

# Parsing Pathways to Health Disparities: A mixed-method, multi-domain approach

11:30 a.m. – 12:30 p.m. | January 5, 2017 (Thursday)

Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



## Dr. Meanne Chan

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### Abstract

How does adversity get under the skin of the developing child to instantiate risk for a heterogeneous set of health problems across the life course? How can we integrate epidemiological and mechanistic findings to build resilience, optimize interventions, and target vulnerable subgroups? This program of research aims to characterize biobehavioral pathways to health disparities in childhood and beyond. A mixed-methods approach grounded in developmental-ecological theory has been adopted to examine how social factors at the neighborhood, family, and individual level interact to confer risk for psychopathology and chronic health conditions. In particular, to better understand how exposure to chronic stress provokes vulnerability to conditions that manifest in different life stages, dysregulation across the domains of social-cognition, emotion processing, health behaviors, cardiovascular reactivity, and immune function are investigated together with the biological state of the developing brain. Findings suggest that adversity during sensitive stages of development sensitizes threat vigilance and response systems as well as immune cells that trigger inflammation, enables high-risk health behaviors, and interacts with genetic predispositions to forecast neuroanatomical structure in frontolimbic regions. However, mobilization of social capital via mentorship programs or community engagement may buffer against vulnerable trajectories in disadvantaged adolescents. Implications for early interventions that may mitigate childhood adversity will be discussed.

### About the Speaker

Dr. Meanne Chan is currently a Lecturer in the Department of Psychology at the University of Toronto. She completed graduate training in Health Psychology at Northwestern University, which also included policy research training with The Center on Social Disparities and Health at the Institute for Policy Research and neurobiology training in the Department of Medical Social Sciences at the Feinberg School of Medicine. She then completed a Postdoctoral Research Fellowship in Biological Psychiatry at Sunnybrook Health Sciences Centre, a research hospital fully affiliated with the University of Toronto.

Her work bridges psychology, neuroscience, and immunology approaches to better understand the vast implications linked with childhood adversity. Key concurrent international projects include a Toronto community engagement study targeted at fostering resilience among marginalized youths with agency and social affiliation, a racial disparities project at Indiana University examining re-appraisal strategies for cardiovascular recovery after exposure to prejudice, and a NIH funded multi-site brain-mapping study exploring early-life stress, a neuro-immune network hypothesis, and risk for psychopathology in adolescents. Her work has also been funded by Canadian Institutes of Health Research, Ministry of Child and Youth Services, and Ontario Trillium Foundation. Meanne also serves as a key partner in community startups for the development of eHealth assessment tools, data science, and knowledge translation.

Prior to doctoral training at Northwestern University, Meanne completed undergraduate and Masters studies at the University of British Columbia, majoring in Health Psychology with a minor in Quantitative Methods. American Psychosomatic Society named Meanne as one of 25 Young Investigator Colloquium Scholars in 2016, an award granted for promising early career research.

~All are Welcome~

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