



Visiting Speaker

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What can we learn from in-vivo mapping of human cortical functional topology and myeloarchitecture? Some initial answers, and outstanding questions.

Theories of brain organization often revolve around the concept of the cortical area. Typically these are defined by a combination of functional characteristics, sensorimotor representations, and cyto- or myeloarchitectonic features that are relatively conserved across mammalian species. In the human case in particular, this is challenging for cortical areas whose putative identity relies on a Venn diagram of functional and architectonic features (for instance in the auditory system). Work over the last years in our group and others has attempted to bridge this gap by combining various functional mapping techniques with myeloarchitectonic maps derived from high-resolution quantitative multiparameter MRI in the same subjects. Here I will discuss some of our findings in visual, somatomotor, and auditory cortex, highlighting what we have learned thus far in our 'fact-finding' expeditions in these regions. I will also show data that raise interesting questions about the universality of cortical functional organization, and the role of relative myelin differences in brain function.

Date: Friday, December 15, 2017

Time: 3:00 pm

**Location: Fisher Room
Robarts Research Institute**

If you require information in an alternate format or if any other arrangements can make this event accessible to you, please contact Denise Soanes at dsoanes4@uwo.ca