2017 Research Reinvestment Fund Seed Grant Program

The University of Maine System (UMS) is pleased to announce the 2017 Research Reinvestment Fund (RRF) Seed Grant Program. This is the third round of this grant program which is designed to provide seed funding for pilot research projects that will enable UMS faculty and staff from all disciplines and ranks to strengthen research, commercialization, and economic development activities that support Maine businesses and industries critical to the state's economy. A related goal for seed funds is to better position research groups to be more competitive in obtaining future funding, whether it be federal, state, commercial, or private. Proposals may be in either MEIF or non-MEIF topic areas. Collaborative and interdisciplinary proposals, which include two or more campuses, and/or external partners are highly encouraged. Awardees will be required to submit a Research Project Grant application related to the seed funding to a federal funding agency, or solicit funding via a state or commercial entity, by November 01, 2018. Future RRF Seed Grant competitions will be held on an annual basis through FY 19.

A competitive process will be employed to identify the highest quality and most competitive research and development groups. Groups are encouraged to collaborate across UMS campuses, and/or to include external partners in order to form competitive teams. Eligible projects will propose research and economic development activities that directly benefit Maine industries and enhance Maine's economic well-being.

Eligible areas include (with some overlap):

- Maine's natural resource- based businesses and industries (agriculture, aquaculture, fishing, forestry, energy).
- MTI's seven Maine Technology Sectors (biotechnology, aquaculture and marine technology, composite materials technology, environmental technology, advanced technologies for forestry and agriculture, information technology, precision manufacturing technology).
- High-tech financial and business services tied to Maine businesses and industries.
- Signature areas of excellence developed by each UMS campus that meet the economic development requirements as defined above.

Interested UMS faculty and staff members should submit the grant application package (including a 3-page concept paper) via the InfoReady grant portal (https://umaine.infoready4.com/CompetitionSpace/#) and using the guidelines that follow this program overview. Proposed projects will be for one year spanning June 1, 2017 – May 31, 2018. No-cost extensions will be considered. It is suggested that project budgets are in the range of \$50,000 - \$100,000 and budget items should be well justified. Allowable expenses include salary, student support, equipment, and materials/supplies, participant support, travel, and meeting expenses. Additional information may be found on the UMaine Research webpage, under the Research Reinvestment Fund tab (https://umaine.edu/research/ums-research-reinvestment-fund/).

Questions about the seed grants can be directed to Jason Charland at: iason.charland@maine.edu or 207-581-2461. The deadline for proposals is 4:30pm, January 31, 2017.

2017 Research Reinvestment Funds (RRF) Seed Grant Program

INSTRUCTIONS FOR PROPOSALS:

2017 RRF Seed Grant applications will be reviewed by an independent, external review panel that will make recommendations to the RRF Advisory Board. Final funding decisions will be made by the RRF Advisory Board. Please write the proposal in a way that can be easily understood by a general audience.

THE FOLLOWING FORMAT MUST BE USED IN THE CONSTRUCTION OF THE PROPOSAL. ONLY PROPOSALS SUBMITTED IN THE FORMAT REQUIRED WILL BE ACCEPTED FOR CONSIDERATION.

Aspects of the body of the proposal (concept paper) are detailed in items 1-5 below. The concept paper is limited to 3 pages, single-spaced, using Times New Roman 12pt font and 1" margins.

- 1. <u>Abstract:</u> Prepare this section to clearly summarize for nonspecialized readers the significance, objectives, and methodology of the proposed research. Indicate the potential impact on the economy of the state. Abstracts must be no longer than 250 words.
- 2. <u>Specific Goals or Objectives of the Proposed Research, Scholarship, or Technology Development:</u>

Information on goals and objectives is required at two levels.

- **I. Research Initiative** Clearly state the goals or objectives of the proposed research, scholarship, technology or economic development initiative to be catalyzed by the seed grant. As appropriate, the statement on goals and objectives should clearly state the hypothesis(es) to be tested, the question(s) to be asked, or the technology(ies) to be developed. Also indicate the specific market segment that will benefit from the project activities, including potential workforce development, products commercialized and/or companies formed.
- **II. Seed Grant Activity** Clearly state the objectives of the proposed research, scholarship, or technology development specific to the seed grant project and to be completed in one year from the award date. Indicate the types of information to be collected.
- 3. <u>Background Information:</u> Provide information regarding the research, scholarship, or technology development being proposed and the relevance of the proposed project to Maine's economy.
- 4. <u>Methods and Materials:</u> Describe clearly the procedures of information/data collection, analysis, and interpretation, associated with specific objectives of the seed grant activity and in support of goals or objectives for research, scholarship, or technology development. Clearly state the deliverables from the seed grant activity at the end of the one-year award period.
- Economic/Commercial Impact of the Research, Scholarship, or Technology Development Being Proposed: It is not expected that the expenditure of these funds alone will result in significant economic impact. However the applicants are requested to summarize how this RRF Seed Grant will better position the project to leverage the additional funding to take the project to a level where economic impact will be generated. Applicants should list where possible specific sources of additional funding/investment that could be leveraged by positive results from the proposed work. Applicants should also indicate the anticipated outcomes of the project (e.g., publications, intellectual property, licenses, market studies, prototypes, companies formed, and external grant applications to specific federal agencies/competitions, or state or commercial entities by November 2018). Applicants should address how the composition of the research and development team leverages collaboration across the UMS and/or external partners to increase the likelihood of successful economic/commercial impact.

2017 Research Reinvestment Funds (RRF) Seed Grant Program

Items 6-8 are required, but do not count toward the 3 page limit for concept papers

- 6. Bibliography: Include only those references cited in the text.
- 7. Biographical Sketch(es) of Principal Investigator and Co-Investigator(s):

Attach a 2-page biographical sketch for the PI and each Co-Investigator that includes:

- Professional positions, including title, organization, and time periods (current listed first)
- Educational background (Begin with baccalaureate/associates degrees first)
- Select grant proposals submitted and awards received from external sources during the past five years (indicate status, amount, dates, funding agency, project title, collaborations, & role)
- Select publications, presentations, showings, performances, etc., from the last five years.

8. Budget:

Please use the form provided in the Competition Files (example below) to detail your requested seed grant budget. Add specific names and time commitments for faculty and staff.

Allowable expenses include salary, student support, equipment, materials/supplies, participant support, travel, and meeting expenses.

Non-student wages (e.g. professional staff, post-doc, technician, or faculty release) must include fringe benefits at 54.7% and faculty summer salary must include fringe benefits at 8% Graduate student support must include 50% of the mandatory health insurance premium of \$2,732 per year/per student (full-time).

Budget Table

Personnel (see note below)	Salary Requested	Fringe Rate	Fringe Benefits	Total
		54.7%	\$ 0	\$ 0
		54.7%	\$ 0	\$ 0
		54.7%	\$ 0	\$ 0
		54.7%	\$ 0	\$ 0
Graduate Student(s)				\$ 0
Undergraduate Student(s)				\$ 0
Subtotal Personnel:	\$ 0		\$ 0	\$ 0

Other Direct Costs	Amount Requested
Materials & Supplies	
Equipment	
Travel	
Tuition	
Graduate Student Health	
Other	
Subtotal Other Direct Costs:	\$ 0

Project Total: \$ 0

Note: If you have more than four personnel receiving salary, combine the salaries of personnel that have the same Fringe Rate and enter "Combined" in the Personnel field. Provide a breakdown of these salaries in the Budget Justification.

2017 Research Reinvestment Funds (RRF) Seed Grant Program

9. Budget Justification:

(Limit to 1 page, single spaced, Times New Roman 12pt font, 1" margins). In this section please discuss in narrative form the details of your budget, including all of the following related to the budget areas above:

- a. Personnel Support: How much of the personnel support requested is to be spent on:
 - (1) student/research assistance; (2) professional/post-doc/technician salary(ies);
 - (3) faculty salary(ies) please distinguish whether summer salary or release time. How does your personnel support relate to the work to be done?
- b. Materials/Supplies: NOTE: Only those supplies that are not generally available in your department, and therefore are unique to this project, should be requested.
- Equipment: NOTE: You must write a specific justification for any single piece of c. equipment that exceeds \$500. This must include:
 - Description and Cost: provide a complete description and identify 1. purchase price and other costs related to acquisition.
 - 2. Purpose: describe the role for the requested equipment in meeting the needs of the principal investigator(s), how it will be used, any planned or potential utilization by other UMS entities and/or external partners, and any use for it beyond this project (if applicable).
 - 3. Other Resource Needs: Describe if other university resources are necessary to operate and maintain the requested equipment, and if so, what provisions have been made to meet these needs.
- 10. Letters of Support: (Optional) Up to 3 one-page letters of support can be included in the proposal. Letters can be used to: identify a need, market, or customer base; identify a team, partners, or collaborators; identify targeted milestones and outcomes that will benefit Maine's economy; and/or discuss workforce development implications of the proposed pilot project.

Applications will be reviewed by an independent, external reviewer using the evaluation rubric below. The external reviewer will make recommendations to the RRF Advisory Board and the final funding decisions will be made by the RRF Advisory Board.

GRANT SUBMISSION CHECKLIST

- 1. COVER PAGE completed information and appropriate signatures
- 2. PROJECT INFORMATION SHEET completed information
- 3. CONCEPT PAPER 3 pages, single-spaced, Times New Roman 12pt font, 1" margins
- 4. BIBLIOGRAPHY include only those references cited in the text
- 5. BIOGRAPHICAL SKETCH(ES) as per template provided
- 6. BUDGET provide a budget table/sheet and a 1-page justification for proposed costs
- 7. LETTERS OF SUPPORT (optional)
- SUBMIT ALL GRANT MATERALS THROUGH THE INFOREADY PORTAL BY 4:30 PM, JANURARY 31, 2017

${\bf 2017}\ Research\ Reinvestment\ Funds\ (RRF)\ Seed\ Grant\ Program$

RESEARCH REINVESTMENT FUND – SEED GRANT PROGRAM – EVALUATION CRITERIA

Intellectual Merit	Poor	Good	Very Good	Excellent	Score
(25 Points)	(0-6 Points)	(7-12 Points)	(13-19 Points)	(20-25 Points)	
	Proposed research unlikely to	Proposed research likely to	Proposed research likely to	High probability that the	
	lead to completion of	lead to partial completion of	lead to completion of	research will lead to	
	objectives; methodologies not	objectives; methodologies	objectives; methodologies are	completion of objectives;	
	well suited; poorly articulated	suitable; some unresolved	suitable and well- reasoned;	methodologies very well	
	hypothesis/ research questions	questions regarding the	hypothesis/ research questions	suited and reasoned;	
		hypothesis/research questions	largely clear	hypothesis/research questions	
				clear and appropriate	
Relevance to Maine's	Poor	Good	Very Good	Excellent	Score
Economy (40 Points)	(0-10 Points)	(11-20 Points)	(21-30 Points)	(31-40 Points)	
	No clear link of the proposed	Proposed activities somewhat	Proposed activities well	Proposed activities intimately	
	activities to Maine's	linked to Maine's economy;	linked to Maine's economy;	linked to Maine's economy;	
Workforce Development	economy; likelihood of job	likelihood of job creation,	high likelihood of job	likelihood of job creation,	
	creation, workforce training,	workforce training,	creation, workforce training,	workforce training,	
	internships, workforce	internships, and workforce	internships, workforce	internships, workforce	
137D (CD	development low	development moderate	development	development very high	
AND/OR					
	No clear link to the proposed	Proposed activities somewhat	Proposed activities well	Proposed activities intimately	
	activities to Maine's	linked to Maine's economy;	linked to Maine's economy;	linked to Maine's economy;	
Economic Development	economy; likelihood of job	likelihood of job creation,	high likelihood of job	likelihood of job creation,	
	creation, commercialization,	commercialization, licensing,	creation, commercialization,	commercialization, licensing,	
	licensing, technology,	technology, economic	licensing, technology,	technology, economic	
	economic development low	development moderate	economic development	development very high	
Likelihood of Additional	Poor	Good	Very Good	Excellent	Score
Funding (20 Points)	(0-5 Points)	(6-10 Points)	(11-15 Points)	(16-20 Points)	
	Proposed research unlikely to	Proposed research somewhat	Proposed research likely to	Proposed research highly	
	lead to external funding	likely to lead to external	lead to external funding;	likely to lead to external	
		funding; targets lacking	targets given	funding; specific targets given	
Extent of Collaboration	Poor	Good	Very Good	Excellent	Score
(15 Points)	(0-3 Points)	(4-7 Points)	(8-11 Points)	(12-15 Points)	
	Proposal has no evidence of	Proposal has some evidence of	Proposal has good	Proposal has strong evidence	
	collaboration across the UMS	collaboration across multiple	collaboration across multiple	of collaboration across	
	and/or external partners;	campuses and/or external	campuses and/or external	multiple campuses and/or	
	collaborations are not clearly	partners; collaborations are	partners; collaborations are	external partners;	
	linked to the proposed	linked to the proposed	well linked to the proposed	collaborations are clearly	
	activities; roles and	activities; roles and	activities; roles and	linked to the proposed	
	responsibilities are not clearly	responsibilities are somewhat	responsibilities are defined	activities; roles and	
	defined	defined		responsibilities are clearly	
				defined	
TOTAL POINTS					