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A. PROFESSIONAL PREPARATION

College/University	Location	Major	Degree &Year
Peking University	Beijing, China	Computer Science	B.S., 1984
Grinnell College	Grinnell, Iowa, United States	Psychology	B.A., 1990
Harvard University	Cambridge, MA United States	Psychology/ Comp. Neurosci. Computational	Ph.D., 1995
Salk Institute Howard Hughes Med Institute	La Jolla, CA USA	Neuroscience	Post Doc Fellow, 1997

B. ACADEMIC/PROFESSIONAL APPOINTMENTS

2016-present Full Professor; Director, Laboratory of Neuroscience for Education, University of Hong Kong
2016-present Adjunct Research Professor, Mind Resource Network, Albuquerque, NM, USA
2012-2014 Program Director, Cognitive Neuroscience Program, National Science Foundation. Arlington, VA. USA.
2014-2016 Program Director, Office International Science & Engineering (China Program), National Science Foundation. Arlington, VA. USA.
2004-2016 Associate Professor, Psychology (primary) and Neuroscience (adjuct), Univ. of New Mexico, Albuquerque, NM. USA
2004-2005 Visiting Professor, Institute of Cognitive Science, University College London, London, UK.
2001-2002 Visiting Professor, Laboratory of Neuroendocrinology, Rockefeller University, New York, NY. USA.
1997-2004 Assistant Professor, Psychology (primary) and Neuroscience(adjuct), Univ. of New Mexico, Albuquerque, NM. USA
1984-1986 Software Engineer, Software Institute, Chinese Academy of Science, China

C. SELECTED PUBLICATIONS

1. Romeo, R. D., **Tang, A. C.** & Sullivan, R. M. (2017). Early-Life Experiences: Enduring Behavioral, Neurological, and Endocrinological Consequences. In *Hormones, Brain and Behavior*, 3rd edition, Vol 5. Oxford: Academic Press; 2017. pp. 133–158.
2. **Tang, A. C.,** Reeb-Sutherland, B. C., Romeo, R. D., & McEwen, B. S. (2014). On the causes of early life experience effects: evaluating the role of mom. *Frontiers in Neuroendocrinology*, *35*(2), 245-251.
3. Zhang, Y., **Tang, A. C.,** & Zhou, X. (2014). Synchronized network activity as the origin of a P300 component in a facial attractiveness judgment task. *Psychophysiology*, 51-3, 285-289.

4. **Tang, A. C.**, Yang, Z., Reeb-Sutherland, B. C., Romeo, R. D., & McEwen, B. S. (2012). Maternal modulation of novelty effects on physical development. *Proceedings of the National Academy of Sciences*, *109*(6), 2120-2125.
5. Saggar M; King BG; Zanesco AP; Maclean KA; Aichele SR; Jacobs TL; Bridwell DA; Shaver PR,; Rosenberg EL; Sahdra BK; Ferrer E; **Tang, A. C.**; Mangun GR; Wallace BA; Miikkulainen R; Saron CD, Intensive training induces longitudinal changes in meditation state-related EEG oscillatory activity, *Frontiers in Human Neuroscience*, 2012, 6(256)
6. **Tang, A. C.,** Reeb-Sutherland, B. C., Romeo, R. D., & McEwen, B. S. (2012). Reducing behavioral inhibition to novelty via systematic neonatal novelty exposure: the influence of maternal hypothalamic-pituitary-adrenal (HPA) regulation. *Biol. Psychiatry, 72(2):150-6*.
7. **Tang, A. C**., Sutherland, M. T. & Yang, Z. (2011). Capturing "Trial-to-Trial" Variations in Human Brain Activity: from Laboratory to Real World. In *Functional Significance of Neuronal Variability*, Ed. Ming-Zhou Ding and Dennis Glanzman. Oxford University Press.
8. **Tang, A. C.**, Reeb-Sutherland, B. C., Yang, Z., Romeo, R. D., & McEwen, B. S. (2011). Neonatal novelty-induced persistent enhancement in offspring spatial memory and the modulatory role of maternal self-stress regulation. *Journal of Neuroscience*, 31(14), 5348-5352.
9. **Tang, A. C.**, Zou, B., Reeb, B. C., & Connor, J. A. (2008). An epigenetic induction of a right-shift in hippocampal asymmetry: Selectivity for short-and long-term potentiation but not post-tetanic potentiation. *Hippocampus*, 18(1), 5-10.
10. Akers, K. G., Yang, Z., DelVecchio, D. P., Reeb, B. C., Romeo, R. D., McEwen, B. S., & **Tang, A. C.** (2008). Social competitiveness and plasticity of neuroendocrine function in old age: influence of neonatal novelty exposure and maternal care reliability. *PloS one*, *3*(7), e2840.
11. **Tang, A. C.**, Sutherland, M. T., Sun, P., Zhang, Y., Nakazawa, M., Korzekwa, A., Yang, Z. & Ding, M. (2007). Top-down versus bottom-up processing in the human brain: distinct directional influences revealed by integrating SOBI and granger causality. In *International Conference on Independent Component Analysis and Signal Separation* (pp. 802-809). Springer, Berlin, Heidelberg.
12. **Tang, A. C.**, Akers, K. G., Reeb, B. C., Romeo, R. D., & McEwen, B. S. (2006). Programming social, cognitive, and neuroendocrine development by early exposure to novelty. *Proceedings of the National Academy of Sciences*, *103*(42), 15716-15721.
13. Akers, K. G., Nakazawa, M., Romeo, R. D., Connor, J. A., McEwen, B. S., & **Tang, A. C.** (2006). Early life modulators and predictors of adult synaptic plasticity. *European J. Neuroscience*, *24*(2), 547-554.
14. Sutherland, M.T. and **A. C. Tang**, Reliable detection of bilateral activation in human primary somatosensory cortex by unilateral median nerve stimulation. *Neuroimage*, 2006. 33(4): p. 1042-1054.
15. Sutherland, M. T., & **Tang, A. C.** (2006, March). Blind source separation can recover systematically distributed neuronal sources from resting EEG. In *Proceedings of the Second International Symposium on Communications, Control, and Signal Processing (ISCCSP 2006)*, Marrakech, Morocco, March (pp. 13-15).
16. **Tang, A. C.,** Sutherland, M., & Wang, Y. (2006). Contrasting Single-Trial ERPs between Experimental Manipulations: Improving Differentiability by Blind Source Separation. *NeuroImage*, 29(1), 335-346.
17. **Tang, A. C.,** Sutherland, M. T., McKinney, C. J., Liu, J., Wang, Y., Parra, L. C., Gerson, A. D. & Sajda, P. (2006). Classifying single-trial ERPs from visual and frontal cortex during free viewing. *In: IEEE*

Proceedings of the 2006 International Joint Conference on Neural Networks (IJCNN 2006), July 16-21, 2006; Vancouver, BC, Canada; pp. 1376-1383.

18. **Tang, A. C.**, Sutherland, M. T., & McKinney, C. J. (2005). Validation of SOBI components from high-density EEG. *NeuroImage*, 25(2), 539-553.
19. **Akaysha Tang** ; Jingyu Liu; MT Sutherland, Recovery of correlated neuronal sources from EEG: The good and bad ways of using SOBI, *NeuroImage*, 2005, 28(2): 507~519
20. Parra, L., Alvino, C., **Tang, A.**, Pearlmutter, B., Yeung, N., Osman, A., & Sajda, P. (2003). Single-trial detection in EEG and MEG: Keeping it linear. *Neurocomputing*, 52, 177-183.
21. **Tang, A. C.**, Reeb, B. C., Romeo, R. D., & McEwen, B. S. (2003). Modification of social memory, hypothalamic-pituitary-adrenal axis, and brain asymmetry by neonatal novelty exposure. *Journal of Neuroscience*, 23(23), 8254-8260.
22. **Tang, A. C.** (2003). A Hippocampal Theory of Cerebral. *The asymmetrical brain*, 37.
23. **Tang, A. C.**, Pearlmutter, B. A., Malaszenko, N. A., & Phung, D. B. (2002). Independent components of magnetoencephalography: single-trial response onset times. *NeuroImage*, 17(4), 1773-1789.
24. **Tang, A. C.**, Pearlmutter, B. A., Malaszenko, N. A., Phung, D. B., & Reeb, B. C. (2002). Independent components of magnetoencephalography: localization. *Neural computation*, 14(8), 1827-1858.

Summary of Research & Service

My research spans many levels of analysis across many disciplines, from whole cell patch, extracellular electrophysiology, neuroendocrinology, psychopharmacoloary, computational modeling, developmental psychobiology, human MEG and EEG, and source separation and localization involving both animal model systems and human subjects. My research has two major themes: (a) enhancement of cognitive, social, emotional, and neural development in animal models and its translation to human development with focus on the role of early experience of stress and maternal influence; (b) development of high-density EEG based brain imaging to enable the study of a learning brain in children and elderly individuals as well as patient populations in the real world context.

Taking leave from academia, I served for two years as the Program Director for the Cognitive Neuroscience Program at the United States National Science Foundation (NSF) conducting reviews of proposals, making funding recommendations, managing the CogNeuro portfolio, coordinating co-funding of highly interdisciplinary projects across units of NSF that span the fields of social, behavioral, and economic sciences, computer information science and engineering, biological sciences, and mathematical and physical sciences. I further served for one and half years as the China Program Director in the Office of International Science & Engineering, NSF, handling review, making funding recommendation, and managing a variety of China related awards for US-China collaboration across all disciplines represented by NSF.

Most recently I took the position of an inaugural director for the newly established Laboratory of Neuroscience for Education (NfE Lab, NfE.edu.hku.hk) at the Faculty of Education, the University of Hong Kong (HKU). The vision of the NfE Lab is to innovate education by leveraging cutting edge neuroscience findings and neuro-technology. The NfE Lab grounds its basic neuroscience research in the context of actual challenges faced by students, parents, teachers, and policy makers---and works to connect the laboratories with the classrooms and homes where real world learning takes place. Its missions are (1) to enhance learning capacity, (2) to improve teaching effectiveness, and (3) to inform policy.