

PROMISING FUTURES

Building Promising Futures for Every Child

S p r i n g / S u m m e r 2 0 1 3



UNBREAKABLE Strides

Adolescents and young adults can often run their way to improved mental health. That's the premise behind Team UNBREAKABLE, a run therapy group that supports 18-25 year-olds with depression or anxiety disorders. While some young people do appear to improve, others don't. Psychiatrist and researcher Roberto Sassi is working with Team UNBREAKABLE to understand who benefits from exercise therapy, how they benefit and why.

Team UNBREAKABLE, is championed by CameronHelps, an organization started by a father who lost his son to suicide. The team name references the "unbreakable feeling" that came from running as described by a young participant struggling with depression and mental illness. So what is happening to these kids when they run? Could it be a viable treatment option for other kids who are suffering?

The running therapy group meets twice a week for organized runs, and once-

weekly talks on topics such as healthy eating, depression and endurance. Therapy participants, doctors, students, and run coaches from a local running store, all run together starting with one-minute walks, one-minute runs. At the end of 13 weeks, the group runs a 5 kilometre organized race together.

"One of the things that we need to understand is how much of the benefit is physical and how much is psychological," explains Dr. Sassi. "If we can understand how much is the result of achievement – of mastering a challenge, and how much is the result of changes in physiology, we may start to understand how to better use exercise therapy to help adolescents who are suffering."

To that end, researchers measure the participants' clinical symptoms of depression weekly and look at cognitive

Continued on page 4

The Offord Centre

is Canada's only

research centre

focused exclusively

on the interaction

between healthy

child development

and mental health.





Mental Health Treatment Before Birth

Is it the Next Frontier?

Imagine if we could prevent the later mental health and developmental problems of children while they are still in the womb? That's a vision that drives Ryan Van Lieshout, a psychiatrist and one of the Offord Centre's exciting new Core Members.

"Regular contact with patients has heightened my appreciation of the devastating effects of mental illness and the limitations of current treatments," explains Dr. Van Lieshout. That has inspired him to help move the Offord Centre's focus on children's mental and developmental health forward, by taking a notable step backward – to the time spent in the womb.

"It is helpful to understand how prenatal exposures affect brain development in ways that can increase the risk of psychiatric and cognitive problems in life," he explains. "Since brain plasticity or adaptability is highest during gestation and infancy, intervention strategies applied during this time potentially offer the most effective means to reduce the prevalence and severity of mental disorders."

Dr. Van Lieshout established a plausible link between maternal obesity and emotional and behavioural disorders in children in his PhD research. "A plausible link is not a cause," he is careful to point out. However, it

does support the need for further investigation.

Over the next five years, Dr. Van Lieshout will look at how common adverse intrauterine exposures affect the risk of psychiatric and cognitive problems in offspring: maternal overweight, maternal anxiety disorders, and conditions leading to extremely low birth weight.* These are all areas amenable to treatment, so the scope for preventive interventions is good.

By demonstrating associations, Dr. Van Lieshout hopes to stimulate further research in this area. And of course, ultimately help healthcare professionals identify risk factors for mental disorders early and develop targeted interventions that will improve the lives of these offspring throughout their lifespan.



Dr. Ryan Van Lieshout is a Core Member of the Offord Centre, a psychiatrist at the Women's Health Concerns Clinic at St. Joseph's Hospital in Hamilton and an associate professor in the Department of Psychiatry and Behavioural Neurosciences.

**Dr. Van Lieshout is co-investigator on a CIHR-funded study of the later consequences of being born at extremely low birth weight led by the Offord Centre's Dr. Louis Schmidt. For more information see Promising Futures Spring 2011 available at offordcentre.com.*

Peter Szatmari Leaves for New Role



Dr. Peter Szatmari

When Peter Szatmari stepped in as Director of the Offord Centre in 2004, it was home to a small but dedicated team of researchers aligned in pursuit of Dr. Dan Offord's vision to improve the mental health of children. Dr. Szatmari, a psychiatrist acclaimed for his work in Autism Spectrum Disorder, left the Offord Centre on March 1, 2013 to develop a new

Child and Mental Health program for SickKids, CAMH and the University of Toronto. He leaves a clear mark, having advanced the Offord Centre's mission admirably.

During the course of his leadership, Dr. Szatmari attracted considerable talent to the Offord Centre, expanding it across multiple disciplines and growing the Membership threefold.

"Peter is incredibly talented at bringing people together,"

says Dr. Harriet MacMillan, Acting Director. Dr. MacMillan has been a member of the Offord Centre since its earliest days. "He brought people together from disparate backgrounds and facilitated international collaborations. That collegial approach has had a significant impact on the way we look at a topic, the way we work, and the results we've been able to gather."

Dr. Szatmari also encouraged a broader focus for the Offord Centre so that the Centre could improve the lives of all children. While we continue our work on the emotional and behavioural problems of children, our mission now includes improving the developmental health of children.

His other significant contribution to the Offord Centre and to child health research came in the form of training the next generation of child health researchers.

Continued on page 3

Eating Disorders

Why use Family-based Treatment?

When parents take control of managing the eating of a child or adolescent with an eating disorder, the chances of recovery more than double. That's one of the findings in a recent review of family-based versus individual treatment for pediatric eating disorders.

In addition, children and adolescents who receive family-based treatment have fewer hospitalizations and are less likely to relapse.

"Family-based treatment is different from past approaches," explains Jennifer Couturier, Co-Director of the Pediatric Eating Disorders Program at McMaster Children's Hospital, and the author of this study. "It places parents in charge of interrupting eating disordered behaviour."

Family-based treatment requires close supervision of children, especially around mealtimes. It may require a system of rewards and consequences, limiting exercise and bathroom supervision if purging is involved. Over the course of the 9-12 month treatment, control is slowly handed back to the individual as they gradually return to normal adolescent eating.

"Previously it was thought that other areas of these kids' lives were out of control, so they needed to control their food to be in control of their life. However, we now know that eating disorders are severe mental illnesses that cloud the person's judgment where food is concerned," states Dr. Couturier. In fact, anorexia nervosa has the highest mortality rate of any mental illness – a rate that increases the longer the individual is ill. "These patients need the guidance and direction that comes with family-based treatment."

Unfortunately, in another recent study, Dr. Couturier



determined that few eating disorder therapists in Ontario are using family-based treatment.

"While therapists recognize the evidence supporting this treatment, few are following the full manualized treatment that produces these results," explains Dr. Couturier. "They let us know that they would like guidelines for treatment to be established and, **95 percent of them said they need on-going training and support in order to deliver family-based treatment.**"

Dr. Couturier has applied for a grant to take up that challenge. If approved, training and support in family-based treatment will be delivered to Ontario eating disorder therapists.

"These studies made it clear that we need to help the clinicians who treat these children adopt family-based treatment," concludes Dr. Couturier. "We've found a tremendous opportunity to improve the health of these children."



Dr. Jennifer Couturier is a child and adolescent psychiatrist, an Offord Centre Core Member, Medical Co-Director of the Pediatric Eating Disorders Program at McMaster Children's Hospital and an Assistant Professor within the Departments of Psychiatry & Behavioural Neurosciences, Pediatrics, and Clinical Epidemiology & Biostatistics at McMaster University.

Peter Szatmari *(continued from pg 2)*

"Peter has a marvelously sunny disposition that is infectious and provided the gel to the collegiality found here," explains Dr. Michael Boyle, a Centre Core Member. "That extended to students. A lot of care has gone into mentoring and providing students with a really good academic experience," says Dr. Boyle, who is renowned for his own student mentoring. "Mentoring, including my own involvement with

students expanded greatly during this period. "

Through these efforts Dr. Szatmari has helped to ensure the Offord Centre's work will continue. "I think he fulfilled what he wanted to do here," reflects Dr. Boyle. We wish Peter all the best.



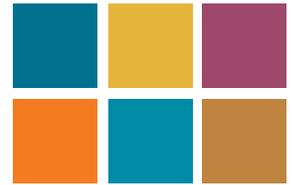
Unicef Report Highlights EDI

The Unicef Report Card on Child Well-being in Rich Countries, released in April 2013, included a significant highlight of Canada and Australia's achievement in monitoring early child well-being using the Early Development Instrument (EDI). The EDI is powerful tool, developed here at the Offord Centre by Drs. Magdalena Janus and Dan Offord.

The EDI creates a snapshot of well-being of children at about age five, providing crucial information for planning and gauging improvements.

For more information visit www.offordcentre.com/readiness.

The EDI highlight in the Unicef Report Card can be found on pages 36-37 at http://www.unicef-irc.org/publications/pdf/rc11_eng.pdf.



Chedoke Site
Patterson Building
1280 Main Street West
Hamilton, Ontario
Canada L8S 4K1
T 905-521-2100
ext. 77358
F 905-574-6665
1-888-541-KIDS
www.offordcentre.com

UNBREAKABLE Strides *(continued from pg 1)*

differences in factors such as focus and mood, before and after the exercise. Research participants also have blood drawn at the beginning and the end of the program so researchers can look for changes in oxidative stress, inflammation and the protective protein BDNF or brain-derived neurotrophic factor.

Depressed people have abnormal markers for inflammation and lower levels of BDNF. "There is very strong evidence that BDNF increases with exercise," explains Dr. Sassi. In theory this improves cognitive function, but is that what is happening here or is it something else?" There are still a lot of questions to be answered.

In the future Dr. Sassi and his fellow researchers hope to apply for a larger

grant, which would enable them to add a control group to the study.

The next running therapy group, the fourth in this small pilot study, will begin in late August 2013. Participants, aged 16-25, will be screened by the research team for a primary diagnosis of a mood or anxiety disorder. Clinicians wishing to refer participants can contact Dr. Sassi directly at sassir@mcmaster.ca



Roberto Sassi is a Core Member of the Offord Centre for Child Studies, an Attending Psychiatrist, Mood Disorders Outpatient Program at St. Joseph's Healthcare Hamilton, and Assistant Professor, McMaster University Department of Psychiatry & Behavioural Neurosciences.



We're Leading The Search

BUT WE NEED YOUR HELP

Your investment allows us to engage in promising new research, transfer evidence-based knowledge to communities where it can improve lives and support the work of emerging scientists. These things are not generally covered by research grants.

Your help is so greatly needed and appreciated! More information and secure online donation button is available at offord.com, or you may contact Julie Bodden at 905-521-2100 ext. 77358. Julie will be pleased to direct your inquiry appropriately.