

Medical Student Fellowship Program Request for Applications

Purpose and Overview

The Medical College of Wisconsin (MCW) Cancer Center (CC) Fellowship Program is designed to train exceptional cancer scientists. The goal is to recruit and train the next generation of leaders in cancer research. Applications from research areas in basic, clinical or population sciences are welcome. This Request for Applications (RFA) is for Medical Students at MCW.

The MCW Cancer Center Graduate Fellowship provides a one-year, full-time research fellowship to support the development of highly promising and accomplished medical student trainees with the potential to become cancer researchers. Due to the complexity of cancer, finding ways to prevent and cure this disease requires a multidisciplinary effort. Therefore, medical students at MCW with an interest in cancer relevant research are encouraged to apply. The MCWCC Medical Student Fellowship will provide one year of support for full-time research with a member of the MCW faculty, on a cancer relevant research topic. Beyond full-time research, additional activities focused on the students maintaining their clinical skills, as well as becoming physician researchers will also be provided. Exceptionally strong candidates will have an option to apply for the Medical Scientist Training Program (MSTP) at MCW to continue their research training as an MD-PhD student. Continuing to the MSTP program is a separate application, and there is no requirement that students chose this route nor is there guarantee of admission to the MSTP.

Eligibility and Evaluation Criteria

Eligibility

- Proposed research must be cancer relevant.
- Applicants must have an identified mentor at MCW or Versiti. The faculty mentor is not required to be a member of the Cancer Center at the time of application, but if the fellowship is awarded they are encouraged to become a cancer center member. For students who are considering pursuing admission to the MSTP program, they are strongly encouraged to do research with a faculty mentor who is appointed within the MCW Graduate School.
- Mentor must commit \$5,000 in matching funds from either the mentor or their department. These funds can be used for attendance at national or international meetings, education, or a computer or computer accessories consistent with MCW policies.
- US citizenship or permanent residency is not required; the applicant must hold a valid US visa.
- Applicants may receive the MCWCC Fellowship award only once.
- Only three medical student applications per cycle are allowed from a single research group, aka team lead by a faculty member (PI). The affiliation of the application is defined by the PI whose funds would support the student's research project if the fellowship is awarded.
- A single research group can only hold one active MCWCC fellowship award per category (graduate student, medical student, and post-doctoral fellow).
- Applicants must pass their STEP I exam prior to starting funding. Students who need to retake STEP I will be considered for funding so long as a clear plan is developed which permits them to continue to perform full-time research.
- Students may choose, while they are supported by the fellowship, to apply to the MCW MSTP program. This will be discussed with fellows who are awarded the fellowship and is entirely optional. Success in obtaining the medical student fellowship award does not guarantee

- admission into the MCW MSTP.
- Applicants must provide a letter from the registrar stating that they are in good academic standing. This letter should be included with their letter of intent.
- All applicants are strongly encouraged to meet with the Financial Aid Office to discuss the ramifications of a one-year absence from medical school.

Evaluation Criteria

Applications will be assigned to reviewers who have substantial expertise in cancer research and grant review. These reviewers will score applications based on the standard NIH criteria for fellowships:

- Applicant strengths and research potential.
- For senior mentors, their track record of training will be evaluated. For more junior mentors, potential as a mentor will be considered. All mentors will be judged by their commitment to the career of the trainee and planned training experience as documented in their Sponsor Statement (see below).
- Significance, impact, approach, and cancer relevance of the project.
- Clear delineation of how a one-year, intensive research training period will further the student's career

Program and Application overview:

Program Details:

- Students who are accepted into the program will be provided a stipend equivalent to MCW graduate students and health insurance. The stipend varies year to year, but currently is approximately \$33,500.
- Students who are interested in in applying for the MCW MSTP program will go through an application process in the summer of their fellowship.
- Students who return to medical school (Phase II) will participate in the MSTP program's return to clerkship activities.
- Additional requirements of the program are detailed below.

Application Overview:

- Letters of intent are required and should be submitted to <u>MCWCCResearchPrograms@mcw.edu</u>.
- Letter of intent should be one page and delineate the following: 1) Name of applicant, 2) Primary research mentor and their department, 3) One paragraph summary of the research project to be proposed, 4) A brief description of the project's cancer relevance. Attached to the letter should be a letter from the registrar stating the applicant is in good academic standing.
- Applicants will be emailed about steps for generating a face page for their application, and full applications should be submitted as a single PDF file to MCWCCResearchPrograms@mcw.edu.

Application Instructions

- **Application Format:** Use standard 11-point font, single space, and half-inch margins throughout the application. Consecutively number all pages.
- **Face Page:** Completed through online application portal.
- Career Development Plan (1-page limit): This section is to be written by the applicant and should reflect career plans and aspirations after the completion of training, including the steps that the applicant plans to take to support the transition to the desired career path in cancer research. Please also clearly delineate why a one-year focused research period is required for the student to achieve their long-term career goals.
- **Project Summary** (350-word limit): The project summary should include an abstract summarizing

the proposed project, including the overall goal, methodology, and significance. A description of how your goals and proposed project will impact cancer research or treatment should also be included.

- **Specific Aims** (1-page limit): State concisely the hypothesis to be tested and the specific aims to be achieved during the one-year award period.
- **Research Strategy** (3-page limit):
 - o Significance: Describe the scientific premise for the proposal, including relevant background and scientific rationale for the project.
 - o Impact: Briefly describe how your goals and the proposed project will impact cancer research or cancer treatment.
 - Approach: Describe how the research will be carried out. Include preliminary data that support the project, a description of methods and analyses to be used, and discussion of potential pitfalls and alternative strategies. Please note preliminary data may come from the research groups' prior work and publications and does not necessarily have to be generated by the trainee.
 - o Cancer relevance: Describe how the proposed studies are relevant to cancer.
- **References Cited:** List only references pertinent to the proposed research. References do not count against the page limit.
- Statistical Plan (1/2-page limit): Identify aspects of the proposal that will require statistical evaluation and briefly explain why. Describe your plan for developing an appropriate analysis in the event funding is received. For assistance, consult the Cancer Center biostatistical service or alternative collaborator if needed.
- **Proposal Contributions** (200-word limit): Proposals should represent the original work of the student with appropriate but limited guidance from the mentor. Briefly describe the relative contributions made by the student, mentor, and any other individuals to the conceptual design, writing and revision of this proposal.
- Letters of Support (if needed): Letters from collaborators to state the specific activities that the collaborator and their group will contribute to the training of the applicant and feasibility of the proposal. These are distinct from Letters of Recommendation or Sponsor Statement (see below).
- **NIH Biosketch** (5-page limit for each): Submit one biosketch for the medical student and one for the mentor, both in the NIH format.
- Letters of Recommendation: Letters should be submitted in confidentiality to MCWCCResearchPrograms@mcw.edu by the application deadline, with a subject line "Medical Student Fellowship: 'applicant name' Letter of Recommendation."

Two letters of recommendation are required.

- The first letter is from the student's research mentor and includes the sponsor statement. **Sponsor Statement** (2-page limit) should specifically address the following:
 - o Mentor's training record and scientific expertise.
 - A list of previous trainees' current positions in tabular form (name, pre- or post-doctoral, dates of training period, current position), distinguishing between MD, PhD, and MD/PhD students.
 - o Individual Development Plan (IDP): Specific training plans for the student's development as a cancer scientist.
 - o An evaluation of the student's potential as a cancer scientist.
 - A statement committing \$5,000 in matching funds from either the mentor or their department (mandatory).
- A second letter of recommendation of the applicant's choice. This recommendation should also delineate the students career goals and how a one-year research period would be

beneficial and distinct from other research options available to medical students.

Timeline

- RFA will be announced in February 2024
- Letter of Intent (LOI): One-page LOI with the trainee's name, the mentor's name and affiliations, tentative project title, one paragraph summary of the tentative research project, and one paragraph on the students prior research experience is due to MCWCCResearchPrograms@mcw.edu by April 26, 2024. LOIs will be used to identify potential reviewers, ensure cancer relevance, and verify the student is academically progressing.
- Complete applications, including letters, are due by 5:00 p.m. on July 26, 2024.
- Notification of awards by September 13, 2024.
- Funding starts **January 2, 2025.**
- Questions about the RFA, guidelines, eligibility and other pre-award and post-award matters should be addressed to MCWCCResearchPrograms@mcw.edu.
- Other questions regarding application reviews or funding decisions should be addressed to Vera Tarakanova (<u>vtarakan@mcw.edu</u>) and Sid Rao (<u>Sridhar.Rao@Versiti.org</u>).

Program Expectations

- Publication of original, peer-reviewed research paper(s), presentation at national or international meetings.
- MCW trainee database information entered or updated for successful applicants.
- Final progress report summarizing project results, resulting publications, and how the additional \$5,000 was spent by the student to further their career goals.
- Fellow and mentor will be asked to participate in MCW Cancer Center sponsored philanthropic endeavors.
- A mentor approved "work product" such as a draft of a manuscript, abstract presented at a national meeting, or a submitted/accepted manuscript.
- Students and Mentors are expected should attend and present at the MCW Cancer Center Trainee Symposium