

FAILURES ARE AS IMPORTANT TO KNOW AS SUCCESSSES

by Richard E. Tremblay, CEECD Director

The title of this editorial comes from a letter written in 1847 by Charles Darwin, who probably made more observations and performed more experiments than any other scientist. However, that was not enough to satisfy a brain that craved "facts." Long before the age of Google and e-mail, he sent thousands of letters to other observers of "nature" around the globe, hoping to learn from their experiments. Knowing very well how easy it is to deceive yourself by putting too much credence in your pet ideas, he asked his correspondents to describe their failed attempts at proving their hypothesis as carefully as their successful ones.

As the father of 10 children and a man with chronic health problems, Darwin was acutely aware of the importance of experiments in the field of education and health. He saw clearly that "best practices" in education and health should be the outcome of rigorous experiments. Unfortunately, these experiments were and still are extremely rare in the area of early childhood development. Still less frequent are replications of successful experiments, although they are essential so that we can find out whether the first experiment can be generalized to a different context.

Given the scarcity of such experiments, it came as quite a surprise to see that our annual Top 10 scientific articles by Canadian investigators included two experiments reporting "failures" to help parents and their children (see page 3 and page 11). The most surprising was an experiment to prevent child abuse, with a careful adaptation of a very well-known "best practice." Harriet MacMillan, who led this extremely important study, was chosen our 2005 Researcher of the Year (see page 2). The findings of this study must be taken very seriously. If this intensive "best practice" applied to abusing parents had no effect,

what are the effects of the untested interventions delivered by thousands of practitioners in the field of child abuse and neglect? The urgency of finding answers to these questions becomes even clearer when we consider that interventions have also been shown to cause harm.

This is the fifth year that we have selected 10 papers published in high-impact scientific journals by investigators who include at least one researcher working in a Canadian institution. Harriet MacMillan is our third CEECD Researcher of the Year from McMaster University (2002: Malcolm Sears; 2003: Daphne Maurer-Richard Le Grand). The other two were from McGill University: Michael Kramer (2001) and Michael Meaney (2004).

We have now chosen a total of 50 scientific papers for our annual Top 10. Each of these includes at least one author from a Canadian institution. The figure at the bottom of the page shows the distribution of authors among Canadian research institutions. For example, McGill University had at least one author on 16 of the 50 articles, the University of Toronto had 15, and McMaster University had 12. A sample of 50 over five years is probably sufficient to give a very good idea of the distribution of strength in Canadian ECD research. 🦋

