



Multiple Myeloma Research Foundation
2024 Scholars Award
Program Guidelines



2024 SCHOLARS PROGRAM

Program Description:

The Multiple Myeloma Research Foundation (MMRF) seeks proposals for the MMRF 2024 Scholars Program. The goal of this initiative is to engage and support the careers of promising Black/African American clinical and/or laboratory investigators in the field of multiple myeloma research. The Scholars Program will support the awardee from post-doctoral training to first faculty-track position.

Applicants for the MMRF Scholars program must have an MD and/or PhD or equivalent degree(s) and have completed at least one year of post-doctoral training and not hold a title higher than assistant professor or equivalent at a US institution at the time of the award. Applicant must propose a clinical, translational, or basic science project relevant to the field of multiple myeloma. The Scholar program will provide up to \$400,000 of financial support over four (4) years (\$100,000/year) plus 10% indirect costs (total award \$440,000) to successful applicants.

Key Dates:

- **January 2nd, 2024– Request for Applications (RFA) issued**
- **March 31st, 2024 – Deadline for Submission of Applications**
- **June 30th, 2023 – Applicant notification**

Background:

Multiple myeloma is a plasma cell malignancy which is currently not curable but is a treatable disease. In the United States alone, approximately 30,000 new cases will be diagnosed this year and nearly 12,500 people will die from this disease.

The Multiple Myeloma Research Foundation (MMRF) was established in 1998 as a 501(c)(3) non-profit organization by twin sisters Karen Andrews and Kathy Giusti, soon after Kathy's diagnosis with multiple myeloma. The mission of the MMRF is to drive innovation that accelerates the development of next-generation treatments to extend the lives of myeloma patients and ultimately lead to a cure. The MMRF is the world's number one funding source for basic, translational, and clinical research in multiple myeloma, and has provided over **\$500,000,000 in financial support for more than 400 research grants and initiatives at over 140 research institutions worldwide**. As part of its continuing mission to accelerate a cure for multiple

myeloma, the MMRF is committed to providing new research funding opportunities in 2024.

Significant advances in our understanding of the pathophysiology, molecular biology, and immunology of multiple myeloma and precursor conditions (Monoclonal Gammopathy of Undetermined Significance - MGUS and Smoldering Multiple Myeloma - SMM) have identified molecular and cellular events associated with disease development and progression. These findings have led to improved understanding of disease risk and the development of new therapies for the treatment of multiple myeloma. However, to fully leverage the current armamentarium of therapeutic options and maximize clinical benefit, we still need to understand how to best optimize therapy and the sequence of therapies in the context of disease biology to tailor treatment for the individual patient.

Most myeloma patients will relapse on therapy, and consequently, undergo more aggressive therapy with the likelihood of shortened duration of clinical response. Therefore, there continues to be a need for new, novel therapies and drug combinations targeting the mechanisms that drive disease biology and drug resistance. This requires researchers to further dissect the molecular and cellular basis of disease development and progression, response to therapy, mechanisms of drug relapse, and to develop new tools and technologies to monitor for and intercept these events.

The prevalence of myeloma and reported clinical outcomes is not equal across all racial groups. Multiple myeloma and its precursor conditions disproportionately affect the Black population relative to other racial groups. There is a 3x-higher incidence of active myeloma and a 4x-higher incidence of MGUS in the Black population compared with the White population, and the onset of disease occurs approximately 10 years earlier for Black individuals. Although there is evidence of genetic, immunologic, and environmental factors to explain these differences, the underlying molecular and cellular mechanisms are not fully understood.

Despite this disproportionate impact on the black community, there are relatively few Black/African American researchers or physicians in the multiple myeloma medical community. This lack of racial diversity in science and medicine has significant implications for Black and African Americans with multiple myeloma, impacting their interactions with the healthcare system, access to medicine as well as options for specific treatments and potential clinical trials. Specific efforts will be needed to help increase the number of Black/African American researchers to directly address their under-representation in multiple myeloma related fields. Providing opportunities for Black/African American scientists and clinicians to excel in their fields of study is necessary to counter the existing biases and structural racism, in both science and society, that influence the framing of critical research questions, the interpretation of research data, and the engagement of minority and disadvantaged populations in medical and scientific research. This Scholars award program is one part of an effort to improve the diversity of the multiple myeloma research community.

The MMRF is currently seeking applications for the 2024 Scholars Program. Applicants should propose a clinical or laboratory project relevant to the field of multiple myeloma. All applicants must have a mentor (associate professor or higher) with established research in multiple myeloma or related fields such as genomics, cancer immunology, or bioinformatics, who will provide a research environment and guidance on study conduct and career development.

Eligibility:

Applications for the MMRF 2024 Scholars Program are requested from Black/African American clinical and/or laboratory investigators at academic, not-for-profit, institutions in the United States. Researchers with a Ph.D., M.D. or equivalent degree(s) and have completed at least one year of post-doctoral training.

The following conditions must be met by all applicants:

- **Applicant proposal must be a clinical, translational, or basic science investigation relevant to the field of multiple myeloma.** The proposal is not required to have a specific Diversity, Equity, and Inclusion (DEI) focus; however, a diversity plan for appropriate patient population representation in clinical or laboratory research is required.
- Applicants must have a research mentor in multiple myeloma or related field who will provide a suitable research environment, guidance on study conduct and career development.
- The MMRF Scholars program is intended for early career scientists and clinicians. Applicants must have obtained their highest degree within 8 years of the application date.
- Applicants may not hold a position higher than Assistant Professor.

Sponsor/Mentor Requirement: Sponsor/mentor must be a faculty member at the host institution with independent extramural funding and established clinical expertise in multiple myeloma and/or scientific expertise in biology relevant to multiple myeloma. The sponsor/mentor will provide a letter of support describing the applicant's qualifications, merit and relevance of project, and training environment.

Proposals must be a clinical, translational, or basic science project relevant to the field of multiple myeloma. The sponsor laboratory and host institution should have the resources available to conduct the majority of the proposed work. Space will be provided in the application to describe any additional resources such as core facilities, tissue banks, or data that may enhance or facilitate the project. The MMRF will work with the awardee to such additional, necessary resources where applicable.

Program Structure: The MMRF Scholars Program will provide financial support for salary and direct costs for laboratory research for up to four (4) years. The MMRF

will work with the awardee to identify and build key collaborations and access key technologies and other resources for advancement of the proposed project.

For clinicians in an American College of Graduate Medical Education-certified Hematology/Oncology Fellowship program, research time is protected in accordance with American Board of Internal Medicine Guidelines for the Research Pathway (<https://www.abim.org/certification/policies/research-pathway/policies-requirements.aspx>). When the awardee transitions to a faculty-track position, the host institution must agree to protect a minimum of 75% of the awardee's time for research.

The MMRF will support the Scholar with the following external mentoring functions and resources:

- The MMRF Scholars Mentor Committee, consisting of clinicians and researchers in the field, will meet with the awardee on a biannual basis to review progress and provide guidance on both project conduct and career development.
- The MMRF scientific and clinical leadership will work with the awardee to find collaborators and contractors for resources and technologies that will enhance project conduct.
- The MMRF will invite the awardee to participate in MMRF-sponsored meetings, including roundtables, conferences, as well as patient-facing activities such as patient summits and seminars.
- The MMRF will reimburse travel expenses (travel, accommodations, meals) to the American Society of Hematology Annual Meeting and the International Myeloma Workshop during the years funded by the Scholars Program.

Funding: The funding period is four (4) years. The MMRF will provide \$100,000 annually. Up to 75% of the funding may be used for salary support for the awardee. Allowable costs include laboratory direct costs, computer hardware and software, and publication costs. Salary support for the mentor or laboratory personnel such as technicians are not allowed. The MMRF will provide 10% overhead to the host institution (total award of \$110,000 total/year). This award is to the awardee and is intended to move with the awardee if she/he moves to another institution for a faculty position. Funding will be completed at the end of four years or when the Scholar transitions to Associate Professor or leaves academia, whichever comes first.

Process:

All applications are due on **March 31st, 2024 at 11:59 PM EST** and **must** be submitted via ProposalCENTRAL (<https://proposalCENTRAL.altum.com>). No paper applications will be accepted.

Scholar applications are reviewed by external scientists who have the appropriate area of scientific expertise. Scientific ratings use the current National Institutes of Health

(NIH) scoring system of 1-9 with 1 demonstrating the highest scientific merit and 9 being the lowest. Each proposal will be evaluated and scored by at least two independent reviewers with appropriate subject matter expertise and the reviewer scores will be averaged for a final score. The reviewers are instructed to weigh research that appears promising with the previous accomplishments of the applicant, the probability of meaningful results from the proposed research, and the likely contributions of the research to advance the myeloma research community's knowledge of disease biology, diagnosis, and treatment. In addition, support by a research mentor or sponsor must be adequately demonstrated. Furthermore, the objectives of the proposal must be reasonable to be performed over the course of the four-year grant period. MMRF will notify all applicants of the outcome of their grant application in June 2024.

Funds Available:

Investigators may request up to \$100,000 total costs up to 10% indirect costs, per year for a four (4) year period (total award is \$440,000)

(a) Permissible Costs.

- (i) Salary for the Research Scholar with the following restrictions:
 - (1) the percent salary (with fringe benefits) cannot exceed the percent effort set forth in the Approved Budget.
 - (2) the salary request (with fringe benefits) cannot exceed seventy-five percent (**75%**) of the total grant request.
- (ii) Expendable supplies.
- (iii) Other expenses directly related to the conduct of Grant Research.
- (iv) Indirect operating costs incurred by the Sponsoring Institution during the Grant Term in an amount **not to exceed ten percent (10%)** of the total costs.
- (v) Notwithstanding the foregoing, in no event shall the base salary exceed the annual Federal capitation imposed by the National Institutes of Health.

(b) Impermissible Costs.

- (i) Construction, alteration, maintenance or rental of buildings or building space.
- (ii) Office equipment and furniture.
- (iii) Dues for membership in scientific societies.

- (iv) Office supplies including, but not limited to, mail/postage costs, copying costs, telephone, fax, internet access or other similar costs.
- (v) Tuition, books and journals.
- (vi) Significant Equipment costs.
- (vii) Any other costs not specifically listed in Permissible Cost.

The funds awarded shall be used solely for the purposes specified in the application submitted to the MMRF as executed by the Scholar and institution in compliance with the budget annexed to the application.

In addition to the base award funds, the MMRF will reimburse the Scholar for expenses associated with attendance to the American Society of Hematology Annual Meeting up to \$1,000 and the International Myeloma Workshop (up to \$1,000 when this meeting is in North America, and up to \$2,000 for when this meeting is at an international location) for the duration of the award. The Scholar will be expected to participate in Research and Clinical meetings organized by MMRF that are coincident with the American Society of Hematology Annual Meeting and the International Myeloma Workshop.

Application Information:

All applications must be electronically submitted through [proposalCENTRAL \(https://proposalCENTRAL.altum.com\)](https://proposalCENTRAL.altum.com). All application instructions are provided below and will also be available on this site.

For scientific and administrative inquiries contact:

Mark Hamilton, PhD

Multiple Myeloma Research Foundation,

383 Main Avenue, 5th Floor,

Norwalk, CT 06851.

Direct (203) 652-0233

Email: hamiltonm@themmrf.org



Multiple Myeloma Research Foundation 2024 Scholars Program Application Instructions

A. General Requirements

- a. **Required Format:** Applications must be in English using single-spaced text, half-inch margins, using either Arial or Times New Roman 11 or 12 point font. Page limitations must be observed for each section as described below.
- b. **Good Standing:** Applications will only be accepted from research investigators who are currently in good standing with the MMRF. An applicant will automatically be considered to be in good standing unless they have failed to provide progress reports on prior MMRF-funded grants.

Note: Sections B – E must be completed in the template titled “Prerequisite Information” which is provided as a downloadable file for applicants on the proposalCENTRAL application portal (<https://proposalCENTRAL.altum.com>). Please download the template, complete each section and save the document, and then upload as a single PDF file.

B. Abstract

This Section should contain the following:

- 1) A General Audience Abstract: briefly describe your proposed project in 100 words or less using non-technical language (i.e., at a level that an eighth grader would understand)
- 2) A Technical Abstract: briefly describe your proposed project in 100 words or less using technical language.

C. Biographical Sketch

This Section should contain the NIH format biographical sketches of the Principal Investigator and Mentor.

D. Budget

Please provide a detailed budget and budget justification fully outlining specific needs for Scholar and itemized supplies by category. Please see the definition of Permissible and Impermissible Cost in the above section on *Funds Available*.

All budget items should be explained under *Budget Justification*.

E. Other Research Support

Other support is defined as any specific funds or resources, whether governmental, non-governmental or institutional, available to the Principal Investigator (and the other key personnel named in the application) in direct support of their research endeavors. This should include active support and pending support.

Information regarding active or pending sources of support available to the Principal Investigator (and other key personnel named in the application), whether related to this application or not, is an important part of the review and award process and must be included.

Note: Sections F - G should be completed in the template titled “Application Template” which is provided as a downloadable file to applicants through the ProposalCENTRAL application portal. Download the template; complete each section and save the document, and then upload as a single PDF file.

F. Project Description

Limited to **5 pages**, but excluding necessary supporting materials such as references, figures, and tables (*see Section G regarding submission of supporting materials*). The project description should be presented in the following sequence:

- 1) Specific Aims (approximately 0.5 pages)
- 2) Scientific Background and Clinical Significance of Proposed Studies (approximately 1.0 pages)
- 3) Previous Work or Preliminary Data (approximately 1.5 pages)
- 4) Methods, Model Systems and Assays (approximately 1.0 pages)
- 5) Plans for Clinical Application of Data (if applicable; approximately 0.5 pages)
- 6) Resources and Environment including support from research mentor/sponsor (approximately 0.5 page)

If part of the application, Clinical Research protocols must be submitted as materials in the Appendix. Include IRB/Ethical Committee approval/compliance number or indicate pending and an anticipated approval date.

G. Supporting Materials (References, Figures and Tables)

Any referenced publications in the Project Description, Figures, and Tables should be submitted but will not count against the five (5) page limit in Section F of the Project Description.

Note: There is no template provided for Sections H – L. These documents need to be uploaded as separate PDF files. Please see each section for any specific instructions or notes.

H. Diversity Plan (1 page)

For clinical and translational projects that involve human subjects or samples from human subjects, applicants must provide a description of intended ethnic and racial populations appropriate for the project and plans for recruitment of these populations. Applicants may describe specific programs, resources, and collaborations at their institution that will support this effort. This will not count against the five (5) page limit in Section F of the Project Description.

I. Request for Resource Support (Optional)

The MMRF may be able to provide access to *non-essential* external research resources and expertise through its network of collaborator institutions and investigators. Applicants who may benefit from access to novel or advanced research technologies and platforms, or expertise, to enhance the conduct of the project described in their application may request assistance from the MMRF to identify the required resources or expertise. Applicants requesting Resource Support must provide a brief description of their expected external technical or expertise needs and how they would add to the conduct (0.5 pages).

J. Letter of Support

Candidates must include a letter of support with their application. This letter must be from a senior faculty Mentor who is active in the myeloma field, commenting on the qualifications and potential of the applicant and stating that they are able to provide an appropriate research environment and career guidance for the candidate.

K. Laboratory Animals Statement

For projects which involve laboratory animals, the Institutional Animal Care and Use Committee (IACUC) Approval Date and Animal Welfare Assurance number must be given. Non-US applicants must submit approval documentation from their Animal Ethics Committee.

Note: If an applicant has Laboratory Animal documentation to submit then this documentation must be uploaded as a separate PDF file.

L. Biohazards Statement

An institutional statement and assurances regarding potential biohazards and safeguards must be included. This may not be applicable to applicants from countries outside the US.

Note: The Department of Environmental Health and Safety (or equivalent office) at most institutes and universities can provide the applicant with a letter stating that the laboratory and/or the applicant is in compliance with applicable laws. This is the document that should be submitted.

M. Relevant Publications

A set of the applicant's publication reprints which are relevant to the proposed project can be included. Please be aware that any password protection feature **must** be removed. Many articles when downloaded from journal sites contain password protection to prevent modifications of the document. **Please note:** if the password protection is not removed, reviewers will have difficulty in downloading your application. Applicants will be limited to five (5) publication reprints. Applications with more than five (5) publications will not be accepted. Submitting numerous large files adds to the download time of your application and can add time delays to the submission site.

Note: Applicants may either include all publications in one document as a Publication Appendix or submit each publication as a separate Appendix. Include in the name of the document(s) or Appendix(s) the following: 1) Applicant's last name and 2) description of the document or appendix. For example: Smith Publication Appendix. PDF (one document with all publications) or Smith Paper on Mouse Model X. PDF and Smith Paper on Myeloma Drug Y. PDF, etc.

L. Signatures:

The signature page is provided as a printable document and is the last step before submitting the application. Applicants should print the signature page, sign (applicant) and then have the appropriate institutional representatives sign the document; e.g., the Institute Signing Official and Finance Officials. **Please check with your institute's Office of Sponsored Programs, or equivalent, to ensure you are obtaining the appropriate signatures.** Once signed, the document needs to be scanned, converted to a PDF and uploaded with the grant application.

Note: This signature page needs to upload as a PDF file. See Section M: Complete and Submit the Application for instructions.

M. Complete and Submit the Application:

All applicants and their institutes' grants and contracts offices must register with proposalCENTRAL (<https://proposalCENTRAL.altum.com>). All applicants must submit a complete application using this portal.

NOTE: PAPER APPLICATIONS WILL NOT BE ACCEPTED. ALL APPLICATIONS MUST BE ELECTRONICALLY SUBMITTED BY 11:59 PM EST ON MARCH 31st, 2024 THROUGH THE ProposalCENTRAL APPLICATION PORTAL. APPLICATIONS RECEIVED AFTER MARCH 31st, 2024 WILL NOT BE CONSIDERED.

N. Publicity, Exhibits and Publication.

1. **Announcement and MMRF Publication of Award.** The Sponsoring Institution and Principal Investigator will cooperate with MMRF in announcing the award of the Grant Funds. Such cooperation shall include submission of an abstract of the research to be conducted with the Grant Funds that the parties agree can be publicly disclosed at the time the award is announced.
2. **Program Marketing.** The Sponsoring Institution and Principal Investigator hereby agree, as a condition to receiving these Grant Funds, to participate in publicity activities, including, but not limited to, being interviewed for MMRF newsletters, press releases, and video as requested by the MMRF as well as acknowledge the grant award in Sponsoring Institution's donor marketing materials.
3. **Prior Notification of Promotion, Presentation or Exhibition.** The Sponsoring Institution and Principal Investigator shall give MMRF written notice at least thirty (30) days prior to any publication, exhibition or presentation relating to Grant Information (which notification shall include a copy of the materials intended for release, as well as the details of the information to be disclosed and the time, place and manner of such disclosure).
4. **Right to Publish.** The Sponsoring Institution and the Principal Investigator shall have the right to publish, present or otherwise disclose Grant Information, subject to the following:
 1. *MMRF Review for Possible Patentable Subject Matter.* The Principal Investigator will provide MMRF written notice at least thirty (30) days prior to any advertising, promotion, publication, exhibition or presentation relating to Grant Information as well as advance copies of any Grant Information submitted for publication, exhibit or presentation during the Grant Term (which notification shall include the details of the information to be disclosed and the time, place and manner of such disclosure). Notwithstanding anything to the contrary contained in this subsection, MMRF may delay, up to an additional sixty (60) days, the Principal Investigator from publishing, exhibiting or presenting Grant Information if it determines in its sole discretion that there is patentable subject matter present.
 2. *Credits.* All published works, including, but not limited to, on-line publications, exhibitions, presentations, marketing materials or other

disclosures of Grant Information or summaries thereof by Sponsoring Institution or Principal Investigator must display the designation, "Supported by a Research Grant from the Multiple Myeloma Research Foundation (MMRF)."

5. **MMRF Publication of Results.** MMRF shall have the right to include published Grant Information results on its website or in other MMRF materials. The Principal Investigator (or other research personnel designated by the Sponsoring Institution) shall have the right to review MMRF's proposed website content solely for scientific accuracy and shall furnish any comments to MMRF in writing within ten (10) business days of his/her receipt of such proposed web content.

6. **Data Sharing.** MMRF is hereby granted an irrevocable, worldwide, non-exclusive, royalty free, sublicensable license to the de-identified data and results generated in the performance of Grant Research to include in the MMRF data repository. Sponsoring Institution and Principal Investigator shall provide de-identified experimental procedures, data, and results of the Grant Research to MMRF in digital format (as outlined in Exhibit G *Data Requirements* and Exhibit H *Data Dictionary*) for incorporation into data repository along with the Final Report. MMRF may incorporate into data repository de-identified experimental procedures, data, and results of the Grant Research received with the Final Report at the earlier of eighteen (18) months from receipt, or upon publication of the Grant Research by Sponsoring Institution or Principal Investigator. Sponsoring Institution and Principal Investigator agree that once MMRF has incorporated such de-identified experimental procedures, data, and results into the data repository, MMRF will have the unrestricted right to use, distribute, share, and publish the de-identified experimental procedures, data, and results.

EXHIBIT A

Patent, Intellectual Property and Technology Transfer Policy of the Multiple Myeloma Research Foundation, Inc.

1. Disclosure and assignment of Invention by the Principal Investigator; Report to MMRF.

- a. **Disclosure and Assignment of Invention by Principal Investigator.** The Sponsoring Institution shall require the Principal Investigator and all other persons engaged in the Grant Research to promptly:

1. disclose all Inventions to the Office of Technology (or the equivalent) of the Sponsoring Institution;
2. assign to the Sponsoring Institution all of their right, title and interest in and to all Inventions which are conceived, discovered or conceived or reduced to practice by such person during the course of the Grant Research at the Sponsoring Institution;
3. require all such persons to cooperate fully with the Sponsoring Institution in pursuing legal protection for any Inventions or improvements thereto, including but not limited to providing assistance in filing and presenting any patent applications for or copyrights on such Inventions or improvements.

- b. **Reporting to MMRF.** Institution and/or Principal Investigator shall report any invention or lack thereof to MMRF on an annual basis on or about April 30th. Notwithstanding the foregoing, all Inventions shall be reported to MMRF in writing within three (3) months after their disclosure to the Sponsoring Institution (*see Invention Disclosure Form*). This section shall survive in perpetuity.

2. Sponsoring Institution's Duty to Decide on Protection of Invention and Notify MMRF.

Sponsoring Institution shall determine whether it will seek patent or other statutory protection for each Invention promptly after such Invention is disclosed to the Sponsoring Institution, and it shall promptly notify MMRF of its decision. Upon MMRF's request, Sponsoring Institution shall notify MMRF when documentation relating to the filing or assertion of rights have published and are publicly available.

3. Licensing of Invention by Sponsoring Institution.

- a. **Notice to MMRF of Possible Revenue-Generating Agreement.** If the Sponsoring Institution contemplates entering into a license, assignment or other revenue-generating agreement relating to the Invention, the Sponsoring Institution shall give MMRF notice thereof prior to execution. If any such agreement relates to MMRF or

subjects MMRF to potential liabilities or responsibilities, MMRF shall have the right to approve such related sections in the agreement prior to execution.

- b. Requirements for Such Agreement.** Any agreements referred to in Section 3a of this Exhibit relating to Inventions shall be entered into by the Sponsoring Institution and/or the Principal Investigator on an arm's-length basis with the licensee, assignee or transferee as the case may be.
- 4. Participation in Income.** MMRF shall have the right to participate in the income derived from any Invention, unless MMRF explicitly waives such right in writing, and the parties hereby agree that no provision of this Exhibit shall constitute such a waiver. This right to participate shall include the sharing of licensing fees and royalties and any other consideration derived from an Invention by Sponsoring Institution and/or Principal Investigator on a pro-rata basis, which shall be calculated as a fraction, the numerator of which is the amount of MMRF's total monetary contribution to the Sponsoring Institution and/or Principal Investigator that supported the Invention, and the denominator of which is an aggregate of all direct monetary costs incurred by the Sponsoring Institution and/or Principal Investigator that supported the Invention not paid by MMRF or any other third party, plus the total amount of all monetary contributions received by the Sponsoring Institution and/or Principal Investigator that supported the Invention including the Grant. MMRF's participation in income hereunder shall be paid on a calendar yearly basis and shall be accompanied by copies of all invoices sent by Sponsoring Institution to its licensees, assignees and/or transferees as the case may be. MMRF shall have the right to audit Sponsoring Institution's books with advance written notice and records no more frequently than one time per year to verify the payments hereunder, with the understanding that access to such information shall be limited by any obligations of confidentiality that the Sponsoring Institution has to its licensees, assignees or transferees.