RESEARCH OVERVIEW:

The Melanoma Research Foundation (MRF) is committed to advancing research across the spectrum of melanoma – from prevention through diagnosis, staging, treatment, and survivorship. The MRF proactively partners with the NCI, Congress, the Department of Defense and other foundations to develop and collaborate on a broad agenda for melanoma research that takes full advantage of all opportunities, while also sharing challenges. Since 1998, the MRF has funded 233 innovative, high impact, basic, translational and clinical research projects. Further, in 2020, the MRF awarded over $1,226,000 in new melanoma research. In 2021, due to COVID, the MRF will focus exclusively on junior investigators by offering only Career Development Awards (as discussed in this RFP), as well as Medical Student Awards and a Young Investigator Team Award to advance the field of translational immuno-oncology (detailed in separate RFPs which have already been completed).

Please visit www.melanoma.org for additional information on the MRF and to learn more about previously funded research. All questions or concerns regarding the MRF’s Research Grant Program can be directed to the MRF Science Officer at research@melanoma.org or by calling 800-673-1290.

TYPES OF AWARDS OFFERED IN 2021:

Available through this award mechanism
Career Development Awards (CDA)
The CDAs provide funding of up to $50,000 per year for two years to junior investigators. Researchers who are beginning a research career focused on melanoma are eligible. This year, in addition to general CDAs, the MRF will also offer specific career development awards focused on Pediatric Melanoma (PED CDA), Mucosal Melanoma (Cavan Family Foundation MM CDA), and Women in Science (Silverstein Family Research Grant Challenge WIS CDA).

Available through a separate award mechanism (please refer to the MRF website for additional details)
Young Investigator Research Team Award
The MRF, through its Breakthrough Consortium (the MRFBC), is pleased to offer the MRFBC Young Investigator Research Team Award to advance the field of translational immuno-oncology, generously funded by a grant from Bristol-Myers Squibb (BMS). This grant provides funding of up to $150,000 per year for two years to an investigative team consisting of junior investigators and senior mentors.

Medical Student Awards
The Medical Student Awards provide funding of up to $3,000 for one year to medical students at accredited U.S. medical schools or institutions. These awards provide opportunities and funding for medical students to engage in short clinical or laboratory-based research projects focused on better understanding the biology and treatment of melanoma.
SPECIFIC TOPIC PROPOSALS (STPs):

The identification of scientific topics that address unmet clinical needs in melanoma research were identified through a 2019 meeting of multidisciplinary experts from the MRF’s Scientific Advisory Committee and Breakthrough Consortium the results of which were published in Clinical Cancer Research (PMID: 33414132). As described in this manuscript, fundamental questions remain in the areas of prevention, tumor cell dormancy and metastasis, response/resistance to targeted and immune-based therapy, and melanoma and COVID-19. As such, these areas have been selected as STPs for 2021.

- **Prevention**
- **Tumor Cell Dormancy and Metastasis**
- **Targeted Therapy**
- **Immunotherapy**
- **Melanoma and COVID-19**

Applicants must clearly indicate which of the categories – if any – is being addressed in their application. Applications are not required to address these STPs, although those that do might be given extra consideration. However, in all cases, the scientific merit is the most important factor underlying the selection for funding.

ELIGIBILITY & REQUIREMENTS:

General (for all grant types)
- Applicants must hold a PhD or MD degree or equivalent at the time of the grant submission.
- Applicants who are postdoctoral fellows must have less than 5 years of postdoctoral experience at the time the grant will be awarded and must not have previously received any major grant support (e.g. from ACS, NIH, NCI, or DoD).
- Applicants who are not postdoctoral fellows may have a title of Research Associate/Scientist, Staff Scientist, Instructor, Assistant Professor, or equivalent at the time of the grant submission. For individuals in this category, previous grant support (e.g. K08, K99, K22, etc.) is allowed.
- Applicants are required to have at least one mentor; their biosketch must be included in the application.
- For this RFP, applicants may be the PI or co-PI on only one submitted application.
- Applicants are eligible to respond to other MRF RFPs, as long as the research proposals are significantly different.
- American citizenship is not required. However, for all grants, the proposed research must be conducted in a non-profit research organization, a medical institution or an educational institution located in the United States.
- Applicants must show evidence of strong departmental or institutional support and commitment.
• PIs and co-PIs may not have an active research award with the MRF (please note: awards currently under no-cost extensions are not considered as active research awards).
• The use of relevant genetic models and/or human derived tumor samples is highly encouraged, but not required.
• Applicants may, but are not required to, submit applications focused on one of the STP unmet needs.
• Proposed research must comply with all applicable National Institutes of Health (NIH) animal and human welfare guidelines.
• Applicants are encouraged to discuss any eligibility questions with the MRF prior to applying.

Focused (for specific grants)
• For the Pediatric Melanoma CDA (PED CDA), the proposed research must focus on pediatric melanoma.
• For the Cavan Family Mucosal Melanoma CDA (MM CDA), the proposed research must focus on mucosal melanoma.
• For the Silverstein Family Research Grant Challenge (WIS CDA), the applicant must identify as a woman.

REVIEW PROCESS:
The MRF’s Research Grant Program emphasizes basic, translational and clinical research projects that explore innovative approaches to understanding critical problems pertaining to prevention, diagnosis, staging and treatment of melanoma. All proposals will undergo rigorous peer review, where reviewers are selected based on their expertise in diverse areas of basic, translational and clinical melanoma research. Reviewers include members of the MRF’s Scientific Advisory Committee (SAC), the Breakthrough Consortium (MRFBC), and the Community United for Research and Education of Ocular Melanoma (CURE OM), as well as members of the scientific and clinical melanoma community who are not in conflict with the application. Applications with the highest scores will be assessed by a panel of representatives from the initial review group. The top ranked grants are recommended for funding to the MRF Board of Directors. The number of grants selected for funding is determined by the MRF Board of Directors, based on available funds.

AWARD ADMINISTRATION AND REPORTING:
Award decisions will be made on or around November 30, 2021. Upon acceptance of the award, the PI and the Institution will be required to sign an award letter accepting the MRF’s terms and conditions.

Awards will cover research conducted over a two-year period. Funds are distributed four times each year, on or around January, April, July, and October for a total of eight payments over two years. A no-cost extension may be permitted with sufficient justification from the PI and approval from the Program Director. Requests for a no-cost extension must be made within 30 days of the award period expiration.

Interim financial and scientific progress reports are to be submitted to the MRF no later than 30 days prior to the end of the grant’s first year. Final financial and scientific reports, detailing all activities during the award period, are to be submitted to the MRF within 60 days of the end of the
award period (even if a no-cost extension is requested). The MRF also requests a short video explaining the importance of your work that can be used to educate the public.

Acknowledgment of support from the MRF must accompany any published report using data or findings from research conducted under an award from the MRF. The intellectual property reviewed remains solely within the institution.

**STEP-BY-STEP APPLICATION INSTRUCTIONS:**

The MRF will accept applications from June 1st- July 12th, 2021 for the 2021 award cycle. The deadline is July 12th, 2021 at 5 pm ET. All submissions, notifications and critiques will be completed entirely online through ProposalCENTRAL (https://proposalcentral.altum.com/).

*Please read the instructions carefully prior to beginning the online grant submission process.*

**NOTE:** Applications that represent resubmission of previously proposed studies, in whole or in part, may be submitted for consideration only twice; however, there is no restriction on the timing of the resubmissions. A one-page letter referencing the project title, a summary of changes to the application from the previous submission, and responses to reviewers’ criticisms must be uploaded as an attachment during Step 11: Upload Attachments.

**Step 1: Title Page**

The project title should not exceed the space provided (75 characters, including spaces).

Choose the grant program, from the list noted below, to which you are applying. You can select more than one grant program.

- General Melanoma Career Development Awards (CDA)
- Pediatric Melanoma Career Development Award (PED CDA)
- Mucosal Melanoma Career Development Award (MM CDA)
- Silverstein Family Research Grant Challenge (WIS CDA)

If applicable, please select the STP category in which you are applying, as well. All grants are up to $100,000 over a two-year period. **The research period for all awards is a two-year period beginning January 1st, 2022 and ending December 31st, 2023.**

Please specify if this is a new application or a resubmission.

**Step 2: Enable Other Users to Access This Proposal**

You have the option to allow other individuals access to your application. You can choose from three different levels of permission.

**Step 3: Applicant/PI**

Profile information is pre-loaded in this section. You may update your profile information here as well.

**Step 4: Institution and Contacts**

Institution information and contact information can be updated and/or changed here.
**Step 5: Key Personnel**

Key personnel, other than the applicant, who will provide support to the project, will be listed here. The PI should also list their mentor in this section. The Biosketch of the mentor and/or key personnel will be required in Step 11: Upload Attachments.

**Step 6: Environment**

Please provide a description of your institutional environment in which the research will be conducted. Please describe how this environment will contribute to the probability of success (e.g. institutional support, physical resources including laboratory, office space, and common use facilities contributing to the proposed work, etc.). Please also provide an overview of the institutional investment in the success of the investigator (e.g. travel, training, collegial support including the availability of organized peer groups, logistical support such as administrative management/ oversight, and financial support such as protected time for research with salary support) as well as a description of your career goals/ objectives including any career development/ training activities that will occur during the grant period.

**Step 7: Abstracts**

**Scientific Abstract**

In the space provided, include a summary of the proposal that gives a brief description of the objectives, rationale, methods and expected results. The total length of the summary may not exceed 3,000 characters (including spaces) and should be written in scientific terms.

**Lay Abstract**

In the space provided, include a brief (<3,000 characters, including spaces) summary of the proposal. The lay level abstract needs to be written so that the everyday person can understand the significance, impact and innovation of the proposed research.

**Keywords**

Please select up to six appropriate keywords (from the list provided) that characterize the proposed research project.

*If the project is awarded, portions of the abstracts may be used in the MRF’s various publications, press releases, fundraisers and educational events.*

**Step 8: Budget Period Detail**

Awards will be made for a two-year period. Please fill out the budget information for both years.

**Please note for all grants:**
- Only direct costs are allowed.
- Cost of living adjustments for personnel or non-personnel costs are not allowed.
- When calculating salaries, please use actual costs – not the salary allowed by the NIH salary cap.

**Personnel Costs**

All personnel may be named in this section. The salary and fringe benefits included in the budget is calculated based on total of salary and fringe benefits multiplied by the % effort. The MRF will consider covering up to 50% of the salary for a CDA recipient. Mentors should not be salaried. Salaries for senior investigators, postdoctoral fellows, graduate students, and/or technicians can be included if they will contribute to the proposed aims and data to be obtained.
Non-Personnel Costs
All budgeted expenses such as consumable supplies, animal costs, service fees and consultant fees must be itemized. Requests for major equipment will be closely scrutinized, should be carefully justified, and should not exceed 15% of the total (two year) budget. **Indirect institutional costs are not allowed.** Allowable travel expenses for meetings and research purposes – including to international meetings – are capped at $2,000 per project year.

Career Development Awards will not exceed $50,000 per year.

**Step 9: Budget Summary**

This is a summary of the Budget Period Detail. Also, please give a brief justification for each budget item here.

**Step 10: Organization Assurances**

Information regarding human subjects, vertebrate animals, and/or recombinant DNA will be entered here (if relevant). If an application has just been submitted, please note that as well.

**Step 11: Upload Attachments**

All attachments must be in PDF form. Uploaded documents should fall under one of the following descriptions:

**Biosketch** – A NIH biosketch must be uploaded for all listed personnel in Step 5 as well as the applicant and mentor. Biosketches must list in chronological order, previous employment, personal statement, positions and honors, contribution to science, and research support/scholastic performance.

**NIH Other Support Pages** – The NIH Other Support Pages (both active and pending) must be uploaded for all listed personnel in Step 5 as well as the applicant and mentor. This must include information about all types of available research support (including direct costs and percent effort). Briefly describe any possible overlap of the active/pending support with the proposed project. Please note: there should be no funding overlap between the CDA applicant’s proposed project and the mentor’s funded research.

**Letter of Support** – A letter of support from your institution is required; additional letters of support are allowed. This letter should be from the department chair or other leader at the institution with direct knowledge of the applicant’s value to the department and institution. A research laboratory head may write a letter of support for a postdoctoral fellow applicant; however, for all other CDA applicants, it is anticipated that the letter of support will come from a departmental chair or other institutional leader. The letter should also mention the trajectory of the candidate in terms of leadership within the department or institution.

**Other** – If the application is a resubmission of a previously proposed study, a summary of changes to the application from the previous submission, and responses to reviewers’ criticisms must be uploaded here. This file must be limited to 1-page in length.

**Research Plan** – The research plan is limited to **6 pages, Arial font, at least 11pt font with ½ inch margins**. Single line spacing is acceptable. The text of the Research Plan should contain sufficient information for the evaluation by the reviewer panel and should cover:

1. Specific Aims (if the application addresses one or more STP, please cite the topic)
2. Background, rationale, and significance. Include a statement of significance of the proposed work, its clinical relevance to melanoma prevention, diagnosis and/or treatment, potential for further research and the potential for securing future funding for the project.

3. Preliminary Data: results of previous research related to the Project Title. Specify how the original research objectives have been met and include justification of support based on exceptional findings. If the original research objectives were not met or were modified, an explanation must be included.

4. Experimental design and procedures

5. References (References ARE NOT counted in the 6-page limit)

**Signature Page** – The signature page should be printed out, signed, scanned, and saved to your computer to be uploaded here.

**Step 12: Validate**

Click the 'Validate' button here to check for any missing required information or files. All missing required information will be listed on the screen. Please correct any missing information before proceeding to the next step.

**Step 13: Signature Page(s)**

You may print the signature page(s) after you have completed all the proposal sections.

**Step 14: Submit**

Submit your application. You will be unable to submit if you have not provided all the required information. We encourage you to submit your application as early as possible so that we can assist you with any issues that may arise. **The deadline is July 12th, 2021 at 5 pm ET.**
FREQUENTLY ASKED QUESTIONS:

How do I apply for a grant?
The grant application will be available ONLY during the time applications are being accepted. During that time, you can apply for a research grant online at http://proposalcentral.altum.com/.

What is the deadline?
Applications will be accepted from June 1st - July 12th, 2021 at 5pm ET.

Do I need to be a U.S. citizen?
No. However, the proposed research must be conducted in a non-profit research organization, a medical institution or an educational institution located in the United States. Prior to submission, the interested PI should inquire for eligibility and obtain specific approval from the MRF Science Officer.

Am I eligible?
Please read all eligibility requirements. Should you have questions not answered here, please contact the MRF Science Officer at research@melanoma.org.

How many grant programs are currently funded by the foundation?
In 2021, the MRF will fund a total of 3 different grant programs: the MRFBC Young Investigator Team (up to $300,000 over a two-year period), Career Development – including CDAs focused on pediatric melanoma, mucosal melanoma, and one for a woman in science (up to $100,000 over a two-year period), and Medical Student Awards (up to $3,000 over a one-year period). This RFP is focused on the CDAs.

What is the difference between the programs?
The MRFBC Young Investigator Team Award is for junior investigators and mentors working as a team on immunotherapy research. The Career Development Awards (including the PED, MM, and WIS CDAs) are designed for junior researchers. The Medical Student Awards are designed for current medical students. This RFP is focused on the CDAs.

How long is the research plan section of the grant?
The research plan is limited to 6 pages, not including references.

What information is included in the project plan?
The text of the research plan should contain sufficient information for evaluation by the review panel. The plan should cover specific aims, background, rationale, significance, results of previous research directly related to the project title, experimental design and procedures and references. Please note: If the application is in response to a STP, the background section could be streamlined as the reviewers already realize the relevance/significance of the research.

Can an award be transferred to a new institution?
A grant can be transferred upon approval of the MRF Science Officer. The MRF envisions that for postdoctoral fellow CDA Awardees, whom may be transitioning to independent faculty positions, this may be a common occurrence. For detailed criteria and instructions, please contact the MRF Science Officer at research@melanoma.org.
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<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td><strong>Key Personnel</strong></td>
<td>The PI and other individuals who contribute to the scientific development or execution of a project in a substantive, measurable way, whether or not they receive salaries or compensation under the grant. Typically, these individuals have doctoral or other professional degrees, although individuals at the masters or baccalaureate level may be considered key personnel if their involvement meets this definition. Consultants also may be considered key personnel if they meet this definition.</td>
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<td><strong>Principal Investigator (PI)</strong></td>
<td>This is the grantee responsible for all activity being supported by the grant. He or she is responsible and accountable to the MRF for the proper conduct of the project or activity.</td>
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<td><strong>Other Support</strong></td>
<td>Includes all financial resources, whether Federal, non-Federal, commercial or organizational, available in direct support of an individual’s research endeavors, including, but not limited to, research grants, cooperative agreements, contracts, or organizational awards. Other support does not include training awards, start-up funds, prizes, or gifts.</td>
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<td><strong>Institutional Animal Care &amp; Use Committee (IACUC)</strong></td>
<td>Established at institutions in accordance with the PHS Policy on Humane Care and Use of Laboratory Animals with broad responsibilities to oversee and evaluate the institutions’ animal programs, procedures, and facilities. IACUC review and approval is required for all PHS supported activities involving live vertebrate animals prior to funding.</td>
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<td><strong>Institutional Review Board (IRB)</strong></td>
<td>IRBs are set up by research institutions to ensure the protection of rights and welfare of human research subjects participating in research conducted under modifications in, or disapprove research protocols based on whether human subjects are adequately protected, as required by federal regulations and local institutional policy.</td>
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| **Clinical Trial**                        | A biomedical or behavioral research study of human subjects designed to answer specific questions about biomedical or behavioral interventions (drugs, treatments, devices, or new ways of using known drugs, treatments, or devices). Clinical trials are used to determine whether new biomedical or behavioral interventions are safe, efficacious, and effective. Clinical trials of an experimental drug, treatment, device, or intervention may proceed through four phases:  
  - Phase I: Testing in a small group of people (e.g. 20-80) to determine and evaluate safety (e.g. determines a safe dosage range and identify side effects).  
  - Phase II: Study in a larger group of people (several hundred) to determine efficacy and further evaluate safety.  
  - Phase III: Study to determine efficacy in large groups of people (from several hundred to several thousands) by comparing the intervention to other standard or experimental interventions, to monitor adverse effects, and to collect information to allow safe use.  
  - Phase IV: Study done after the intervention has been marketed. These studies are designed to monitor the effectiveness of the approved intervention in the general population and to collect information about any adverse effects associated with widespread use. |