Research Co-ordinator/Technician

The Bowdish lab

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McMaster Immunology Research Centre M. G. DeGroote Institute of Infectious Disease Research McMaster University, Faculty of Health Sciences

Our lab studies how the aging immune system and the airway microbiota contribute to respiratory infections such as pneumonia and SARS-CoV-2. We study how age-related changes in the immune system change the microbes that live on an in us and how this may make us permissive to respiratory infections.

The Research Coordinator will support multiple projects in the Bowdish lab, including studies of the microbiome and immune system in the context of respiratory infections including SARS-CoV-2. Duties will include submitting ethics applications, ensuring compliance with biosafety protocols, patient recruitment and consent, administering questionnaires, documenting assisting with sample collection, dropping off sample collection kits and picking up participant samples in the greater Hamilton area, processing biologic samples (e.g. nasal swabs, saliva, nasal secretions, blood) including samples from potentially infected people. The research coordinator will also be required to synthesize and analyze participant data and present written and oral presentations for diverse audiences including participants, collaborators and the greater scientific community.

Essential skills/requirements

MSc in a related area and/or at least 3 years of research experience (BSL2)

 This project requires someone with basic lab skills such as pipetting, tissue culture under BSL2 condition and sterile techniques and the commitment to learning new lab skills.

Organization and Communication

- The applicant will be required to coordinate participant visits and sample collection with other team members and collaborators. The applicant must be able to document results in a laboratory notebook and will be responsible for writing protocols. The applicant will communicate frequently with research participants from a variety of backgrounds and must have the ability to clearly explain the project. Excellent written and oral English skills are essential.
- Must have transportation and be able to drive to drop off/pick up samples and

sample collection kits within an hour's drive from McMaster (mileage will be reimbursed).

- Some flexibility with working hours (early mornings, evenings, occasional ½ day on weekends) is required.
- TCPS training and a strong commitment to participant privacy and data integrity
- Experience creating study protocols and ethics applications

Must be willing to learn:

Immunology assays

• The applicant will need to perform ELISAs including multiplex ELISAs (e.g. Luminex), flow cytometry and PCR for genotyping.

Statistics

• The applicant will need to use Graphpad for data analysis and will need to know how to use statistical techniques such as ANOVA.

Transportation of Dangerous Goods training

• The applicant will be required to transport potentially infectious samples to the research laboratory.

Additional skills which may be an asset:

Phlebotomy certificate or willingness to learn Experience working with older adults Experience with safety committees or BSL2+ work Flow cytometry, microbiome analysis and assays of cellular immunity

Please describe your experience with any of these techniques in your cover letter.

Why the Bowdish lab?

Our lab's core values are Diversity, Ambition, Innovation and Collaboration. These core values dictate our approach to doing science. Our technical staff are valuable members of our team who participate in our research by performing exemplary work, attending conferences, presenting their work, and communicating with the broader scientific and lay audience. We teach transferable skills that have broad utility within and outside of academia and provide opportunities for personal and professional growth. We value diversity and are family friendly. For more details on our lab see our website.