

REQUEST FOR PROPOSALS

Embry-Riddle's Faculty Innovative Research in Science and Technology (FIRST) Program 2022-2023

ANNOUNCEMENT

The Senior Vice President for Academic Affairs and Provost is pleased to announce that proposals are now being accepted for the *Faculty Innovative Research in Science and Technology (FIRST)* program for academic year **2022-2023**. The awards will begin on July 1, 2022, and end on June 30, 2023.

Increasing the national recognition of our research and growing our externally-funded research are two key objectives of the university. This program contributes to these objectives by providing stimulus funding to faculty who are starting their research careers, and to those faculty embarking on research that the university considers to be high impact and that, in the long term, would lead to substantial recognition for the researcher and the university.

The program provides seed funding for high-impact projects to allow researchers to develop their ideas to a level of maturity that will make them more competitive in applying for substantial external research funding. Publishable research and/or product development are also expected outcomes of this support. This component of the program is open to all full-time tenured and tenure-track faculty.

The program also provides seed funding for junior faculty (primarily tenure-track assistant professors) to enable them to get a strong start on their research. Awardees are expected to perform publishable research. It is also expected that they will elevate their research to a level that allows them to begin developing proposals for external funding, where such funding sources exist.

Funding is available in two categories: Category-A for those projects which constitute groundbreaking and/or high impact research in areas of science and technology (S&T) across all three campuses; and Category-B for smaller S&T or non-S&T related projects (e.g., humanities projects, business projects, etc.).

- Category-A awards will be made up to a maximum of **\$26,000** for those projects considered “high-impact” S&T research. Note that the actual number funded in this category will depend on the number, quality and relevance of applications submitted in this category.
- Category-B awards will be made up to a maximum of **\$13,000** for projects considered to be non-S&T related research or for smaller S&T projects.

Eligibility and review criteria are detailed for each of the two categories on pages 2 and 3.

DEADLINE FOR SUBMISSION: Proposals are due no later than 1:00 p.m. EDT **Friday, February 4, 2022**. Please see [proposal preparation and submission instructions](#) on page 5. Complete schedule and deadlines can be found in [Deadlines and Schedule](#) table on page 5

APPLICATION PACKAGE/SOLICITATION

GENERAL INFORMATION:

- **Applicants are encouraged to:**
 - Consult with a Grants Analyst to assist with the proposal preparation prior to the deadline. Contact Yadan Komrowski 386-226-4787 – yadan.komrowski@erau.edu
 - Seek guidance, as needed, on technical proposal writing issues (e.g. from respective Associate Dean for Research, representative on the University Research Council, or a mentor).
- Full proposal packages must be submitted by the application deadline per the [Proposal Preparation and Submission Instructions](#) in order to be reviewed.
- **Incomplete proposals will not be reviewed.**

AWARD INFORMATION:

The period of performance for all awards will be one year beginning at the start of the fiscal year (July 1, 2022) and must be spent within the same fiscal year (by June 30, 2023). Funds will be appropriated as the research is being conducted during the award's period of performance. Proposals are encouraged from all university campuses. Award decisions will be made based on how well proposals address the review criteria and on their quality.

Category-A Research Awards (High Impact S&T Research Projects)

- Awards of up to **\$26,000**.
- High impact projects that will further the university's recognition in signature research areas.
- Collaboration across university campuses, colleges and/or departments is strongly encouraged.
- Due to the size of these awards, *generally, no more than one proposal will be funded from the same department.*

Eligibility

- Applicants must be full-time tenure and tenure-track faculty.
- Temporary, Visiting, and Adjunct Faculty are not eligible, but they can be an unsupported co-investigator (Co-I) with a tenured or tenure-track principal investigator (PI) if they can contribute substantively to the project.
- Faculty may serve as PI on only one proposal under this solicitation.
- Faculty can serve as a Co-I on any number of proposals.
- There is no restriction on applicants who have previously received internal research funding.
- Eligibility requirements must be met at the time of application.

Criteria

1. Perceived impact of the research.
2. The problem or area to be researched is clearly articulated.
3. Alignment of the research to the university's signature areas of research.
4. The methodology to be used is clearly identified and is appropriate.
5. The likelihood that the proposed objectives will be fulfilled.
6. The likelihood that the proposed research will lead to the development of a proposal seeking extramural federal funding or to an industry research contract.
7. The overall scholarly merit is of high quality or excellence. The intellectual merit of the project has been made clear and it is expected that this project will lead to academic journal articles or other high-quality research projects.
8. Demonstrated outcome(s) of current and previous FIRST funding received by the applicant(s).

Category-B Research Awards (Non-S&T and Less Expensive S&T Research Projects)

- Awards of up to **\$13,000**.
- Selection of awards will be made based on how well the proposals address the review criteria and on their quality.
- *Generally, no more than three proposals will be funded from the same department.*

Eligibility

- Applicants must be full-time tenure and tenure-track faculty.
- Special consideration will be given to tenure track Assistant Professors.
- Temporary, Visiting, and Adjunct Faculty are not eligible, but they can be an unsupported co-investigator (Co-I) with a tenured or tenure-track principal investigator (PI) if they can contribute substantively to the project.
- Faculty may serve as PI on only one proposal under this solicitation.
- Faculty can serve as a Co-I on any number of proposals.
- Eligibility requirements must be met at the time of application.

Criteria

1. The problem or area to be researched is clearly articulated.
2. The project objectives are relevant to the university research interests.
3. The methodology to be used is clearly identified and is appropriate.
4. The likelihood that most of the proposed objectives will be fulfilled.
5. For those areas of research for which the availability of extramural funding is a reasonable expectation, the likelihood that the proposed research will lead to the development of a proposal seeking extramural federal funding or to an industry research contract.
6. The overall scholarly merit is of high quality or excellence. The intellectual merit of the project has been made clear and it is expected that this project will lead to academic journal articles or other high-quality research projects.
7. Demonstrated outcome(s) of current and previous FIRST funding received by the applicant(s).

Program Questions

- Questions related to the FIRST program can be directed to the Associate Provost for Research, Remzi Seker (sekerr@erau.edu).

ALLOWABLE EXPENSES:

Allowable costs of up to **\$26,000** for Category-A ‘high-impact’ projects or up to **\$13,000** for Category-B non-S&T projects must be clearly explained in the Budget Justification section of the Budget form. Fringe benefits are charged in addition to faculty stipends and student wages, but indirect costs are not applicable.

Allowable Costs

- Faculty stipends (maximum \$4,000 per proposal for Category-A; maximum \$2,000 per proposal for Category-B proposals).
- Student/technical assistants (must be able to perform the research during the term of the award).
- Supplies and equipment.
- Duplication and communication expenses.
- Travel to professional conferences for research collaboration or for data collection is allowed, but the associated costs should not exceed 20 percent of the total request. Special requests with appropriate justification will be considered on a case by case basis for research that requires travel costs that exceed this limit. International travel is not usually allowed.

Unallowable costs

- Faculty salary beyond the stipend limits stated in the “Allowable Costs” section.
- Materials readily available from the department.
- Course development.
- Text book writing or typing, and page, review, and reprint charges.
- International travel is discouraged.
- Although equipment deemed critical to the proposed research is allowed, projects that are determined to be primarily for equipment (as evidenced by the proposed budget) will not be accepted.
- Capital assets.¹
 - *When the property is purchased with University funds and the purchase price is \$5,000 or more per item or \$30,000 or more for an aggregate purchase of similar items, the property is considered a capital asset. Software with a purchase price of \$10,000 or greater is considered capital.*

Awarded project expenditures in a given category (object code) may not deviate by more than 10 percent from the proposed budget. The Senior Vice President for Academic Affairs and Provost must be notified immediately if it is expected that deviations in any category will exceed 10 percent.

PhD Student Stipend Support

Because the involvement of PhD students in research is usually considered positively by external funding agencies, for Category-A proposals it is acceptable to include a PhD student in the research plan and budget. PhD student stipends of up to \$20,000 for 12 months may be included.

Inclusion of a PhD student in the proposed research requires a short paragraph of justification. PhD students are required to perform their own dissertation research, and hence it is advised that significant synergy should exist between the student’s own research plans and the proposed FIRST research project. It is also expected that the PI will have sufficient time to supervise the student in the FIRST research. This means that the FIRST proposal PI must also be the PhD student dissertation advisor.

Note that PhD tuition needs to be cost-shared by departments. Agreement to cost-sharing of PhD tuition must be outlined in the letter of endorsement written by the applicant’s immediate supervisor in support of the proposal.

HUMAN SUBJECTS:

If the project includes research that involves human participants, it must be reviewed by the Institutional Review Board (IRB) for the use of Human Subjects in Research prior to participant recruitment and data collection. This must be indicated in the project narrative. Contact Teri Gabriel for an application at teri.gabriel@erau.edu or 386-226-7179.

REPORTING:

- A comprehensive Final Report is due on September 8, 2023. Specific format guidelines for the Final Report will be sent to awardees in May 2023.
- A presentation describing the research project, outcomes, and notable achievements will be required for all awardees. The specific details of the required presentations and the dates and times will be discussed with PIs at a later date.

¹ Please see APPM 2.2 for further information on capital assets at <https://myerauedu.sharepoint.com/teams/APPM/section-2/Pages/2-2-procedure.aspx>

ACKNOWLEDGEMENTS

All publications resulting from this internal funding should acknowledge the university support in the following way:

This research was partially supported through Embry-Riddle Aeronautical University's Faculty Innovative Research in Science and Technology (FIRST) Program.

DEADLINES and SCHEDULE:

Date	Task	Person Responsible
January 7, 2022 (5:00 p.m. EDT)	Pre-Proposal Form Completed & Fully Approved	PI
January 28, 2022 (12:00 p.m. EDT)	Budget Finalized and Approved by OSRA Administrator for Streamlyne Routing	PI & OSRA Administrator
February 3, 2022 (12:00 p.m. EDT)	Final Proposal Application Package due to the Office of Sponsored Research Administration	PI
February 4, 2022 (5:00 p.m. EDT)	Proposal Application Packages reviewed and submitted to the Sr. VP for Academic Affairs and Provost Office	No late applications will be accepted
April 26, 2022	Notification of awards	Senior Vice President for Academic Affairs and Provost Office
July 1, 2022	Start date of award	
May 31, 2023	Guidelines for final report distributed	OSRA Administrator
June 30, 2023	End date of award	Unspent funds returned to Senior Vice President for Academic Affairs and Provost Office
September 8, 2023	Final reports due	OSRA Administrator

PROPOSAL PREPARATION and SUBMISSION INSTRUCTIONS

1. **Proposal Cover Page/Review and Approval Form – Two page maximum**

One additional page may be added to include Co-Investigators.

Project's title should be prefixed with "Category-A Proposal:" or "Category-B Proposal:" An example title is seen below:

Category-A Proposal: Modeling the Impact of Solar Storms on Aviation Operation Safety Margins.

2. **Project Description – Six page maximum, single-spaced with a font size no smaller than 10 point**

The text needs to include enough detail about the project so that reviewers can assess the quality, feasibility and significance of the project. The project description must be written in plain language and **include the following parts:**

- a) **Abstract. On a SEPARATE PAGE, one page maximum.** The abstract should be a brief narrative in non-technical language describing the project, its overall goals and specific objectives, and the approach/methodology to be employed.

- b) *Background*. Present the project to be addressed and the importance of the proposed research.
 - c) *Methodology/approach*. Provide both a description of and a justification for the project. For research projects, this might include design, sample size, measurement techniques, instrumentation and data analysis. Include a **timetable** for accomplishing specific tasks. If student assistance is required, clearly delineate the activities of the Principal Investigator and student.
 - d) *Significance*. For research projects, describe the expected outcomes and their impact on current understanding, knowledge, or practice. For creative projects (undefined), describe the significance of the project both to a particular field and to the arts and humanities in general; include relevant information on galleries, events, judges, juries, etc. For either type of project, describe how the project contributes to the applicant's professional development as a scholar and to the building of a successful research program, where applicable.
 - e) *Adequacy of resources*. Describe relevant experience, and what space, facilities and equipment are available. Provide evidence for access to facilities elsewhere if necessary to carry out the proposed research project.
 - f) *Planned External Proposal Development*. **A key issue to address in the Project Description, particularly for the large S&T awards category**. Indicate funding agencies identified for proposal submission upon completion of this project including a time schedule for submission. If potential funding agencies cannot be identified indicate how the scholarly activity and expected outcomes would strengthen the ability of the PI to obtain funding at a later date.
3. **References Cited** – **No page limit**
List the references cited to back up the significance, methodology and approach of the research.
4. **Curriculum Vitae (CV)** – **Two page maximum**
Include date and institution of terminal degree and 10 most relevant publications (in print or accepted). The CV must delineate the applicant's role in multi-authored citations (e.g. primary author, principal investigator, co-principal investigator, data collection, data analysis, etc.).
5. **Budget** – **Two page maximum** (must be completed by the Office of Sponsored Research Administration)
Please contact The Office of Sponsored Research Administration for assistance in preparing the budget. Submit a detailed budget with an explanation justifying the amount requested for each category (see ALLOWABLE COSTS section).
6. **Endorsement Letter from Immediate Supervisor**
A letter from the applicant's immediate supervisor detailing the departmental/unit support that will be provided to the applicant in case the proposal is funded. The letter should include cost-sharing for Ph.D. student tuition when applicable and any reduction in teaching and service loads in order to support the applicant's research project.
7. **Supporting Documents** – **Five page maximum**
Include the following supporting documents, as appropriate:
- a) Any instruments or surveys which will be used in the project.
 - b) Letters from collaborators who will be making substantial commitments of time and/or facilities to the project.
 - c) Letters of support, which can include those from deans.
 - d) Quotes for equipment purchases.

Proposal Submission Instructions

- Principal Investigators (PIs) must submit a Pre-Proposal Information Form (PPIF) using the on-line *electronic PPIF form*. The URL for this is either via <https://webforms.erau.edu/private/university/grants/pre-proposal/> or directly in Ernie (under Departments/Sponsored Research Administration/forms): <https://ernie.erau.edu/Departments/office-of-sponsored-research-administration/forms/Pages/Default.aspx>
- Once the PPIF is approved, the proposal will be assigned to an Office of Sponsored Research Administration administrator (OSRA Administrator) who will assist the PI with budget preparation for the proposal.
- Proposal budgets will be internally routed by the OSRA Administrator for university approval via the Streamlyne online system. The final proposal package is due to the Office of Sponsored Research Administration by the submission deadline in order to be reviewed.

PROPOSAL COVER PAGE
FIRST Program

NEW TENURE-
(Under 2 Years Service)

OTHER TENURE-
(Over 2 Years Service)

TENURED

PI NAME:	RANK/TITLE:
DEPARTMENT:	COLLEGE:
CAMPUS:	
CO-INVESTIGATOR (Co-I):	
PROPOSAL TITLE:	
PROPOSAL CATEGORY <input type="checkbox"/> A <input type="checkbox"/> B	AMOUNT REQUESTED:
<p>I have received prior internal research funding. <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If you answered YES please complete the "Outcomes from Current and Prior Internal Research Funding" form on page #9.</p>	
<p>I have received prior extramural research funding. <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	
<p>Does this research involve human participants? <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	

Outcomes from Current and Prior Internal Research Funding

This form should only be completed by those faculty who have previously received internal research funding (PI and Co-Is). It emphasizes research accomplishments that resulted from this internal funding, including published papers, conference presentations, extramural proposal submissions, and funded proposals. Please complete the form below for every internally-funded project.

Title of Project:

Period of Performance: 1st July (year) to 30th June (following year)

Funding Amount:

Summary of Accomplishments

A short paragraph (less than 200 words) describing significant findings and research accomplishments.

List of Publications

List of Conference Presentations

List of Extramural Proposals Submitted

List of Extramural proposals Funded

**Faculty Innovative Research in Science and Technology (FIRST) Program
BUDGET***

***Please use the attached spread sheet**

CHECKLIST

- Pre-Proposal Form**

- Proposal Cover Page**

- Project Description** – Six page maximum with a font size no smaller than 10 points
 - Abstract – **provided on a separate page, one page maximum**
 - Background
 - Methodology/approach – include **timetable**
 - Significance
 - Adequacy of resources
 - Planned future proposal development for external funding

- References Cited** – No page limit

- Curriculum Vita (CV)** – Two page maximum

- Budget** – Two page maximum using the Excel Budget form
 - Budget – Grants Analyst will assist with preparation
 - Justification – a written explanation of expenses

- Outcomes from prior internal research funding**– No page limit

- Endorsement letter from immediate supervisor**

- Supporting Documents** – Five page maximum
 - Instruments or surveys
 - Letters from collaborators
 - Letter of Endorsement from Department Chair
 - Extra information that was not part of the narrative

Incomplete applications will NOT be reviewed.