



**Post-Doctoral Fellow on Aptamer-based detection chip for water contaminant detection**

*Interdisciplinary | Aptamer-based graphene sensors | Capillary circuits | Global Health*

The Micro and NanoBioengineering lab of McGill University seeks an outstanding postdoctoral fellow to extend our work on capillary circuits and aptamer-based small molecule binding assays, to develop an aptamer-based sample processing and enrichment system, and, in collaboration with Dr. Mohamed Sijaj at Université du Québec à Montréal, a graphene sensor chip for the detection of water contaminants.

**Start:** January 2017 or at the earliest convenience

**Major Activities:**

- Develop aptamer-functionalized, bead-based sample processing and analyte enrichment
- Create and design novel capillary circuits
- Fabricate capillary circuits by rapid prototyping
- Integrate graphene sensor within microfluidic chips
- Perform detection with the detection system and assess analytical performance
- Coordination of projects and interaction with collaborators
- Supervision and training of students
- Possibility to participate in grant writing upon mutual agreement

**Requirements and assets:**

- Strong background in lab-on-a-chip, microfluidics, sensors and interests in applications of aptamers
- Knowledge and experience in assay development, sample collection and processing, rapid prototyping and technology integration
- Team player with leadership abilities
- Excellent communication and writing skills
- PhD in related area

Please send your application (cover letter, CV, names of three references and pertinent reprints and preprints, preferred format .pdf) by email with the subject “Postdoctoral Fellow on Aptamer-based detection chip for water contaminant detection” to:

Dr. David Juncker

Biomedical Engineering Department

McGill University and Genome Quebec Innovation Centre

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**Please visit our webpage for additional information:** <http://dj.lab.mcgill.ca>