Research Fellow

Job ID: 17732
Date Posted: 2022-11-18
Deadline to Apply: 2022-12-16
Target Openings: 1

The Tabori lab and the International Replication Repair Deficiency Consortium is looking for a highly motivated Research Fellow with outstanding organizational, critical thinking, quantitative data analysis and scientific writing skills to join our highly collaborative, multidisciplinary team.

The Research Fellow will work on an exciting new initiative in the field of preventive immune-oncology. Specifically, the project aims to develop a robust immunological and preclinical foundation for novel LNP based RNA cancer vaccines.

This opportunity falls within the rising field of cancer immunoprevention therapies, which has been recognized by organizations like the National Institute of Health and the Canadian Cancer Society as priority research areas for the coming years.

This initiative will involve co-investigators with RNA vaccine expertise from 5 other centers across the globe, including those who played pivotal roles in developing the Moderna COVID-19 RNA vaccines being used today. We are extremely excited to be working with such an amazing team to create vaccine therapies for CMMRD patients, and are seeking a Research Fellow to lead these pre-clinical in-vivo trials. The candidate should have previous hands-on experience in transgenic mouse models and immunotherapy, and will be responsible for devising experimental plans, directing ongoing data collection, performing data analysis, generating figures and presentations, co-supervising research trainees and technicians, and conducting all collaborative research activities related to the study.

This is a two-year fellowship, with the potential for renewal for a second term based on the candidate's performance and their compatibility with the team objectives. The fellowship will provide an opportunity for the candidate to directly facilitate translational pre-clinical research in the highly anticipated and rapidly expanding field or cancer prevention and immunotherapy. Additionally, it will allow the candidate to deepen their knowledge of cancer genomics and vaccine therapy, and develop their professional and scientific acumen by engaging with global collaborators and stakeholders. The successful candidate will have the opportunity to travel to present at national and international conferences, and broaden their network of world-class scientists clinicians, and industry stakeholders working on novel cancer therapies and clinical translation.

Primary Responsibilities:
- Develop and conduct pre-clinical trials in established MMRD mouse models to evaluate the safety and efficacy of novel CMMRD vaccine candidates for cancer immunoprevention.
- Investigate the mechanisms underlying MMRD mutagenesis and immunoediting in these models.

- Execute experiments, conduct data analysis, troubleshoot, evaluate, and adjust protocols as necessary in response to experimental needs.
- Work closely with the PI, organize, support, and collaborate with team members to meet project deliverables and timelines.
- Generate figures from the research findings and lead manuscript preparation.
- Prepare presentations for internal knowledge dissemination and project stakeholders, and for national and international conferences
- Supervise and mentor graduate students and technicians working in parallel on aspects the project.
- Contribute to research grant writing.

Qualifications and Experience:
- A PhD from a recognized institution preferably within last 3-4 years.
- Experience in cancer biology, genomics & genetics, and immunology with a publication record in peer-reviewed journals is required.
- Excellent animal handling and microsurgery skills are required.
- Strong technical skills in foundational molecular and cellular biology techniques such as cell culture, flow cytometry, and immunohistochemistry is requires.
- Bioinformatic analysis skills in immunopeptidomes, and/or RNA and DNA sequencing analysis are preferred.
- Proven track record of excellent problem recognition, critical thinking, organizational, detail-focused, and problem-solving skills.
- Ability to work effectively in all team settings (independently, collaboratively and as a team leader) is required.
- Effective verbal and written communication skills.

To apply, please visit The Hospital for Sick Children (SickKids) website:
https://career.sickkids.ca:8001/psc/CRPRD/CAREER/HRMS/c/HRS_HRAM_FL.HRS_CG_SEARCH_FL.GBL?Page=HRS_APP_JBPST_FL&Action=U&FOCUS=Applicant&SiteId=1&JobOpeningId=17732&PostingSeq=1