Virginia Commonwealth University (VCU) Massey Cancer Center & University of Puerto Rico Comprehensive Cancer Center

Bidirectional Research Program to Increase Diversity and Equity in Cancer Research (BRIDGE)

BRIDGE Postdoctoral Fellows Training Program
Purpose

The purpose of the collaborative Postdoctoral Fellowship program between Massey Cancer Center (MCC) and the University of Puerto Rico Comprehensive Cancer Center is to develop and implement a bidirectional educational and training experience targeted for post-graduate/post-doctoral trainees who have completed terminal doctoral degrees in cancer-relevant fields.

Possible Tracks

- **Cancer Biology and Translational Sciences Track**: Post-doctoral fellows will spend one to two years in a Massey Cancer Center member’s laboratory where research might be focused in numerous areas of cancer biology (e.g., cancer genetics and epigenetics, cancer cell signaling, tumor microenvironment) and developmental therapeutics (e.g., new compound development, drug resistance, clinical trials).

- **Cancer Prevention and Control Track**: Post-doctoral fellows will spend one to two years engaging in multidisciplinary cancer prevention and control (CPC) research with members of the Massey Cancer Center CPC research program. This track will offer hybrid and non-virtual options.

Post-doctoral Fellows Eligibility:

- Applicants must have already earned or be within 5 months of earning a terminal doctoral degree, with no more than two years of postdoctoral training in cancer-relevant fields.
- Applicants must be able to commit full-time effort to research during each year of the training period, verified by the letter of support from the mentor.
- The potential UPRCCC applicants, their co-mentors and the potential MCC mentors must attend the initial open house to identify common research interests and potential matches. Following this event, UPRCCC applicants will collaborate with their preferred MCC mentor to prepare a post-doctoral program application, which will undergo competitive selection process. MCC and UPRCCC leaders will review the applications and choose two post-doctoral fellows to support.

MCC Mentor Eligibility:

- To qualify as primary mentor, individuals must be research members of the Massey Cancer Center. Additionally, they should have a proven track record of successful mentoring and current peer-reviewed cancer funding.
- Postdoctoral mentor must commit to completing and following an Individual Development Plan, meeting with MCC and UPRCCC leadership quarterly, and assist the fellow with developing proposals for extramural funding (e.g., NIH diversity supplement, F32).
- Each year, the potential UPRCCC applicants, co-mentors, and potential MCC mentors must attend an annual open house. The purpose of this event is to identify common research interests and potential matches.
Program Expectations

- Submission of at least one proposal for extramural support (NIH diversity supplement, F32 or other foundational support for postdoctoral fellows).
- Publication of at least two original, peer-reviewed research papers by the end of the fellowship.
- Development of an Individual Development Plan with the MCC mentor that will undergo quarterly review by a joint UPRCCC and MCC leadership team.
- Completion of yearly progress report to document significant progress to qualify for second year of funding.
- The Post-doctoral Fellow will be expected to attend Massey Cancer Center research seminars, grant writing workshops, retreats, and symposia offered throughout the year.
- The mentor is expected to attend at least one yearly scientific event hosted by UPRCCC.

Application Process

Phase I: Initial application process

- Please enter your information through our application portal.
- Initial application/letter of interest must be submitted to UPRCCC for consideration by 5 PM of August 1, 2023. At least 2 reference letters must be submitted detailing the applicant’s aptitude in the desired area of research. All documents to be submitted to Mr. Wilfredo Morales (wilmorales@cccupr.org).
- Potential UPRCCC applicants and co-mentors and the potential MCC mentors must attend a yearly open house event at Massey Cancer Center to be held on August 31st – September 1st, 2023 to identify common research interests and potential matches. After the open house, UPRCCC applicants will work with their top MCC mentor choice to develop an application. These applications will then be reviewed by MCC and UPRCCC leaders to select two post-doctoral fellows for support.

Phase II: Invitation to Submit Research and Career Proposal

After identifying an MCC mentor and UPRCCC co-mentor, applicants are expected to collaborate with them to prepare a comprehensive application packet with the following components:

Research Project – (3 pages)

This section should provide a clear and concise overview of the hypotheses, specific aims, and the scientific approach that will be employed to address each aim. The applicant should provide background information leading to the proposed research, highlight its significance and detail the proposed approach (design and methods), potential pitfalls, and expected/alternative outcomes. Including pertinent preliminary data to demonstrate feasibility can be advantageous. Ultimately, the section should present a well-defined research project.

Research Experience and Career Goals – (1 page)

In this section, the applicant is expected to provide a brief but comprehensive description of their previous research experience and their intended career goals. It is essential to convey the depth and breadth of their research background, including highlighting any previous
publications, research internships, or other related experience. They should describe the specific techniques, methods, and approaches that they have used in previous research projects, relevant to how these have prepared them for their intended research project.

The applicant should also outline their long-term career goals and explain how this post-doctoral program fits into their overall career trajectory. They should consider discussing their interests and aspirations for research in their field, the type of research they intend to conduct in the future, and any potential collaborations or partnerships that they hope to establish. The applicant should also include any other relevant information, such as any awards or achievements they have earned or any unique perspectives or experiences that they bring to their research field.

Overall, this section is an opportunity for the applicant to demonstrate their research expertise and to explain how their experience and career goals align with the goals of the post-doctoral program. The section should be concise, yet informative, and should leave the reader with a clear understanding of the applicant's qualifications and ambitions.

**Mentoring/Training Plan** – (1 page)

This section requires a collaborative effort between the applicant and their mentor to develop an individualized plan that will enhance the applicant's research training during the 1–2-year period. The training plan should be individualized for the applicant, and designed to enhance research training, considering the applicant’s strengths and weaknesses to identify any skill gaps that need to be addressed. The training plan should be coordinated with the applicant's research project and include new training opportunities, relevant coursework, and professional development activities.

Professional development skills such as grant-writing, presentation skills, primary data collection/secondary data analysis and/or lab management should be prioritized in the training plan. The plan should also explicitly describe how the training will facilitate the applicant’s transition to the next stage of their career.

The mentoring plan should include a timeline for applying for peer-reviewed funding during and after the training period. The training experience should aim to:

- Enhance the applicant's ability to conceptualize and think through research problems with increasing independence, as well as present and publish research findings as first author.
- Increase opportunities to interact with members of the scientific community at relevant scientific meetings and workshops.
- Facilitate the development of skills needed to transition to the next stage of the applicant’s research career.

**Mentor's Letter of Support** - The letter should explain the mentor's commitment to advising the applicant according to the mentoring plan included in the application.

- The mentor is expected to provide an assessment of the applicant’s qualifications and potential for a career as a productive, independent researcher.
- The mentor should describe the provided space and resources to support the applicant to successfully complete the research project.
The mentor should briefly discuss the research, mentorship, leadership and other relevant experience that he/she possesses to effectively mentor postdoctoral level researchers, including evidence of successful mentoring outcomes as demonstrated by examples of previously mentored postdoctoral trainees and their current titles/positions.

**Required Attachments:** Applicant’s CV or NIH Biosketch, Mentor’s NIH Biosketch, Mentor’s Other Support document.

**Completed application packets are to be submitted by 5 PM on Friday, October 6th. Applicants will be notified no later than October 27th. Fellowships will start in November (hybrid) or December (Richmond, VA) 2023.**

**Additional Information:**

**Financial Support**

- All applicants nominated by UPRCCC will receive financial support from Massey Cancer Center to attend the open house/interview event to be held at MCC in Richmond, VA.
- The fellows will be VCU employees and will be eligible for full benefits. Salary support for the applicant will adhere to the current Ruth L. Kirschstein National Research Service Award (NRSA) levels based on number of years of postdoc experience.
- Other financial support will be provided up to $10,000 per year to mitigate research-related expenses (i.e., travel costs for two trips between Richmond and PR each year, publication costs, support to attend and/or present at one national meeting annually, laptop).
- Mentors will receive $5,000 to support their efforts and costs related to supporting the post-doctoral fellow each year.

**Post-Training Requirement**

Fellow must submit a detailed progress report 30 days after the end of training period including:

- A summary of research performed during the award year and evaluation of the results. The summary should be technical but targeted to a general scientific audience. It should be sufficiently detailed such that the fellow’s research activities over the training period are clearly articulated. Figures and references may be included if appropriate. The report must be signed by both the fellow and the mentor. The report should not exceed three pages.
- A bibliography of publications and list of extramural applications submitted/awarded.
- Fellows will be added to MCC’s Cancer Research Training and Education Program database and tracked for a period of 15 years.

**Policies**

Program and appointments will be subject to VCU policies, including the Postdoctoral Scholars Policy and the Office of Research and Innovation policies.

For any questions, please contact Dr. Rosuany Vélez Acevedo at velezrn@vcu.edu.