

EMF/EMRA/AFFIRM Mentored Research Award in Firearm Injury Research

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 12 pt. font, single-spaced and margins are 1 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 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>

EMF/EMRA/AFFIRM Mentored Research Award in Firearm Injury Research

Supported by the American Foundation for Firearm Injury Reduction in Medicine (AFFIRM), the Emergency Medicine Foundation (EMF) and the Emergency Medicine Residents Association (EMRA)

Application Deadline	February 7, 2020
Notification of Award	June 2020
Funding Period	July 2020 – June 2021
Funding Amount Per Award	\$12,000 (\$10,000 for awardee, \$2,000 for mentor)
Number of Awards	One

Contacts

Cynthia Singh, MS, EMF Deputy Executive Director csingh@acep.org

Megan Ranney, MD MPH, AFFIRM Chief Research Officer mranney@affirmresearch.org

INTRODUCTION

Firearm injury is the proximal cause of ~40,000 deaths and 120,000 injuries each year in the United States. Firearm injury is the second leading cause of death among U.S. youth (14–24), the primary cause of death among African-American youth, and the most common method of suicide deaths across all age groups. Unlike almost every other type of injury, the absolute number and the mortality rate of firearm injuries are increasing.

In 2013, the Institute of Medicine (now National Academy of Medicine) developed a firearm injury prevention research agenda. In 2016, an ACEP-sponsored technical advisory group developed a consensus inventory of key firearm injury prevention research questions that are specifically relevant to emergency medicine. Due to continued lack of funding, none of these research questions have been answered. Without high-quality, rigorous research, it will be impossible to solve the firearm injury epidemic facing our country.

The **Emergency Medicine Foundation** awards funds to support the development of research in emergency medicine. The **Emergency Medicine Resident Association** regularly sponsors research grants to facilitate the academic growth and development of future researchers, and thereby invest in the specialty of emergency medicine. The **American Foundation for Firearm Injury Reduction in Medicine (AFFIRM)** is a non-partisan, non-profit philanthropy whose mission is to fill this governmental funding gap by partnering with medical societies and private funders. AFFIRM believes that physicians and other health professionals can reduce the incidence and health consequences of gun violence in exactly the same way we address all other complex health problems: through a comprehensive public health approach. Our overarching goal is to identify who is at risk of a firearm injury or death, and then develop and disseminate effective risk-reduction strategies. Our priorities build on existing, externally-validated research agendas published in collaboration with AFFIRM leadership, including our partner organizations.

PURPOSE OF THE AWARD

The goals of the EMF/EMRA/AFFIRM Research Grant are to 1) facilitate innovative, high-quality research that can advance the evidence base on firearm injury prevention; 2) foster development of novel methods that can advance the state of research in this area; 3) support new partnerships between researchers in relevant disciplines; and 4) facilitate the academic growth and development of future leaders in firearm injury prevention research. We are particularly interested in funding high-risk, high-reward ideas that have the potential to significantly contribute to our country's perception of and approach to firearm injury prevention.

We ask that proposals highlight both how they will advance both the **science** of firearm injury prevention, and how they will lead to downstream **tangible changes** in firearm injury patterns, morbidity, and mortality. Additionally, for this trainee grant, we ask the grant to highlight c) how it will contribute to the trainee's career

path.

One grant will be awarded for a maximum of \$12,000. Funds are not to be used for capital equipment purchases, faculty salary support, publication costs, travel, or institutional overhead.

APPLICANT ELIGIBILITY

The Applicant may be a resident in an ACGME approved emergency medicine residency training program, a first-year graduate, or entering first year faculty member.

It is required that the applicant submit a **letter of support from a preceptor** at the applicant's institution. This letter must describe the preceptor's and the resident's roles and responsibilities in the proposed project. The preceptor must hold an MD, DO, PhD or equivalent degree. The preceptor must have proven ability to pursue independent research as evidenced by original research publications in peer-reviewed journals and/or funding from extramural sources. The preceptor may be in any department within the applicant's institution.

We also encourage inclusion of a **letter of support from a subject area mentor**, who may be outside of the applicant's institution. The mentor must have a demonstrated research track record in the area of focus of the research proposal (e.g., suicide prevention, dissemination & implementation, etc.).

INSTITUTIONAL SUPPORT

The applicant and preceptor assume responsibility for conducting the research projects and supervising the work of the resident and associate investigators. The applicant and preceptor must demonstrate that access to a suitable caseload or patient population will be available for study during the funding period. If a basic science or nonclinical project is proposed, the applicant must show that adequate and appropriately equipped laboratory space will be available during the funding period. **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 EMF funds. Letters of support from the Emergency Medicine Chair and Residency of Fellowship Director (if applicable) are required.**

PROJECT EXAMPLES AND RECOMMENDED TOPIC AREAS

We strongly recommend that projects coincide with the ACEP Technical Advisory Group's published firearm injury prevention research agenda ([https://www.annemergmed.com/article/S0196-0644\(16\)30932-5/abstract](https://www.annemergmed.com/article/S0196-0644(16)30932-5/abstract)). We encourage applicants to use rigorous methods that will provide pilot data on innovative new strategies for firearm injury prevention. We also encourage inclusion of diverse perspectives, such as those of public health professionals, firearm owners, or community members. Applicants are also encouraged to include a plan for the recruitment and inclusion of participants from diverse racial, ethnic, socioeconomic, and cultural backgrounds.

Examples of appropriate research projects may include, but are not limited to, the following:

- Preliminary development of risk prediction instruments for assessment of emergency department patients' risk of firearm suicide, homicide, or mass shootings
- Qualitative research with family and community members affected by firearm injury
- Preliminary development and evaluation of ED clinician training materials, to improve assessment and intervention for at-risk patients
- Clinical trials of innovative ED-or hospital-based interventions to reduce firearm injury
- Development or pilot studies of ED-or community-based interventions to reduce sequelae of firearm injury (such as PTSD)
- Collaboration with local police departments, medical examiners, or community groups to develop novel epidemiologic or intervention modalities

We strongly discourage purely observational studies that do not make significant contributions to the knowledge base; for instance, neither a local replication of national data nor an ecological pre-post study would be likely to be funded, unless the methods and proposed findings were tremendously rigorous and innovative. We also discourage blatantly political studies, such as evaluations of advocacy methods.

AWARD ADMINISTRATION, APPLICATION, AND SELECTION PROCESS

EMF will administer the joint EMF/EMRA/AFFIRM Research Award. Each application will be reviewed by researchers from American College of Emergency Physicians (ACEP) Research Committee and the AFFIRM Research Committees/Council. The applications will be judged primarily by their likelihood of making a substantive contribution to the field, with a preference for the projects with the *greatest potential to advance the field of firearm injury prevention*, as judged by:

- a) significance of the problem from a public health perspective;
- b) innovation;
- c) rigor of the approach, including soundness of the proposed analysis;
- d) feasibility of the study;
- e) qualifications of the investigator(s) and Mentor(s);
- f) potential impact of the research findings;
- g) the degree to which the proposal accords with AFFIRM's mission
- h) the degree to which the project will enhance the Awardee's career.

We also request that applications specifically identify which area of firearm injury they will focus on (suicide; community violence; domestic violence; unintentional injury; mass shootings).

PROGRAM ACTIVITIES AND REQUIREMENTS

Progress and Final Reports: The Awardee is required to submit a 6-month narrative progress report and a final narrative report at the end of the performance period. Failure to provide the report may negatively impact your institution's ability to apply for future awards. These reports will be submitted to EMF for subsequent submission to EMRA and AFFIRM. In the event that the Awardee's project is not completed at the end of the designated performance period, and appropriate approvals to continue have been granted, the final report must still be submitted as an outline of work done and projections for work/expenditures remaining.

Institutional Annual Meeting: Attendance is expected at the EMF Grantee Workshop and the AFFIRM Annual Research Council meeting. EMF and AFFIRM will cover these travel expenses.

Publications: All discoveries resulting from work supported in part by this award should be made available to the public and scientific community through approved scientific channels such as national meetings and peer reviewed publications. Publications will acknowledge the support of EMF, EMRA and AFFIRM. Two reprints of each publication should be forwarded to EMF, EMRA, and AFFIRM.

PROGRAM EVALUATION

Awardees will be contacted annually by EMF, EMRA and AFFIRM following completion of the funding year regarding career paths, ongoing research or dissemination activities, leadership in firearm injury prevention, subsequent grants/contracts obtained, and publications. Awardees will be expected to respond to this outreach.

BUDGET

The budget consists of \$10,000 for the Awardee project and a \$2,000 stipend for the Mentor, for a total award of \$12,000. Awards are contingent on availability of funds.

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.

TERMS OF THE AWARD

Duration: Applications will be accepted for a one-year project only.

Extension of Award Period: In unusual circumstances, arrangements can be made for an extension of an award. Such a request must be made by the Awardee at least 60 days before the expiration date of the award. This request must be made in writing, specify reasons for requesting the extension, and state a new expiration date. Project extensions of greater than six months will not be considered.

Change of Status of Designated Mentor or Awardee: If the Awardee changes affiliations or ceases work in the field for which the award was made, the award will terminate, and the remaining balance will be returned unless the Awardee and his or her new institution demonstrate the ability to successfully complete the planned project and the plan for this is approved. If the named Mentor changes affiliations or ceases work in the field for which the award was made, the award will terminate, and the remaining balance will be returned unless another appropriate mentor or plan to ensure appropriate mentoring is identified and approved.

Location of work: Awards are for projects in the United States at an accredited medical school, medical center, or institution affiliated with a university teaching program. The Awardee, with the direction of the Mentor, will make all arrangements for conduct of the proposed projects.

Liability of the Emergency Medicine Foundation, Emergency Medicine Residents' Association and American Foundation for Firearm Injury Reduction in Medicine: EMF, EMRA and AFFIRM assume no financial liability if patient care responsibilities of any kind are undertaken by the AFFIRM Awardee or Mentor. The Mentor, the Awardee, and their respective institution(s) acknowledge that EMF, EMRA and AFFIRM are not legally liable for the conduct of the Awardee or the Mentor and associate investigators.

Patent Policy: The Mentor, the Awardee, and their respective institution(s) acknowledge that if a patentable invention or discovery is conceived or conceived and reduced to practice by the Award during the term of the award year, AFFIRM and EMF must be apprised of the invention and the institution's plans for protecting such invention under existing institutional patent policy. EMF will defer to institutional policies where they are in compliance with those of the Federal government. AFFIRM and EMF reserves the right where the institution has no patent policy, or policies not in compliance with those of the federal government, to claim rights and interests in the invention or discovery consistent with FAR Clause 52.227-11, Patent Rights-Ownership by the Contractor.

ABSTRACT PRESENTATION – ACEP RESEARCH FORUM

Awardees 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 to attend the Research Forum.

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, EMF Deputy Executive Director at csingh@acep.org, or Megan Ranney, MD MPH, AFFIRM Chief Research Officer mrانney@affirmresearch.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 application consists of the following sections:

1. INFORMATION PAGE

Name the **one** person responsible to the applicant organization for the scientific and technical direction of the project. Choose a title that is descriptive and specifically appropriate, rather than general. List the mentor and any associate investigators. (See sample below)

2. ABSTRACT (limit 1 page)

Provide a summary of research proposal. Include rationale, research hypothesis, specific aims, and significance.

3. TABLE OF CONTENTS

4. RESEARCH PROPOSAL (limit 6 pages)

Please use the following subheadings:

Specific Aims

- State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.
- List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.
- Specific Aims are limited to one page.

Significance

- Explain the impact of the condition on the health of individuals and populations
- Explain how the potential for the study to improve healthcare and outcomes
- Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

Innovation

- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

Approach

- Describe overall strategy, methodology, and analyses to be used to accomplish specific aims of project.
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.
- Preliminary Studies. Include information on Preliminary Studies. Discuss the PD/PI's preliminary studies, data, and or experience pertinent to this application. Preliminary data can be an essential part of a research grant application and help to establish the likelihood of success of the proposed project.

5. PERSONAL STATEMENT (limit 1 page)

The applicant should compose and submit a personal statement that addresses:

- a. the applicant's interest in the topic and this project
- b. the applicant's perception of his/her role in the project
- c. any additional pertinent experience or interests the applicant wishes the committee to consider

6. ROLE OF PARTICIPANTS (limit 1 page)

List the principal investigator, co-investigator, mentor and others involved in the research. Include a brief description of how and to what extent each will be involved in the proposed project.

7. BIOGRAPHICAL SKETCHES

Use the NIH Biographical Sketch Format Page available on the internet at

<https://grants.nih.gov/grants/forms/biosketch.htm> Information is requested for the applicant, mentor and any associate investigators who will be involved with the projects.

8. RESOURCES AND ENVIRONMENT

Describe the research facilities (laboratory space, clinical population, etc.) available for training. If computer access or statistical support is available, it should be described in this section.

9. BUDGET

Use the NIH Form Detailed Budget for Initial Budget Period available at

www.grants.nih.gov/grants/funding/phs398/phs398.html# Indicate how the money will be spent. Justify all major expenditures. Institutional overhead is not allowed.

10. OTHER SUPPORT

List all current and pending intramural and extramural research funding for the applicant, mentor and co-investigators. For each item indicate the grant identification number, grant type, PI, funding source, annual direct costs, funding period, percent effort, grant title, and brief description of project. For all items indicate whether there is any scientific or budgetary overlap with the current proposal.

11. 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.

5. DATA AND SAFETY MONITORING PLAN (if applicable)

If your research includes a clinical trial, create a heading entitled "Data and Safety Monitoring Plan." Provide a general description of a monitoring plan that you plan to establish as the overall framework for data and safety monitoring.

Vertebrate Animals. For all applications involving vertebrate animals, the applicant must address the following five items. These five points may be copied and pasted directly into the application.

1. Provide a detailed description of the proposed use of the animals in the work outlined in the Research Design and Methods section. Identify the species, strains, ages, sex, and numbers of animals to be used in the proposed work.
2. Justify the use of animals, the choice of species, and the numbers to be used. If animals are in short supply, costly, or to be used in large numbers, provide an additional rationale for their selection and numbers.
3. Provide information on the veterinary care of the animals involved including the name of the supervising veterinarian. Include information from the Association for Assessment and Accreditation of Laboratory Animal Care International: the name of the accredited parent organization (e.g., University of X) and the certificate number and date of last inspection.
4. Describe the procedures for ensuring that discomfort, distress, pain, and injury will be limited to that which is unavoidable in the conduct of scientifically sound research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices, where appropriate, to minimize discomfort, distress, pain, and injury.
5. Describe any method of euthanasia to be used and the reasons for its selection. State whether this method is consistent with the recommendations of the Panel on Euthanasia of the American Veterinary Medical Association. If not, present a justification for not following the recommendations

12. LITERATURE CITED

13. APPENDIX

Include letters of support from the department chairs, and associate investigators (required). 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.

14. SIGNED STATEMENT OF CONDITIONS (see below)

Principal Investigator (*Last, first, middle*): _____

Table of Contents

_____	Information Page
_____	Abstract
_____	Table of Contents
_____	Introduction to Revised Application (if applicable)
_____	Research Proposal
_____	Personal Statement
_____	Role of Participants
_____	Biographical Sketch
_____	Resources and Environment
_____	Detailed Budget
_____	Other Support
_____	Ethics
_____	Literature Cited
_____	Appendix
_____	Signed Statement of Conditions

Information Page

Full Name with Titles: _____

Name of Institution: _____

Grant Category: _____

Project Title: _____

Amount Requesting: _____

Mentor, if applicable: _____

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 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 Type Name of Mentor

_____/_____
Date Signature of Institutional Official Type Name of Institutional Official