As the following programs and initiatives will illustrate, patients who come to NewYork-Presbyterian Hospital for mental health care benefit from a tremendous number of resources, including world-renowned faculty, innovative treatment approaches, dedicated inpatient units, and a vast array of outpatient services. Collaborative programs among colleagues at both Columbia and Weill Cornell serve to strengthen programs at both campuses, which include a joint residency program in child and adolescent psychiatry and a combined fellowship in forensic psychiatry.

Center for Autism and the Developing Brain. NewYork-Presbyterian Hospital has joined with Weill Cornell Medical College and Columbia University College of Physicians and Surgeons to establish the new Center for Autism and the Developing Brain at the Hospital’s Westchester Division. Developed in collaboration with the New York Center for Autism and the Developing Brain, the Center combines cutting-edge research with comprehensive services to people with autism spectrum disorders (ASD) at every stage of life.

“By evaluating the strengths and weaknesses of each patient, and by monitoring and measuring that individual’s response,” says Dr. Lord, “we will fine-tune our ability to deliver the best possible short-term treatments while linking patients and their families to existing resources. In an integrated treatment approach, patients will receive a combination of expanded applied behavior analysis and other targeted therapies to improve social communication and motor and adaptive skills.”

Dr. Lord has pioneered the development of tools that have become the gold standard in autism diagnosis: the Autism Diagnostic Observation Schedule and the Autism Interview-Revised, and led a study that demonstrated that diagnoses of autism spectrum disorders vary widely across clinics. She recently served as senior investigator on a study examining the newly proposed DSM-5 criteria for ASD. The study, published in the *American Journal of Psychiatry*, is the largest to date that has tried to distinguish the differences between the diagnostic criteria for ASD in the fourth edition of the *Diagnostic and Statistical Manual of Psychiatry Update Winter 2013*.
Mental Disorders (DSM-IV) and the proposed revision in the fifth edition (DSM-5), which will be published in May 2013. According to Dr. Lord, “There is no substantial reason to fear that children who need to be diagnosed with autism spectrum disorders, and provided with vital services, will not be included in the new criteria in this updated manual. Rather, the changes proposed by DSM-5 are designed to better identify autism spectrum disorders and distinguish them from other conditions.”

Center for Eating Disorders. A collaborative treatment program of NewYork-Presbyterian Hospital, Weill Cornell Medical College, and Columbia University College of Physicians and Surgeons is helping individuals suffering from anorexia nervosa, bulimia nervosa, and related conditions to work toward recovery.

The integrated Center for Eating Disorders includes The Outlook at Westchester, a 17-bed inpatient eating disorders program overseen by Evelyn Attia, MD, Director of the Columbia Center for Eating Disorders. The Center brings together unprecedented clinical, research, and educational expertise and resources in order to address these challenging conditions. “We understand that eating disorders are serious illnesses, and we also believe that recovery is possible,” says Dr. Attia. “This is the only specialized psychiatric inpatient unit for eating disorders in New York State.”

In the associated Eating Disorders Research Unit at the New York State Psychiatric Institute, several studies are ongoing by Dr. Attia and her colleagues. One study led by Dr. Attia and supported by the National Institute of Mental Health is investigating the effects of the antipsychotic medication olanzapine on outpatients with anorexia nervosa. Additional studies focus on neurocognition in anorexia nervosa, with researchers examining behaviors that appear to be habit-like; the use of PET imaging to determine whether abnormalities in brain dopamine described in substance use disorders also occur in bulimia nervosa.

The Promise Program. In 2011, the Division of Child and Adolescent Psychiatry at NewYork-Presbyterian/ Morgan Stanley Children’s Hospital established the Promise Program to provide low-income families with comprehensive, state-of-the-art neuropsychological evaluations that otherwise would be unobtainable for this population. A key component of the program is early intervention, especially in the key academic years – first, second, and third grades. “These are critical times for children to be able to access the curriculum,” says Molly A. Algermissen, PhD, Clinical Director of the Promise Program.

Center for Practice Innovations. On April 1, 2012, Lisa B. Dixon, MD, MPH, joined the Department of Psychiatry at NewYork-Presbyterian/Columbia as the Director of the Center for Practice Innovations and as the Medical Director of the Lieber Clinic at the New York State Psychiatric Institute. Dr. Dixon also works closely with the New York State Office of Mental Health on a number of initiatives, including the “First Break” initiative, which provides services statewide for people experiencing their first psychotic episode.

“Early intervention in the treatment and possible prevention of serious mental illnesses, including psychotic illness, is both an exciting possibility and imperative for our mental health system,” says Dr. Dixon. “Research has demonstrated that many, if not most, persistent mental illnesses start in childhood or adolescence. Knowing that illness comes so early in life underscores the need for, and opportunities of intervening as soon as possible with accessible and high quality services. The result can be reduced disability and improved quality of life over a lifetime.”
Depression. George S. Alexopoulos, MD, founder and Director of the Weill Cornell Institute of Geriatric Psychiatry, directs a comprehensive program of studies that seeks to identify neurobiological abnormalities leading to depression in late life, with the explicit goal of developing targeted interventions. Dr. Alexopoulos' group has been one of the first to identify the biological significance of cognitive impairment in late-life depression. They have shown that specific types of executive dysfunction are common in geriatric depression and increase the risk of non-response to classical antidepressants. In subsequent studies, they proposed that the brain metabolic changes mediating late-life depression may result from three interacting causes: aging (e.g., aging-related inflammatory responses) or disease (e.g., vascular-related factors); frontolimbic abnormalities serving as predisposing factors; and biological responses to chronic experience of stress. Using this model, they developed two experimental treatment strategies that are now under evaluation. The first strategy consists of biological interventions targeting aging-related factors and an anti-inflammatory antibiotic to augment classical antidepressants to reduce aging-related inflammatory responses sustaining late-life depression. The second strategy consists of psychosocial interventions targeting both the depressed elderly patient and the patient’s ecosystem with a goal to maximize the patient’s behavioral competence and enable the patient’s human environment to accommodate the remaining disability.

Schizophrenia. A new “fast-fail” strategy to identify novel treatments for psychosis has been initiated by Columbia University Medical Center and the New York State Psychiatric Institute to fill the gap left by the retreat of pharmaceutical companies from the development of new drugs for mental disorders. “The knowledge we’ve gained about psychosis in the last decade, combined with new technology, is now making it possible to determine earlier than before if new compounds have potential,” says Dr. Jeffrey A. Lieberman, who is leading the new initiative funded by the National Institute of Mental Health. “The word fail in the strategy may sound odd, but the approach is designed to quickly weed out ineffective compounds at an earlier stage in clinical testing before much money and time have been spent and, at the same time, quickly identify compounds with more potential.” The new initiative takes aim at other brain systems and new molecular regions that are important in schizophrenia but have never been successfully targeted. “Ultimately the idea is to find early proof that a compound – or a similar molecule – could work and then submit the compounds to pharma,” adds Dr. Lieberman. “It’s a new paradigm for drug development, one that we hope will identify new promising compounds so pharma companies can be more confident taking them forward.”

In the most comprehensive study of its kind, Maria Karayiorgou, MD, Acting Chief of Psychiatric and Medical Genetics, New York State Psychiatric Institute, and her colleagues have identified dozens of new spontaneous genetic mutations that play a significant role in the development of schizophrenia, adding to the growing list of genetic variants that can contribute to the disease. Results, published in the online edition of *Nature Genetics*, demonstrated that many of the mutations were found to affect genes with higher expression during early-to-mid fetal development.

Alzheimer’s Disease and Psychosis. At Columbia University Medical Center, Davangere P. Devanand, MD, Director of Geriatric Psychiatry, has been studying antipsychotic treatments in Alzheimer’s disease patients with psychosis, agitation, or aggression. In a recent study, Dr. Devanand and his colleagues evaluated the risk of recurrence of symptoms after discontinuation of the antipsychotic medication risperidone in patients with Alzheimer’s disease. Results published in *The New England Journal of Medicine* showed that after clinical response to risperidone, there was an increased risk of worsening in symptoms of psychosis or agitation-aggression after the medication was discontinued in patients who had maintained improvement for four to eight months. “This increased risk of worsening in symptoms needs to be weighed against the risk of adverse effects with continued antipsychotic treatment,” says Dr. Devanand.
National Leadership. A clinician-scientist, Dr. Jack D. Barchas is internationally recognized for his contributions to fundamental and behavioral neurobiology, particularly in the area of neuroregulators. The Institute of Medicine has awarded him the Rhoda and Bernard Sarnat International Award and Medal in Mental Health honoring his many contributions to psychiatry, and the McDermott Medal, its highest award for service to the institution. Today, Dr. Barchas is Chairman of the Board of the Association for Research in Nervous and Mental Disorders and is a member of the Board of the American Psychiatric Foundation. He serves as the Site Director at Weill Cornell for the Pritzker Neuropsychiatric Disorders Research Consortium, which seeks to discover the neurobiological and genetic causes of major depressive disorder, bipolar disorder, and schizophrenia. He is also President of The Pasarow Foundation created by Robert J. and Claire Pasarow to provide awards for extraordinary scientific achievement in the fields of neuropsychiatry, cardiovascular disease, and cancer.

Throughout his 25-year career as a physician and as a scientist, Dr. Jeffrey A. Lieberman has pursued research on the neurobiology, pharmacology, and treatment of schizophrenia and related psychotic disorders. He has played a pioneering role in demonstrating the importance of early detection and intervention for psychotic disorders, and his work has advanced the understanding of the mechanisms of action and effectiveness of antipsychotic drugs. In May 2013, Dr. Lieberman will apply his administrative, clinical, and research expertise to his new role as the next President of the American Psychiatric Association. “The scientific foundations and the quality of psychiatric care are better now than at any time in human history and with the potential to improve rapidly,” says Dr. Lieberman, who is also a Distinguished Life Fellow of the APA. “However, unless psychiatric services and mental health care are adequately supported, both the burden of suffering and the costs of untreated mental illness will continue to rise. There is no health without mental health.”