

CANADA'S INTERNATIONAL ECD LEADERS

Each year for the past eight years, the Centre of Excellence for Early Childhood Development (CEECD) has selected the 10 best international research papers on early childhood development (ECD) by Canadian authors, gathering over the years a valuable overview of Canada's international contribution to the field.

To be selected, studies had to be published in the journals most frequently cited as sources by researchers around the world. The authors of the 80 papers selected from 2001 to 2008 were primarily from McGill University, followed by University of Toronto, McMaster University and Université de Montréal (see graph on Page 1).

McGill's prevalence is in part due to the two researchers whose papers were the most frequently selected among all Canadian investigators over the last eight years: Michael S. Kramer made the Top Ten with seven papers while Michael J. Meaney had six Top Ten papers. The papers which Dr. Kramer co-authored were based on experimental and epidemiological studies reporting on pregnancy, induction of labour, breastfeeding, use of pacifiers, infant mortality, allergies, asthma, cognitive development and myocardial infarction. Dr. Meaney's co-authored papers reported on experimental research to understand long-term effects of maternal care, in rats and humans, on gene expression, stress reactivity, cognitive development, and dopamine response. Richard E. Tremblay, a Université de Montréal investigator, was the third most frequent researcher profiled, with five Top Ten papers. His co-authored publications reported on early childhood determinants of stress reactivity, development of physical aggression, peer victimization, and gang membership during adolescence.

Seven other prominent Canadian researchers have appeared in the Top Ten *Bulletin* three times each. Four of these published reports on premature babies: Arne Ohlsson (University of Toronto), Robin S. Roberts

(McMaster University), Charlene Robertson (Glenrose Rehabilitation Hospital, Edmonton) and Barbara Schmidt (McMaster University). Three others published studies about genetics, stress, aggression, early peer relation difficulties, and asthma: Cathy L. Barr (University of Toronto), Michel Boivin (Université Laval), and Malcolm R. Sears (McMaster University).

"Canada leads the world in the area of population health of mothers and babies," says Michael S. Kramer, when asked about trends in ECD over the past eight years. He cited a cultural tendency towards globalism as part of the reason. "I grew up in the States, and when I came to Canada in 1978, I noticed a difference. People in the States are usually quite inward-looking. In Canada, there was a lot more in the news about the rest of the world. That gave me an edge."

For his part, Meaney identifies leaders like Fraser Mustard, competition with the United States, a collaborative culture, and universal health care as keys to his success. "The most important advantage is that we operate in a public health system, and that makes it easier to collect data," he says. "There's a shared set of values in Canada that understand that there's a direct link between healthy children, healthy families and a healthy economy."

ECD researchers are starting to understand the importance of multidisciplinary research, says Richard E. Tremblay. "The fields that are studying human development have realized over time that they need each other to tell a better story. This is especially true for those who try to understand the rapid growth between conception and the first few years after birth. We are starting to understand that the

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environment impacts biological development from the start; that this impact has long term consequence on how we adapt to our environment, and how our environment reacts to our behaviour. Nature and nurture are working together and investigators need to work together to understand how to help when things go wrong." 🦋

**BY THE CENTRE OF EXCELLENCE FOR EARLY CHILDHOOD DEVELOPMENT,
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