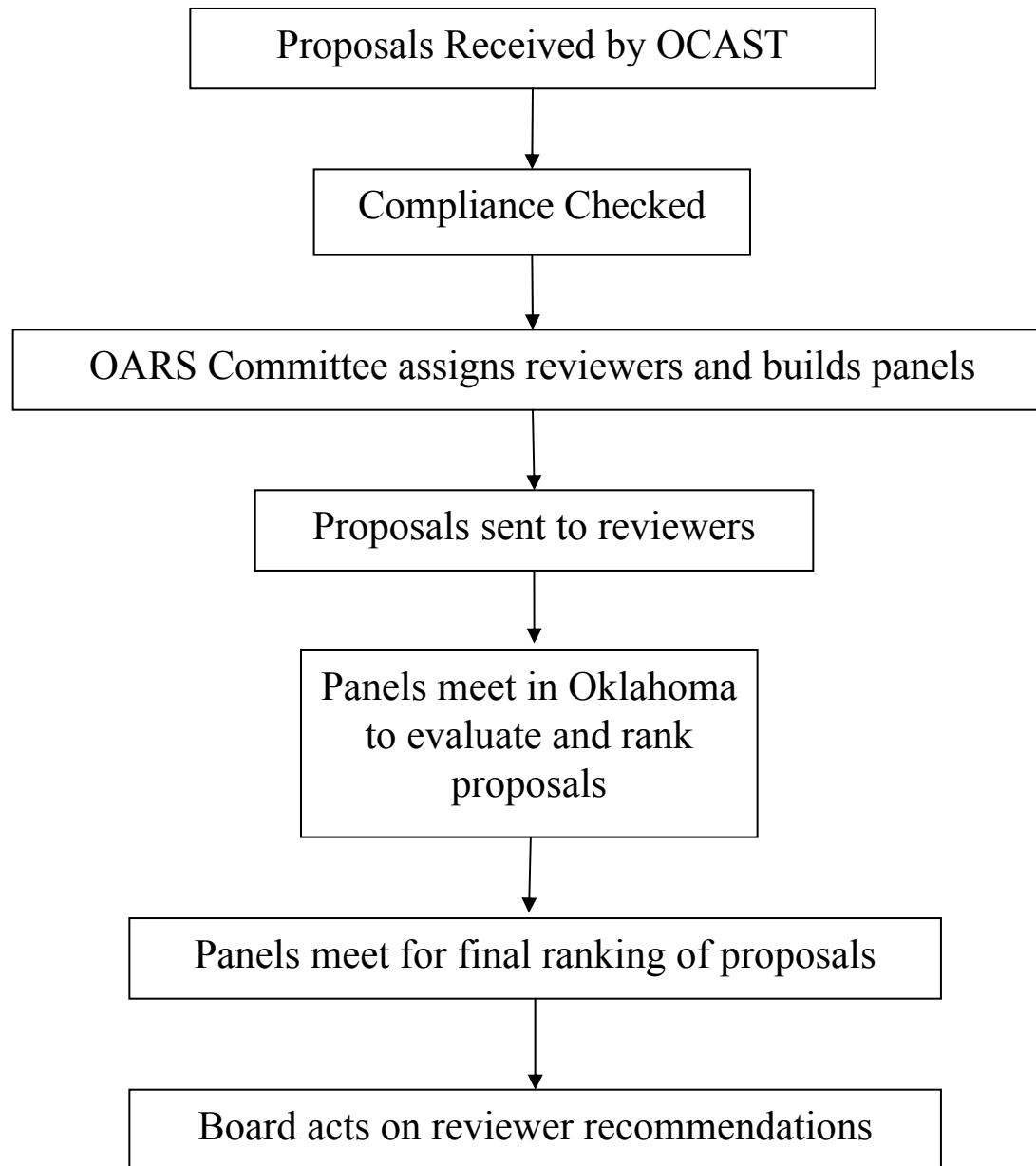
What Can't I Do?

- Market surveys
- Training or technical assistance for business firms
- Fundamental or basic research
- Anything that lacks potential for commercialization



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Review Process & Evaluation Criteria



Evaluation Criteria

- Proof-of-concept: 30% potential for economic impact, 70% technical merit of the research and the ability to perform the research
- Accelerated: 50% economic impact and 50% technical merit and the ability to perform the research

Evaluation Criteria

Technical Merit of the Research and Ability to Perform the Research

1. Creativity and inventiveness of the proposed research.
2. Degree to which state-of-the-art techniques and processes are to be used.
3. Quality of the research plan.
4. Probability of success of the research plan design.
5. Competence of investigator(s) as measured by training and research experience.

Evaluation Criteria

Technical Merit of the Research and Ability to Perform the Research

6. Competence of support personnel as measured by training and research experience.
7. Adequacy of facilities.
8. Adequacy of equipment.
9. Commitment of the applicant organization(s) as evidenced by resources dedicated to the project
10. Appropriateness of budget.

Evaluation Criteria

Potential for Economic Impact

1. Potential for leading to a commercially successful product, process or service within 2 years of project completion
2. Potential for leading to a commercially successful product, process or service within 5 years of project completion
3. Potential for leading to a commercially successful product, process or service within 10 years of project completion
4. Status of Intellectual Properties Agreement
5. Commitment of financial resources to successfully bring product to market

Evaluation Criteria

Potential for Economic Impact

6. Availability of marketing capability to successfully bring product to market
7. National/international market growth potential
8. Potential for creating jobs in Oklahoma, considering both the probability and number
9. Potential of short-term impact (within 5 years of project completion) on the Oklahoma economy
10. Potential for creating jobs that will enhance the technology base in Oklahoma



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Standards & Requirements

Solicitation Forms

Application in an edible format can be found
online at:

<http://www.ok.gov/ocast>

Intent Deadline

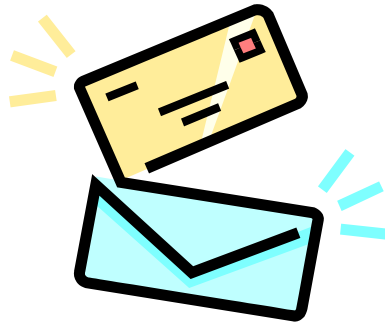
5 P.M., August 17, 2011

Oklahoma City



Application Deadline

5 P.M., September 7, 2011
Oklahoma City or Tulsa



Required Materials

Sets	Contents
1	Original paper application, marked “original,” with appendices attached (stapled or fastened with a binder clip in the upper left corner). Prepare required application pages 1- 25 (Items 1-25) as provided. Refer to required attachments pages 1-8 (Items 26-42) for instructions to prepare text sections of the application including, presentation order and headings.
1	Paper set of application pages: 1-25 (Items 1-25) staple each set in upper left corner. Include in each set Items 22, 22A, 23, 24 and 25 for each budget year of project.
1 CD	File containing the entire application in .PDF format including appendices.

Proposal Presentation

If a college professor wouldn't allow it, don't do it!

Use the presentation order and headings as shown in solicitation

Secure the application as easily as possible; rubber band or nothing at all is preferable

Required Materials

Total section text page length includes everything you could ever want to include in your proposal

No circumventing page limits

Leave no sections blank; indicate “Not Applicable”

Resubmissions

A resubmission is a *new* proposal, which includes:

- Indication that the proposal is a resubmission.
- A separate appendix with:
 - a letter responding to the reviewers' comments from the previous review and noting all changes in the research plan,
 - a copy of the previously submitted application and
 - all reviews of that application.

Additional Requirements

- Refer to the solicitation for the following:
 - IRB
 - Biographical information
 - Letters of support/recommendation
 - OCAST, previous, and other support
 - Company profile
 - Contact Information
 - Post Award Support



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Budgets

Matching Requirements

Applicant organization must provide 50% of the total direct cost

Funding sources cannot be from state-appropriated money

Matching monies must be specifically for the OARS project

In-kind services and indirect costs are not allowed

Matching Requirements

Comparison	Equipment as Match	Salary as Match No state appropriated funds can be used as match
Business	CANNOT use equipment & machinery as match	CAN use salary as match
Universities	CAN use equipment as match to fulfill part or the entire required match if the equipment did not originate from State-appropriated funds	CANNOT use salary as match unless from a private university
Non-Profits	CAN use equipment as match to fulfill part or the entire required match if the equipment did not originate from State-appropriated funds	CAN use salary as match if they do not receive monies from state appropriations

Direct Costs

Only research direct costs are allowable as part of matching expenses

Allowable

- ✓ Research related: travel, supplies, equipment, patient care, alterations, rent, phone, and utilities

Non-allowable

- ✗ Advertising, public relations, food, housing cost, automobiles, personal computers, lobbying costs, selling and marketing costs, first class air travel, patent and licensing fees

Indirect Costs

OCAST does not allow indirect costs as part of the match expenses

Indirect and unallowable:

Building & equipment depreciation, interest, operations and maintenance, overhead, administrative support, tuition and fees



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Commercialization Development, Economic Impact & Research Plan

Commercialization Development Strategy

Proof of Concept: 4 pages maximum

Accelerated: 10 pages maximum

- A. Briefly describe the product, process or service to be commercialized and its end use
- B. Describe the customers or clients.
- C. Describe the domestic and global markets market size, market growth rates, number and nature of competitors

Commercialization Development

Strategy

- D. State the competitive advantage the project offers in the targeted markets.
- E. Using a chart or table, describe the key steps required to commercialize the product, process or service. This plan should include a schedule of key business milestones.
- F. Provide summary pro forma income statements and cash flow projections

Intellectual Property Relationships and Protection

- Describe the plan to protect the intellectual property
- Collaborative proposals
 - Provide a short statement describing how the intellectual property patent and licensing agreements will be effectuated
- Existing agreements
 - Provide a short statement indicating the types of agreements that have been executed between the parties

Economic Impact Statement

Maximum 4 pages

- Discuss the project's potential impact on Oklahoma's economy during the project and at 2, 5 and 10 years following the project.
- Carefully discuss under a separate heading for each time period items A. through G., during the project, and at 2, 5 and 10 years after completion

Economic Impact Statement

- A. Increase in scientific and technical staffing levels
- B. Increase in work force staff
- C. Productivity, profitability or cost savings
- D. Amount of capital investment in equipment and facilities at the organizations participating in the project

Economic Impact Statement

- E. The estimated gross sales, net sales, and cost avoidance
- F. If applicable, describe technology transfer plans
- G. Other sources of funding and capital attracted to Oklahoma

Release of Information

OCAST is subject to the Open Meetings Act and the Open Records Act.

Application abstracts and executive summaries from progress reports are considered public information.

Marketing plans, financial statements, trade secrets, research concepts, methods or products, or any other proprietary information are exempt by statute.

Research Plan

- A. Objectives for the period of the proposed work. State concisely what the research described in the application is intended to accomplish.

Research Plan

- B. The significance of the research:
- i. Briefly sketch the background
 - ii. Evaluate existing knowledge in this area and identify the gaps that exist
 - iii. State the importance of this research by relating its aims to longer-term objectives
 - iv. Present related projects and demonstrate this effort does not repeat previous studies nor infringe on intellectual property rights

Research Plan

C. Preliminary and related studies:

- i. Describe prior research by the investigator(s) that lead to formulating the proposal

- ii. Describe competence of the investigator(s) who will perform the proposed project

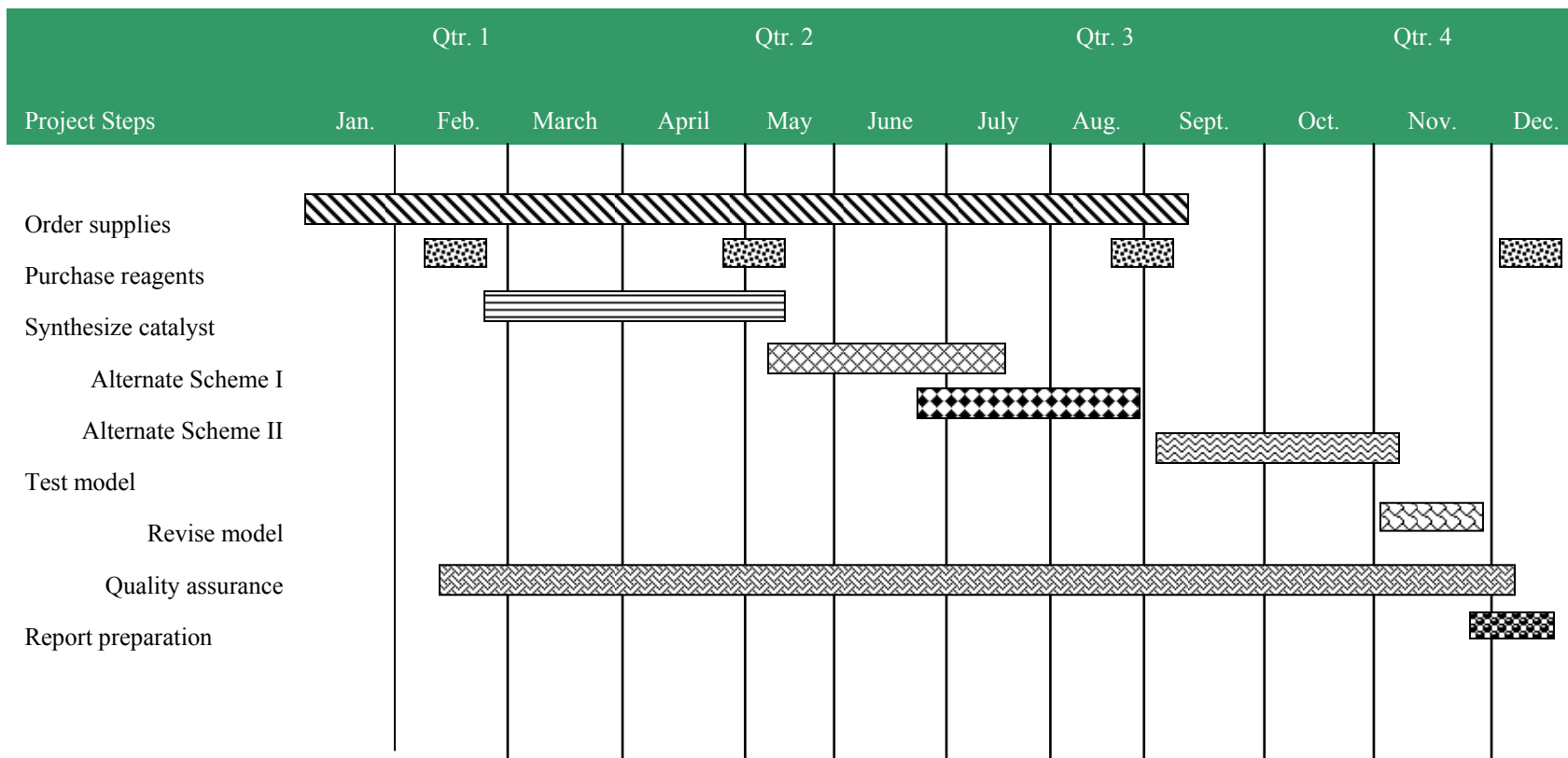
Research Plan

D. Research methodology:

- i. Detail the research design
- ii. Describe the sequence of events
- iii. Discuss the means by which the data will be analyzed and interpreted
- iv. Discuss the methodologies and any potential limitations of procedures and alternative approaches
- v. Note any procedures that may be dangerous to personnel and the precautions that will be used in these situations
- vi. Include indicators of success
- vii. Using the heading “*Facilities, Equipment and Resources*” describe the resources necessary and available for this project

Research Plan

Project Development Schedule



Literature Cited

- Number the references in order of appearance, and provide the complete citations. Do not scatter throughout proposal.
- Each citation must include the title of the journal article or specific book chapter
- While disciplines vary in the accepted style, the citation must be sufficient for a reviewer to locate the cited information with little searching
- Use a referencing style suitable for your discipline

Seven Deadly Sins of OCAST Proposals

1. Incomplete list of team members
2. Suspect budget
3. Poorly developed research plan
4. Previous research not acknowledged
5. Unclear innovation/competitive advantage
6. No or poorly reasoned collaboration
7. LACK OF DETAIL

Resources

OCAST staff

Grant writers

Business planners

Local researchers

Previous winners

Questions?



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