

Position: Postdoctoral Research Fellow
Site: Toronto General Hospital Research Institute
Department: Advanced Diagnostics
Reports to: Principal Investigator
Status: Temporary Full-time (2 years)

The postdoctoral fellow will endeavor to identify mechanisms that modulate pro-inflammatory gene expression in macrophages loaded by oxidized low density lipoproteins (oxLDL). We discovered that loading of macrophages with oxLDL down-regulates the expression of a subset of TLR-induced pro-inflammatory genes at the level of transcription, accompanied by reduced binding of p65/RelA subunit of the NF- κ B transcription factor to the promoters of the genes (J Immunology 2017; 199(6): 2149-2157). The project will now focus on epigenetic changes that underlie the down-regulation of TLR4-induced gene expression in mouse macrophages loaded by oxLDL. Approaches that will be employed will include RNA-seq, CHIP-seq and ATAC-seq combined with bioinformatics.

Qualifications:

- PhD and/or a MD degree awarded within the past 2-3 years with a background in molecular and/or cellular immunology.
- Experience in macrophage biology and/or vascular biology is preferred, but is not necessary.
- Experience in RNA-seq, CHIP-seq, ATAC-seq and bioinformatics is desirable but not essential, since these approaches can be learned from expert collaborators.
- A good track record of scientific accomplishments (including publication(s) in peer-reviewed journals).
- Highly motivated and independent.
- Attention to detail and strong organizational skills
- Good verbal and written communication skills

Applicants should respond by email with a curriculum vitae and brief description of research interests to Dr. Myron Cybulsky (myron.cybulsky@utoronto.ca).

Closing Date: Until filled