



2001-2008: EIGHT YEARS OF RECOGNIZING THE BEST OF ECD RESEARCH IN CANADA

A TIME TO PAUSE, REFLECT AND PRAISE

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This is the eighth edition of our annual *Bulletin* featuring the Top Ten best Early Childhood Development (ECD) research studies in Canada. Over the years, this list has featured a total of 80 scientific papers. The figure below shows the distribution of authors among Canadian research institutions. McGill University (with at least one author on 25 of the 80 articles) and the University of Toronto (24) come in first and second, respectively. McMaster University (16), the Université de Montréal (11) and the University of British Columbia (9) join them in the top five positions. Top-level ECD research is actually being conducted in all regions of Canada: Queen's University, the University of Manitoba, the University of Ottawa and Simon Fraser University have all entered the ranking this year.

This sample of 80 papers over eight years gives a very good idea of Canada's standing in terms of world-class excellence in ECD research. The yearly compilation of Top Ten statistics provides a unique standpoint for analyzing trends in ECD research in Canada. Overall, ECD research is strong, diversified and increasingly characterized by interdisciplinary and international collaborations. Each year brings its unique mix of biomedical, epidemiological and developmental research on population health issues (see article on Page 2). This year is no exception.

Over the years, genetic research has consistently shown a strong presence (see October 2005 *Bulletin*¹). In this year's edition, one paper highlights the disruption of genomic imprinting as a possible mechanism underlying both autism spectrum disorder and psychotic disorders. Another study shows that adverse

environmental conditions supersede genetic influence on early physiological reaction to novelty.

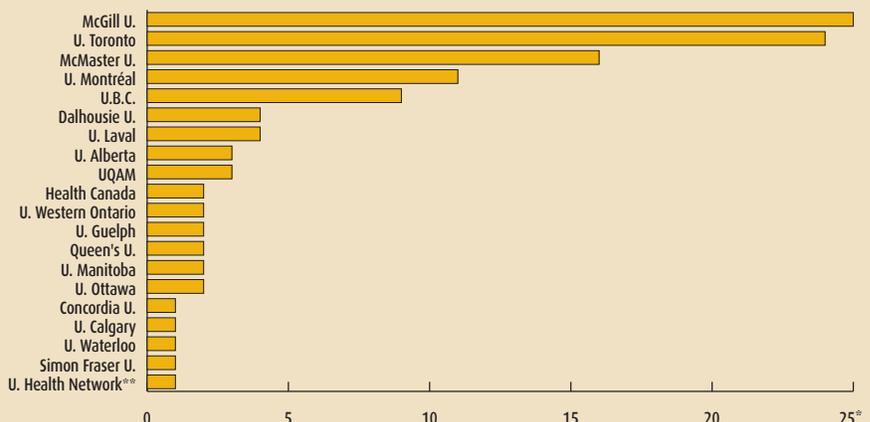
As is often the case, some studies clarify issues of clinical relevance for ECD using more robust scientific methods. Such studies abound in this year's edition. Through sophisticated 3-D scans, one study found an association between asymmetric growth of the face and autism spectrum disorder. Two studies confirmed the benefits of taking medication for controlling asthma and depression during pregnancy. Asthma was also targeted in a study exploring its link with developing a fever very early in life. One study showed that hypother-

mia has no positive effect, and could even have negative consequences, when used to treat severe traumatic brain injury in children. Another international study used a combination of randomized and longitudinal designs to confirm in a large sample that breastfeeding leads to higher cognitive abilities in children. A longitudinal survey was used to describe the early development of peer victimization. Studies may also expand our general knowledge of cognitive capacities in infants, as it has been shown that they intuitively understand statistical math concepts without teaching.

These studies all manifest excellence in various ways: strong designs, large sample sizes, innovative methods, sound theorizing and relevance. They deserve to be celebrated for their scientific breakthroughs. The Strategic Knowledge Cluster on Early Child Development is proud to be associated with this initiative. 🌟

1. Tremblay RE. Canadian ECD research in 2004: Is there a world beyond genetics?. *Bulletin of the Centre of Excellence for Early Childhood Development* 2005;4(2):1. Available at: <http://www.excellence-earlychildhood.ca/documents/BulletinVol4No2Oct05ANG.pdf>. Accessed December 21, 2009.

2001-2008 TOP 80 PAPERS



* Number of papers with at least one author from a Canadian institution.

** U. Health Network : Toronto General Hospital, Toronto Western Hospital and Princess Margaret Hospital.