Emergency Medicine Foundation
Council of Residency Directors in Emergency Medicine

Starter Grant - Emergency Medicine Education Scholarship

Request for Proposal

Please read these instructions carefully. Applications that do not follow these instructions with regards to type size, length, format, and supporting documentation will be summarily rejected. No extension of the deadline will be granted.

Before submitting your application, please be sure that the following items have been addressed:

- Information page is included as the first page of the application packet and is fully completed (sample attached).
- Type size is 11 pt. font, single-spaced and margins are one-half (.05) inch
- Evidence of IRB approval, or at least evidence of submission to IRB, from each institution, is included in application packet (for multi-centered studies, approval from or evidence of submission to IRB/AUC for all sites is required)
- Clearly stated research hypothesis
- Statement of Conditions is signed by **Principal Investigator** and **Institutional Official** and is included in application packet (see below).
- Letter of support from Emergency Medicine Chair and/or Vice Chair of Academics/Education is included in application packet
- Letter of support from each co-investigator is included in application packet
- Other grant support for all investigators is included in application packet
- Submission via the on-line application system is required. Late applications will not be considered. Submit application at https://emfoundation.aibs-scores.org

EMERGENCY MEDICINE FOUNDATION
COUNCIL OF RESIDENCY DIRECTORS IN EMERGENCY MEDICINE
STARTER GRANTS - EMERGENCY MEDICINE EDUCATION SCHOLARSHIP

Application Deadline	February 5, 2021
Notification of Award	June 2021
Funding Period	July 2021 – June 2022
Funding Amount Per Award	$10,000
Number of Awards	Up to two

GRANT TOPIC

EMF-CORD Starter Grants - Emergency Medicine Education Scholarship are intended to provide a vehicle for emergency medicine education researchers early in their career that promotes the development of well-conceived projects while allowing for grant writing experience and recognition of successful grant applications. Successful applications will revolve around innovation and/or the creation of new knowledge related to medical education including but not limited to: simulation, teaching, assessment, curricula, program evaluation, patient safety, and education as it pertains to medical students, residents, fellows or faculty.

As funding that supports professional development in education research, there are several unique components of these Starter Grants: (1) A mentor is an absolute requirement of all successful applications. A mentor is defined as someone with significant experience and/or advanced training in education research who will assist with project design, implementation, completion and presentation and (2) Grant monies may be used for travel or project development opportunities that facilitate the education of the Principle Investigator and their funded project (e.g. MERC at CORD Scholar's Program). In addition, multi-institutional projects are encouraged due to the ability to more broadly generalize the results of these studies. Up to $10,000 can be requested per Starter Grant. Though not required, preference will be given to faculty of CORD member programs.

ELIGIBILITY

The principal investigator (PI) must have a primary faculty appointment in Emergency Medicine. The PI will be responsible for all arrangements and conduct pertaining to the proposed research projects and supervising the work of all associate investigators. Only US-based universities will be eligible to apply for this grant award. The research proposal must be approved by the corresponding institutional review board (IRB) at the time of grant submission including those determined to be exempt. This must be documented by inclusion of the IRB letter in the grant proposal.

INSTITUTIONAL SUPPORT

The applicant must also submit a letter from the Emergency Medicine Chair and/or Vice Chair of Academics/Education of stating that adequate funds and time will be available to the applicant to complete the proposed project. Additionally, the Chair person's letter should document why the investigator will benefit from the grant funding opportunity.

EVALUATION OF APPLICATIONS

Each application will be reviewed by emergency medicine specialists who are actively involved in education, basic science, clinical or health services research. Each application will be judged primarily on: (1) **the significance of the project to emergency medicine**, (2) **the soundness of the research methodology**, and (3) **the likelihood the project will be completed**. It is, therefore, important to completely and clearly describe the methodology of the research, the importance to emergency medicine, and why the project will be completed in the allotted time frame. The final funding decision will be made by the Emergency Medicine Foundation Board of Trustees and all decisions are final.

TERMS OF THE AWARD
The EMF/CORD Research Grant funds will be disbursed semi-annually over the one-year cycle. Disbursement of payments will be contingent upon satisfactory progress reports.

Change of Status of Principal Investigator
If the PI makes any changes, including affiliations or ceases research in the field for which the award was made, that jeopardizes the research, he/she is responsible for immediately notifying EMF. The award will immediately terminate, and the remaining balance will be returned to the Emergency Medicine Foundation.

Liability of the Emergency Medicine Foundation
The EMF and CORD assumes no financial liability if patient care responsibilities of any kind are undertaken by the program faculty or investigator. The principal investigator and his or her institution acknowledge that the EMF is not legally liable for the conduct of the institution, the principal investigator, the program faculty, or any associate investigators.

Patent Policy
The principal investigator and institution acknowledge that, though unlikely, if a patentable invention or discovery is conceived, or conceived and reduced to practice by EMF-supported personnel during the award year, the EMF and CORD must be apprised of the invention and the institution's plans for protecting such invention under existing institutional patent policy. The EMF will defer to institutional policies where they are in compliance with those of the Federal government.

SUPPORT FACILITIES
The applicant must submit letters of support if the proposed project uses facilities not routinely available to or directly under the supervision of the sponsoring program.

PUBLICATIONS
All discoveries resulting from work supported in part by the Foundation should be made available to the public and scientific community through scientific and/or public policy channels such as national meetings and peer-reviewed publications. Publications will acknowledge the support of the EMF/CORD. Two electronic reprints of each publication will be forwarded to the Emergency Medicine Foundation.

PROGRESS REPORTS AND MONEY MANAGEMENT
The principal investigator will submit a six-month progress report and a final progress report within thirty days of the conclusion of the award year. Additional reports may be required. Failure to provide the reports will delay transmission of funds. Furthermore, failure to provide interim and final reports to the Foundation may negatively impact the PI's institution's ability to apply for future EMF awards. EMF/CORD will maintain the copyright of all such reports. Progress reports must include an accounting report using Generally Accepted Accounting Procedures showing the distribution of funds with a signature from an institutional official (e.g., accountant, grants manager, administrator from the Office of Sponsored Research). The EMF reserves the right to withhold release of interim funds if >25% of the previous cycle remains unspent. The EMF allows up to 25% of funds to be carried over from one cycle to the next. The PI must immediately report any violation of IRB rules or IRB concerns relating to the research.

SURVEYS
The principal investigator and the institution will be surveyed periodically following completion of the award regarding career paths, subsequent grants/contracts obtained, and publications. The principal investigator and the institution will be expected to respond to these surveys as the Foundation will rely on such information to

support continuation of the award program.

ABSTRACT PRESENTATION – ACEP RESEARCH FORUM AND CORD ACADEMIC ASSEMBLY
Grantees are required to present their work at the American College of Emergency Physicians (ACEP) Scientific Assembly/Research Forum immediately following the completion of the award. At the time of submission, abstracts must not have been accepted for publication in any journal. Also, abstracts may not be presented at any U.S. nationwide emergency medicine meeting or major international emergency medicine meeting prior to the ACEP Scientific Assembly. Presentation at non-emergency medicine meetings is allowed after presentation at ACEP. Funds cannot be requested to cover the travel cost nor registration to Research Forum. Awardees are also required to present their work at CORD Academic Assembly as a poster or oral presentation

GRANTEE WORKSHOP
Grantees are expected to attend a grantee workshop in Bethesda, MD. The workshop is designed to bring together EMF grant recipients to present their progress and discuss any problems they may be facing. Senior researchers and faculty will be available to help solve problems, such as enrollment efforts, managing staff and life-work balance. NIH program officers participate in this workshop to discuss funding opportunities, provide research career advice and network with the grantees. Travel expenses will be reimbursed by the Emergency Medicine Foundation.

CONTACT INFORMATION
Please address questions to Cynthia Singh, MS, Deputy Executive Director at csingh@acep.org.

APPLICATION INSTRUCTIONS

Do **not** submit an incomplete application. **An application will be considered incomplete if it is illegible, if it fails to follow instructions, or if the material presented is insufficient to permit an adequate review.** Unless specifically required by these instructions (e.g. human subjects certification, vertebrate animals verification) do **not** send supplementary material.

The following sections are required and must be clearly identified:

1. **Cover Page**
   Provide the primary investigator's contact information, list your mentor and co-investigator(s), title of the project, proposed project timeline and total dollar amount. Your title should be descriptive and specifically appropriate, rather than general. (See sample below)

2. **Abstract/Lay Summary** (max. 1 page)
   Provide a brief, easily understood description of the proposed project.

3. **Table of Contents**

4. **Statement of Problem**: (max 1/2 page)
   Briefly describe the existing problem that this project intends to address.

5. **Background/Literature Review** (max. 2 pages)
   Provide a succinct discussion of underlying learning theory and review of related previous research which will inform the reader of the existing knowledge relative to the problem being addressed, describe the gaps in the existing literature and provide the basis for interpreting the results of the proposed work. Also describe any previous work by the current investigator that is directly related to the proposed project. If the investigators have relevant unpublished pilot data, these should be summarized concisely in appendices.

6. **Rational, Statement of Need and Audience** (max 1 page)
   Clearly articulate how the proposed work will generate new knowledge and address need, fill existing gaps in the literature and who is your intended audience.

7. **Specific Aims/Hypothesis** (max 1 page)
   Describe the specific aims of the project and the hypothesis that will be tested. These should be clearly related to the rationale.

8. **Methodology** (max 2 pages)
   Describe, under separate subheadings, the following for each Specific Aim/Hypothesis:
   - Subjects to be Studied (including a **rationale for the proposed sample size**)
     - Clearly describe the population of interest
     - Describe the sampling methods involved
     - Describe the generalizability to the target population of interest
   - Research Design/Procedures with justification for the particular methodology including feasibility
     - Strengths and weakness of various research designs should be considered
     - Validity of data both internally and externally should be considered
   - Measurement and Instrumentation including well defined outcome measures
   - Data Analyses (including specific statistical procedures, if relevant)

- Weaknesses

Other headings/subsections can be used as appropriate to the particular project. This section must include a clear and specific description of the research plan and product implementation.

9. **Timeline** (max 1 page)
   Include a graphic depiction of what the investigators propose to accomplish on a month-by-month basis.

10. **How will this project help your career?** (max 1 page)
    - Does it help you develop or advance an area of expertise?
    - Will this project provide pilot data or serve as the basis for a future project?
        - How?
        - What is the future project and likely funding source?
    - How else will it help you?

11. **Plans for Presentation** (max 1 page)
    Describe plans for publication and presentation of the results of the project.

12. **References** (limited to 25 references).

13. **Dean/Department Chair's Letter**
    Include a letter of endorsement from the appropriate dean or departmental chair of the applicant's organization indicating his/her support of the project. Include support letters from key collaborators.

14. **Mentor's Letter of Support**
    Include a letter from your mentor that acknowledged their endorsement of the project and willingness to mentor the project.

15. **Letters of support from all other collaborating institutions or investigators who will provide expertise**

16. **IRB Letter**
    Include the letter from the chair of the Institutional Review Board(s) of the applicant organization(s) indicating that the project has been reviewed and approved, and a copy of any consent form(s) that may be required. Projects judged to be exempt from continuing IRB review, require a letter from the Chair of the IRB stating this.

17. **Budget**
    Provide an estimate of the expenses required to complete the proposed project. Preference will be given to funding which directly benefits the knowledge and or skill of the applicant.
    Examples include but are not limited to:
    - Travel related to education that facilitates a quality project: (Example: MERC at CORD Scholars' Program). It is important to provide the rational for any travel related to the project.
    - Consultation fees: Statistician, data management
    - Computer hardware/software relevant to the project
    - Communication costs: Conference calls, long distance calls, postage
    - This grant does not pay for:
        - New computers
        - Faculty salary support or "Buy-down time"

Use the NIH Form Detailed Budget for Initial Budget Period available on the internet at www.grants.nih.gov/grants/funding/phs398/phs398.html# Provide a budget narrative to indicate how the money will be spent. Justify all major expenditures. Use the current NIH salary cap. Institutional overhead is not allowed.

18. **Appendices.** Include letters of support from the Department Chair and/or Vice Chair of Academics/Education and associate investigators (required). Include proof of IRB approval or submission. Copies of questionnaires and relevant testing forms should also be included as appendices. No page numbering is necessary for Appendix. Do not use appendix to circumvent page limitations for research plans. Do not include experimental methods, protocols or figures that should be incorporated within the research project description.

19. **A NIH Biosketch for the Principal Investigator, Co-Investigator(s) as well as the Project Mentor**. Each should include a brief description of the researchers' experience as educators and represent their capabilities to successfully conduct and manage research projects. For an example of a NIH Biosketch, go to: http://grants.nih.gov/grants/funding/phs398/biosketchsample.pdf

20. Statement of Conditions
See below. Must be signed and included in application package.

ETHICS

Human subjects. For all research involving human subjects, a part of the peer review process will include careful consideration of protections from research risks, as well as the appropriate inclusion of women, minorities, and children. The EMF Scientific Review Committee (SRC) will assess the adequacy of safeguards of the rights and welfare of research participants, and the appropriate inclusion of women, minorities, and children, based on the information in the application. This evaluation will be factored into the overall score. The information on the protection of human subjects that you are required to provide in this section is identical to information that you will be required to provide for IRB at your own institution and are required by most Federal agencies. This section must address the following items. These can be copied and pasted directly into your application.

The applicant should include specific measures on how protected health information (as defined by the Human Health Services) will be handled in accordance with the Privacy Rule of the Health Insurance Portability Accountability Act (HIPAA)."

1. RISKS TO THE SUBJECTS

a. Human Subjects Involvement and Characteristics

Describe the proposed involvement of human subjects in the work outlined in the Research Design and Methods section. Describe the characteristics of the subject population, including their anticipated number, age range, and health status. Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as fetuses, neonates, pregnant women, children, prisoners, institutionalized individuals, or others who may be considered vulnerable populations. Note that 'prisoners' includes all subjects involuntarily incarcerated (for example, in detention centers) as well as subjects who become incarcerated after the study begins. List any collaborating sites where human subjects research will be performed and describe the role of those sites in performing the proposed research.

b. Sources of Materials

Describe the research material obtained from living human subjects in the form of specimens, records, or data.
Describe any data that will be recorded on the human subjects involved in the project.
Describe the linkages to subjects and indicate who will have access to subject identities.
Provide information about how the specimens, records, or data are collected and whether material or data will be collected specifically for your proposed research project.

c. Potential Risks

Describe the potential risks to subjects (physical, psychological, social, legal, or other), and assess their likelihood and seriousness to the subjects.
Where appropriate, describe alternative treatments and procedures, including the risks and benefits of the alternative treatments and procedures to participants in the proposed research.

2. ADEQUACY OF PROTECTION AGAINST RISKS

a. Recruitment and Informed Consent

Describe plans for the recruitment of subjects (where appropriate) and the process for obtaining informed consent. If the proposed studies will include children, describe the process for meeting requirements for parental permission and child assent.
Include a description of the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. Informed consent document(s) need not be submitted to the PHS agencies unless requested.

b. Protection Against Risk

Describe planned procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness. Where appropriate, discuss plans for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects.
Studies that involve clinical trials (biomedical and behavioral intervention studies) must include a description of the plan for data and safety monitoring of the research and adverse event reporting to ensure the safety of subjects.

3. POTENTIAL BENEFITS OF THE PROPOSED RESEARCH TO THE SUBJECTS AND OTHERS

Discuss the potential benefits of the research to the subjects and others.
Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and others.

4. IMPORTANCE OF THE KNOWLEDGE TO BE GAINED

Discuss the importance of the knowledge gained or to be gained as a result of the proposed research.
Discuss why the risks to subjects are reasonable in relation to the importance of the knowledge that reasonably may be expected to result.

Applicant (*Last, first, middle*): _____

Cover Page Sample

Full Name with Titles:_____

Name of Institution:_____

Grant Category:_____

Project Title:_____

Amount Requesting:_____

Mentor, if applicable:_____

Applicant (*Last, first, middle*): _____

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STATEMENT OF CONDITIONS GOVERNING THE EMERGENCY MEDICINE FOUNDATION GRANT

It is understood that any Emergency Medicine Foundation Research Grant approved by the Emergency Medicine Foundation will be made with the following conditions:

1. Institutional overhead is not allowed.
2. The principal investigator's institution is organized for humanitarian purposes and is not a profit-making organization.
3. All reports of work achieved with this grant will acknowledge the support of the Emergency Medicine Foundation and any co-sponsors.
4. Any discovery that arises from work supported by the Emergency Medicine Foundation will be submitted for publication. Two electronic reprints of each electronic publication will be forwarded to the Emergency Medicine Foundation.
5. Independent progress reports by the applicant will be submitted to the Emergency Medicine Foundation mid-project, and within thirty days of completion of the funding period. Additional reports may be required. The Emergency Medicine Foundation will maintain the copyright of all such reports.
6. Participation in the Emergency Medicine Foundation Grantee Workshop is expected. The Emergency Medicine Foundation will reimburse travel expenses.
7. Grantees must submit the abstract of the funded project to the ACEP Research Forum at the end of the project. Research Forum is held each year during the American College of Emergency Physicians Scientific Assembly. Grant funds may not be used for registration nor travel.
8. If the named principal investigator leaves the institution or terminates research in the designated field, all remaining funds revert to the Emergency Medicine Foundation. If unused funds exist at the completion of the project, all remaining funds revert to the Emergency Medicine Foundation.
9. Patent rights will conform to institutional standards. If none exist, the Emergency Medicine Foundation reserves the right to protect such interests.
10. No research proposal will be funded unless the Principal Investigator and the Institutional Official of the sponsoring institution affirm:
    a. That the investigation(s) proposed in this application are endorsed by the Animal and/or Human Subjects Committee or other designated body of the preceptor's institution, and
    b. That any research involving human subjects conforms with the principles of the Helsinki Code of the World Medical Association, and
    c. Research involving animals or human subjects must be approved by the institutional review board (IRB), or its equivalent, and a copy of the approval or pending approval sent with this application. IRB approval must be documented prior to dispensation of Emergency Medicine Foundation funds.
    d. That research involving vertebrate animals will conform with the "Guiding Principles in the Care and Use of Animals" as approved by the Council of the American Physiological Society.
    e. Research involving vertebrate animals must have approval from the Institutional Animal Care and Use Committee.

_____	_____	_____	
Date	Signature of Principal Investigator	Type Name of Principal Investigator	
_____	_____	_____	
Date	Signature of Mentor, if applicable	Type Name of Mentor, if applicable	
_____	_____	_____	
Date	Signature of Institutional Official	Type Name of Institutional Official	