The University of Hong Kong
Department of Psychology

Departmental Seminar

**Personalized Learning: From Neurogenetic Markers to Modification of Training**

Date: February 1, 2011 (Tuesday)
Time: 11:30 to 12:30 p.m.
Venue: Room 624, Knowles Building, HKU
Speaker: Dr. Patrick Wong
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The links among genotype, endophenotype and phenotype—and their interactions with the environment—have intrigued theoretical pillars of our discipline from Piaget and Vygotsky to Hubel and Wiesel, among others. Together with psychologists, practitioners (and our funding agencies!) ask how knowledge of such links and interactions might translate into clinical and pedagogical practices. In this presentation, I discuss some preliminary attempts by my research group that explore not only the biological and cognitive fundamentals of human learning, but also how learning can be altered based on knowledge of these fundamentals. We focus our efforts on language learning. Language, especially the sound and grammatical aspects, is notoriously difficult to master when learning begins in adulthood. The considerable individual differences we see in this domain provide a tremendous opportunity for identifying neurogenetic and neural markers for learning success. With these biomarkers, we can then attempt to modify training so that at least some of the learners’ learning can be optimized. This “Personalized Learning” approach has the potential to improve not only language teaching and treatment of communication disorders, but also other kinds of learning and behavioral therapies. [Work supported by NIH and NSF, USA]