



## Departmental Seminar Series

A seminar entitled:

### *"Genetic dissection and functional mapping of a fear control circuit"*

by

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**on Tuesday, October 27, 2009 at 2:00 p.m.**

in Seminar Room 1  
G/F. Laboratory Block  
Faculty of Medicine Building  
21 Sassoon Road  
Hong Kong

*All are welcome*

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#### **Abstract**

Emotional disorders such as autism, depression and anxiety are likely due to abnormal neural circuits function. The amygdala plays a key role in emotional behavior, however, its cellular complexity makes it difficult to understand in detail how the underlying neural circuits regulate emotional responses. Our lab has identified a genetic-marker-labeled subpopulation of CeL (lateral division of central amygdaloid nucleus) neurons, which might function in a circuit that is gating a well characterized emotional behavior, fear conditioning. In order to understand the circuit-level mechanism of how these neurons participate in fear responses, we combined optogenetics and electrophysiology to map the neuronal circuits that these neurons are involved in. The structure of the neural circuits characterized here will help us to understand better how the amygdala regulates fear responses and other emotional behaviors.