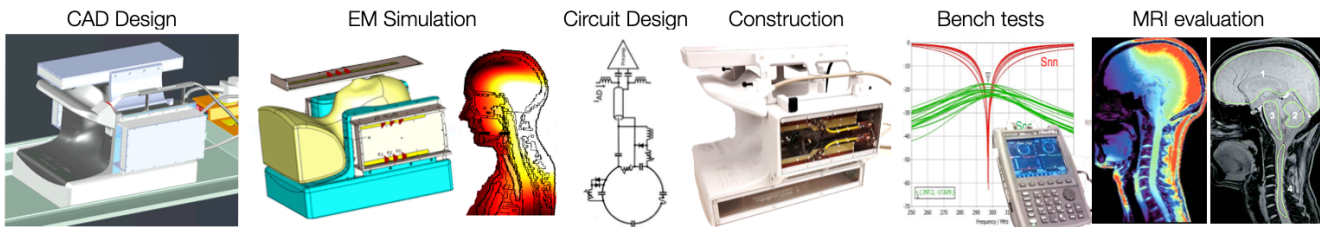


# RF and shim coil development @7T

## Description of the position

Building on our recent progress on integrated “AC/DC” shim coils and real time shimming technology <sup>1</sup>, we are recruiting an **experienced RF engineer or postdoc** to develop coils for the brain and spinal cord at 7T (Siemens Terra). The candidate will perform EM simulations, CAD design, build and test coils on the bench and in the MRI, create coil files and VOPs, run safety tests. Research will be conducted at the **NeuroPoly** lab (Polytechnique, University of Montreal), and at the **Montreal Neurological Institute** (MNI, McGill University). This is a long-term position.



## Qualifications

- Advanced degree in electrical engineering, physics, or biomedical engineering,
- Knowledge in MRI physics, RF and antenna,
- Experience in EM simulation (ideally CST) and RF/microwave circuit design,
- Experience in CAD design tools (ideally AutoCAD),
- Experience with RF lab equipment including network analyzers, oscilloscopes, etc.

## Why should you apply?

- You will gain expertise on state-of-the-art integrated RF/shim coil technology 🧠
- You will interact with radiologists and neurosurgeons who will use the developed coils 👨‍⚕️ 👩‍⚕️
- You will collaborate with top institutions (McGill, Western Univ. MGH/Harvard, Stanford) 🎓
- Salary and benefits at University of Montreal are competitive, the position is unionized 💰
- Montreal is an awesome city to live in (<https://www.topuniversities.com/city-rankings/2017>) 🌍

## How can you apply?

Send a cover letter describing your research experience, a CV, and contact information for three references to Prof. Julien Cohen-Adad: [jcohen@polymtl.ca](mailto:jcohen@polymtl.ca).

<sup>1</sup> Example of projects: <https://neuro.polymtl.ca/research/rf-and-shim-coil-design.html>