

# A GREATER DEPRESSION

Dr. Anthony Levitt finds an acute form of bipolar disorder — in children



Dr. Anthony Levitt

As psychiatrist-in-chief at Sunnybrook Health Sciences Centre, Dr. Anthony Levitt spends a lot of time asking questions of patients. Those patients, in turn, and many health professionals outside Levitt's field often have a question for him: "Don't you get depressed treating people with depression all the time?" It's a question for which Levitt has a ready answer. "I tell them it's quite the opposite. It's exhilarating, because people actually get better," he says during a break between patients in his Sunnybrook office.

Levitt had a case in point the previous week. A woman he'd been treating for six years and who had been in treatment for six years before that came to see him and reported a month of wellness. "Remarkable," he says. "It's not many medical conditions where you can say someone's been ill for 12 years and they've made a recovery."


That recovery, dependent on the combination of a standard treatment with one still experimental, may not have happened without Levitt's approach to depression: maintain a broad perspective and work across the clinical-research spectrum, from genetics and prevention, to treatment resistance and community implementation of new

therapies. "Depression has to be addressed at every level," says Levitt, who also wears the hat of scientist at Sunnybrook Research Institute. "It's not simply an infection that needs a drug; it's a multifactorial illness that needs a multifactorial view."

To that end, Levitt has done several studies of depression and other mood disorders, one of which yielded results on bipolar disorder in 2006. Published in *The American Journal of Psychiatry*, the study weighed in on a controversy started a decade ago by researchers in the U.S. who said that the disorder exists in children as young as five years old. Prior to this work, clinicians believed that the disease begins in late adolescence or early adulthood; many doctors and researchers still hold that view. Levitt and his group, however, who treat patients of all ages at Sunnybrook, have observed what they think is bipolar disorder in young children, observations supported by the results of their study. In analyzing 1,411 people with lifetime bipolar disorder, 8% (113) reported onset before age 13 years; another 24% (339) reported onset between age 13 and 18 years.

The study also examined whether the illness as reported by the U.S. group looked like that described by the participants — more severe than average, with longer episodes, and more drug abuse and other psychiatric problems, particularly anxiety. It did. That was significant because, like diabetes and other chronic conditions, bipolar disorder is more resistant to treatment when it begins early. "This gives us more reason to identify kids at risk and then try to 'inoculate' them against ever developing the illness," says Levitt.

Striving for prevention of the disease in this young demographic, Levitt and study coauthor Dr. Benjamin Goldstein, recently a trainee at Sunnybrook and now a staff psychiatrist at the University of Pittsburgh, are tracking children whose relatives have bipolar disorder — measuring their cognition, moods, inflammatory markers in the blood and genetic markers — toward possible intervention with cognitive behavioral therapy or novel treatments.

Levitt is optimistic about those new treatments, which he says are poised to revolutionize mood disorder outcomes. Brain imaging is allowing researchers to pinpoint the geography of depression for the first time, and new biochemical targets, like substance P in the stress system and melatonin, are emerging to complement prior work on serotonin, dopamine and norepinephrine. Most exciting, says Levitt, is the potential therapeutic implications of brain-derived neurotrophic factor, a protein produced in the brain that helps grow and potentially repair damaged or lost brain cells. "These approaches are percolating through to clinical practice," says Levitt. "Our capacity to fight these illnesses and our choice of treatments is about to explode." 

Levitt's work is funded by the Canadian Institutes of Health Research, Physicians' Services Incorporated, and private and corporate donors.