The Commonwealth Research Center (CRC) newsletter is designed to communicate the progress we’re making as researchers investigating the underlying causes and optimal treatments for mental illnesses. Our goal is to translate new scientific knowledge to the citizens of Massachusetts. The Communicator will be distributed bimonthly. We greatly appreciate the support you’ve given us over the years!

CRC website: http://sitenav.bidmc.harvard.edu/display.asp?node_id=9858

About the CRC
The CRC was created in 1988 at the Massachusetts Mental Health Center (MMHC) by the Massachusetts Department of Mental Health (DMH) to address the need for cutting edge biological and treatment research on schizophrenia and related psychotic disorders. The CRC has been a "Center of Excellence in Clinical Neuroscience and Psychopharmacological Research" funded by the DMH since 1993. The other DMH Center of Excellence is at the University of Massachusetts, focusing largely on services research. Currently the CRC is administered by the Beth Israel Deaconess Medical Center (BIDMC) Dept of Psychiatry. Larry J. Seidman, Ph.D. has been the Director of the CRC since 2002.

For further information about participation in research or clinical services, contact Corin Pilo at 617-754-1224 or cpilo@bidmc.harvard.edu

Massachusetts Mental Health Center (MMHC) Celebrated its 100th Anniversary in June 2012!

Larry J. Seidman, PhD, CRC Director

The past year has been very eventful at MMHC. First, the historic clinical, research and education center, MMHC, returned from its diaspora of 8 years to its ancestral homeland on Fenwood Road, in November 2011. Then, on June 22-23, 2012, MMHC had a wonderful two day celebration of its 100th birthday (June 24, 2012). Perhaps the biggest event of the year was the two-day conference and celebratory events put on by a committee of CRC and MMHC/BIDMC faculty (Drs. Keshavan, Salzman & Seidman), and DMH Deputy Commissioner for Mental Health Services, Clifford Robinson. The celebration included a two day scientific and clinical conference, “Celebrating a Hundred Years of Mental Health Care at MMHC: Advances in Mental Health Care Update”, a cocktail party at the MMHC, a faculty dinner and a memorable dinner at the Kennedy Library. All in all, there were 47 participating faculty and more than 300 attendees at the events. The celebration truly capped a momentous year for MMHC and reunited many from the MMHC diaspora, including former trainees, staff and patients.

In addition, an article on the rebirth of MMHC ("The Massachusetts Mental Health Center: Going Forward After 100 years") was published in the American Journal of Psychiatry by Carl Salzman, Larry Seidman, and Matcheri Keshavan in October 2012. The institution remains vital as reflected in the current clinical services, teaching and research described in this edition of the CRC newsletter. Please come and visit our beautiful new home!

Children’s Development Study
Matcheri S. Keshavan, MD

Schizophrenia is a highly disabling mental disorder affecting about 1% of the general population. The key goal in schizophrenia research is to develop effective early intervention and prevention approaches. It is therefore important to understand the underlying causal processes and development in the early phases of this illness.

It is well-known that some of the earliest symptoms and signs of schizophrenia are disturbances in the inner sense of the self and the boundary between self and others. One approach is to focus on understanding the inner self experiences in children at risk for schizophrenia by evaluating the brain networks that underlie the development of the self and its boundaries with the outside world.

The National Institute of Mental Health recently funded a study of brain imaging of children aged 7 to 12 who have a parent with schizophrenia. This is an exciting collaboration between researchers at Beth Israel Deaconess Medical Center/Massachusetts Mental Health Center/ Harvard Medical School (Larry Seidman, PhD and Matcheri Keshavan, MD) and Massachusetts Institute of Technology (John Gabrieli, PhD). We will conduct detailed neuropsychiatric and psychological evaluations, and structural and functional magnetic resonance imaging studies. The results would be compared to age-matched controls not at risk for schizophrenia. We expect that the results will inform us about the earliest changes in those at risk for the illness. Our long-term goal is to be able to follow the children in the study, better understand the evolution of risk for psychosis, and develop better approaches to early intervention and prevention.

If you are interested in learning more about this study, you can contact Corin Pilo, LMHC at 617-754-1224 or cpilo@bidmc.harvard.edu.

CEDAR Launches CLUES Cognitive Enhancement Program
Michelle Friedman-Yakoobian, PhD and Kyle Minor, PhD

The Center for Early Detection, Assessment and Response to Risk (CEDAR) is delighted to announce the recent launch of Cognition for Learning and for Understanding Everyday Social Situations (CLUES), a new cognitive enhancement program for young people ages 14-30 at clinical high risk for psychosis. This program is designed to improve social and cognitive functioning (e.g., memory, attention, planning) in order to help adolescents and young adults meet their educational, occupational and social goals. CLUES members participate in weekly:

1. Partnered, computerized cognitive remediation exercises to improve cognition.
2. Social-cognitive skills classes focused on increasing proficiency in social situations.
3. Individual coaching sessions aimed at translating skills from computer and group exercises to everyday life.

CLUES is based on Hogarty and Greenwald’s Cognitive Enhancement Therapy (CET), which was designed to treat individuals with schizophrenia. Previous research studies investigating the effectiveness of CET for individuals with schizophrenia found that clients who participated in CET showed better occupational and social functioning, as well as improved cognitive abilities, including memory and concentration. In addition, one study using Magnetic Resonance Imaging of the brain found that CET was associated with preserved brain structure over time.

Given the research support for CET as a treatment for individuals with schizophrenia, the CEDAR team is hoping that an adapted version of this program will be an effective treatment for early intervention and prevention of psychosis. That is, CLUES may help to prevent difficulties with cognition, work, school, and social functioning that almost always occur when a young person develops schizophrenia.

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Cognitive Remediation in Individuals with Schizophrenia: Two Approaches

Joanne Wojcik, PhD, APRN

People with a diagnosis of schizophrenia often notice changes in their cognition or their ability to think clearly when trying to solve problems, learn new information, and pay attention or concentrate. Antipsychotic medication does not improve this type of problem and, in some cases, the side effects of medication may even worsen cognitive problems a little bit. Cognitive dysfunction is vitally important and closely related to people’s difficulty in working and going to school. Recently, research efforts have been focused on identifying methods to improve cognition. Cognitive remediation or cognitive enhancement refers to a variety of methods used to improve cognition. (See also CLUES program on page 1)

Currently, the CRC has two studies evaluating the effectiveness of different types of cognitive remediation. The first study is funded by NIMH and in partnership with the University of Pittsburgh called “Brain Imaging, Cognitive Enhancement and Early Schizophrenia” (“BICEPS”). This study is recruiting participants who are within the first 8 years of having been diagnosed with schizophrenia or schizoaffective disorder. Participants in this study will be assigned to either an enriched supportive therapy or to cognitive enhancement therapy that includes group and computer exercises. The treatment lasts for 2 years with a follow-up set of assessments 1 year later.

The second study, the “Latuda” or “Lurasidone” study, is for people with a diagnosis of schizophrenia or schizoaffective disorder and are either taking Latuda or are interested in changing their current antipsychotic medication to Latuda. This study includes 90 sessions of either computer-based games or cognitive exercises and group discussion. Funding for this study is provided by Sinovian Pharmaceuticals. As in the BICEPS study, the Latuda study provides treatment free of charge.

If you are interested in learning more about these studies, you can contact Corin Pilo, LMHC at 617-754-1224 or cpilo@bidmc.harvard.edu.

New “Prevention Collaborative” Working to Prevent Mental Illness

Kristen S. Woodberry, MSW, PhD

Imagine you are the mother of a 16-year-old girl. If she is “prediabetic”, her pediatrician is likely to identify this and refer you to information about what this means and what you can do to prevent her from developing diabetes. Now imagine that she is beginning to think others can steal her thoughts. Pediatricians don’t typically screen for this. And even if they do, there are no guidelines about what the mother might do.

With generous funding from the Sydney R. Baer, Jr. Foundation, we have launched a Prevention Collaborative to begin addressing the discrepancy in the prevention of physical versus mental illnesses. This collaborative brings together key stakeholders from public and private youth mental health agencies, adolescent medicine, secondary schools and universities, parent and consumer groups, emergency services, and academia to enhance prevention and early intervention efforts for Massachusetts youth.

Initiatives we’re working on include: enhanced screening for psychosis in pediatric offices, public schools and on university campuses, a public education campaign on the early warning signs of mental illness, an anti-stigma video targeting adolescents and young adults, guidelines for treating early signs of risk, and clinician training on screening for and treating early signs of psychosis. As part of our ongoing work on this latter initiative, we hosted a conference, “Innovations for Early Intervention in Major Mental Illness”, for child psychiatrists and youth mental health clinicians in November 2012. We will be hosting another conference on May 3, 2013 (see below). Our goal is to help that mother of a 16-year-old girl know what to do to help her daughter.

The Consumer Advisory Board Plans a Research Project on Relationships

Nate Schwirian, Melissa Alford, Linda Larson and Susan Landy

The CRC Consumer Advisory Board formed around 5 years ago and has been involved in a number of projects including a December 2011 conference on “The Many Faces of Recovery from Serious Mental Illness”. That conference highlighted the importance consumers place on relationships with their treators. Over the past year, at the Consumer Advisory Board, we have been meeting bi-monthly to develop a study that will examine what effect, if any, there is between the relationship of caregiver with client, and outcome of the client. Our hypothesis, generally stated, is that better relationships between caregiver and client will correlate with better life outcomes for the client.

We are reviewing previous studies and creating questions for use as measures of relationships between clients and caregivers, and questions that will provide measures of patient outcomes. Our group approaches this task with the perspectives of people who have lived experience of mental health issues (the Consumer Advisory Board), as well as people with clinical and research experience of mental health issues. CRC researchers Raquelle Mesholam-Gately, Larry Seidman, Matcheri Keshavan and Elena Molokotos (a Master’s level graduate student) have worked closely with the Consumer Advisory Board on this project.

We hope that the information obtained will be useful in enhancing effective mental health treatment. We expect the questionnaire to be completed and a study initiated by some time later in the spring, 2013. Stay tuned!

Save The Dates: Upcoming Events

Thursday, March 14, 2013 - Massachusetts Department of Mental Health’s 5th Annual Research Centers of Excellence Conference: “Innovations in Research: Lived Experience Leading the Way”

Friday, May 3, 2013: Baer Conference “Prevention and Management of Acute Psychiatric Crises in College and Graduate Students”

Location: One Autumn Street, Boston, MA 02215

Watch for further updates on www.cedarclinic.org under “News & Events”