



## COLLOQUIUM

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### “Specialization of the Specialist”

One of the most important discoveries in cognitive neuroscience is that the human brain is much more plastic than previously anticipated. Several approaches have been used to study human brain plasticity. In the context of cross-sectional approaches experts are compared with novices in terms of anatomical and neurophysiological measures. In the context of longitudinal approaches short-term or long-term training sessions are introduced as experimental variations and the neuroanatomical and neurophysiological consequences of these training interventions are measured. In my talk I will focus on neuroanatomical and neurophysiological studies on professional musicians demonstrating neuroanatomical and neurophysiological adaptations due to musical practice. In this context I will also thematize possible functional and anatomical links between music and language processing which will be helpful for understanding the neural implementation of both language and music. Finally, based on the new findings about the plastic human brain I will argue for possible new research endeavors in the context of neuro-rehabilitation and education.

Monday, March 16, 2009  
3:30 p.m.-5:00 p.m.  
Sloan College, Room 112

Reception immediately following  
The McCutcheon House  
5:00 p.m.- 6:30 p.m.

