Research Technician in Mouse Models of Aging

The Bowdish lab

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

This CIHR funded 12 month technician position will study how the immune system changes with age using mouse models. This position is suitable for someone with an MSc or strong experience in mouse models or immunology. The successful applicant will handle mouse breeding and inventory, liaising with animal care technicians to deal with health issues, ordering reagents for lab members, maintaining financial records, enforcing safety regulations and maintaining lab inventories. Research responsibilities will include working independently to perform studies of how the immune system changes with age and will include tissue collection, metabolic and behavioural testing, and creating bone marrow chimeras. This is a limited term contract but pending successful performance reviews it may be possible to extend the contract.

Essential skills

Animal handling

- This project requires significant experience in animal handling including breeding, non-terminal blood collection, anesthesia, tissue collection and procedures such as tail vein and intraperitoneal injections. Experience in behavioural testing, metabolic testing or flow cytometry would be assets. The applicant will be expected to work independently and be able to perform experiments with minimal guidance and to train junior members of the team in basic procedures. Please provide a detailed description of relevant animal experience and training in your cover letter.

Organization and Communication

- The applicant will be required to coordinate experiments with other team members and collaborators weeks to months in

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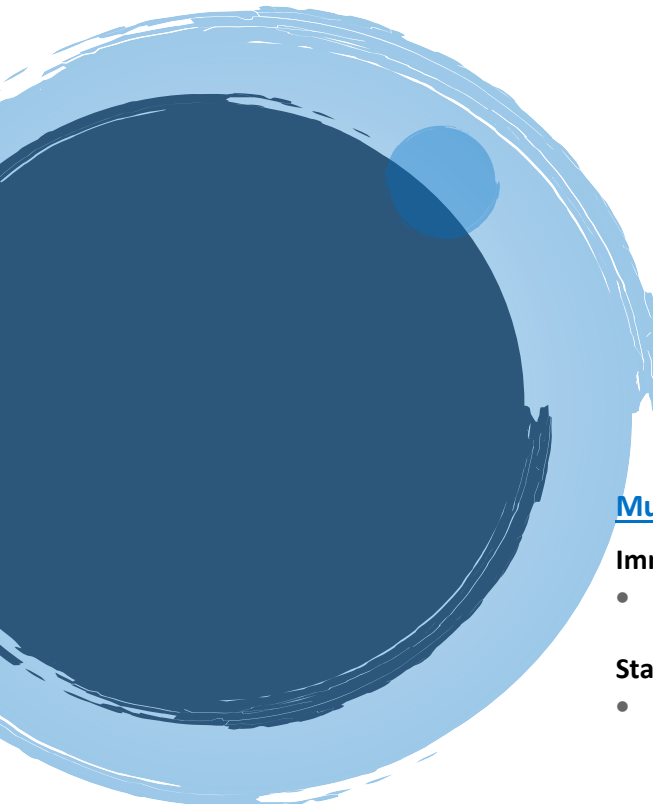MDCL4077
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advance and consequently excellent organizational skills are required. The applicant will need to work closely with animal care staff and make good judgement calls on issues of animal welfare. The applicant must be able to document results in a laboratory notebook and will be responsible for writing protocols. Excellent written and oral English skills are essential.

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.

Additional skills which may be an asset:

Chimeric bone marrow transplants
- The applicant will create bone marrow chimeras. Previous experience in this or other mouse immunology techniques will be an asset.

Behavioural testing
- Experience in studying mouse behavior including anxiety, cognition, and mobility would be strong assets.

Metabolic studies.
- Experience in measuring blood glucose and insulin would be valuable.

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.