A position is available immediately in the laboratory of Dr. Margot Damaser in the Department of Biomedical Engineering of the Lerner Research Institute ***to refine and validate a wireless in vivo bowel sensor system***. The research will focus on programming of bowel sensor prototype, enabling wireless battery charging, addition of features to the sensor such as adding new sensing modalities and enabling recording from multiple locations in the bowel simultaneously, benchtop and in vivo calibration and testing, and technology transfer to other research groups both local and national.

Candidates should have a **MS or PhD in Electrical Engineering or Biomedical Engineering** and proficiency in at least one programming language (e.g. C++, Matlab) as well as experience debugging and developing custom electronic devices, testing and validation protocols, and experience with statistical data analysis & signal processing (e.g. filters). *Student interns or co-ops could also be considered if they have the appropriate background and expertise*.

The successful candidate:

* Can work in a milestone-driven research environment (i.e. can adhere to a schedule of deliverables)
* Will be comfortable studying physiological functions, such as bowel and bladder function
* Shows initiative and take ownership of project
* Shows attention to detail particularly with regard to documentation and analysis
* Possesses strong written and oral communication skills
* Can function in a multidisciplinary team
* Work at multiple locations, as needed

Experience/expertise is one or more of the following areas is desired:

* Matlab & Labview software
* Embedded software for microcontrollers (e.g. C++, TI MSP series)
* Low-power radio frequency communication methods
* RF power amplifiers and/or wireless battery charging
* Circuit design/layout
* Circuit simulation
* Electromagnetic simulation
* Experience with biocompatible polymers (e.g. silicones)

If you are interested in this position, please send your resume or CV and cover letter to:  
Margot S. Damaser, PhD

Staff and Professor  
Dept of Biomedical Engineering

Lerner Research Institute

Cleveland Clinic

Cleveland, OH

[damasem@ccf.org](mailto:damasem@ccf.org)