Yale SCHOOL OF MEDICINE
Child Study Center

From the Director:

It is my pleasure to introduce this Annual Report of the Yale Child Study Center, an interdisciplinary department at Yale University School of Medicine. For over 50 years the Yale Child Study Center has been at the forefront of research, education, and clinical care in the field of child mental health. Our mission is to advance understanding of the biological, psychological, and social factors that influence children's development and to provide compassionate, high-quality care to children and their families.

Our team of dedicated professionals includes world-renowned experts in psychiatry, psychology, education, and more, who work together to improve the lives of children and families. We offer a range of services, including outpatient and inpatient clinics, research programs, and educational opportunities. Our work extends beyond the walls of our center, as we collaborate with schools, hospitals, and other organizations to promote the health and well-being of children and their families.

One of our key initiatives is the Yale System of Integrated Training (YSIT), which provides comprehensive training to a diverse group of trainees, including medical students, residents, fellows, and postdoctoral scholars. Through this program, we prepare future leaders in the field of child mental health.

We are deeply grateful to our supporters, including the Yale School of Medicine, our attending institutions, and our generous donors. Your contributions make it possible for us to continue our work and to expand our impact. Thank you for your support.

Sincerely,

Fred R. Volkmar, M.D., Director and Irving B. Harris Professor Chief of Child Psychiatry, Yale New Haven Children's Hospital
Accomplishments & Highlights

ACCOMPLISHMENTS

• Eighty five new proposals were submitted by CSC faculty during FY11 including 30 proposals to NIH. We had 25 new grants awarded and 16 brand new contracts awarded. During FY11 the Child Study Center garnered $5,509,151 ($4,623,611 DC, $885,540 IDC) in new research funding including a new grant from the Simons Foundation (M. State PI) in the amount of $1,658,114. The grant, entitled, “Whole Exome Sequencing of Simons Simplex Trios” proposes to use whole-exome sequencing to identify rare genetic defects in 400 families with a child affected with Autism Spectrum Disorders (ASD).

• New programs in anxiety, oncology mental health, developmental disabilities.

• Began a new study of effectiveness of IICAP (intensive child in home services program)

• New fellowship program in the area of adolescents and adults with autism (supported by Associates of the Center)

• With the support of an Associate of the Center new initiatives in training with Native American tribal colleges and universities.

• An international team lead by Young-Shin Kim completed the first comprehensive, total population study of autism prevalence.

• Our outpatient clinic provided services to nearly 1000 children and youth (over 11,000 individual sessions) fiscal year 2010-2011.

• Our work in the Neurogenetics program using next generation sequencing to identify the gene WDR62 as a cause of structural brain disorders was highlighted as one of the top scientific breakthroughs of 2011 by Science Magazine.

EVENTS AND OUTREACH

• Annual meeting of the Associates of the Center.

• Online lectures from undergraduate Autism course on Yale YouTube web site.

• Development of a regional outreach program for dissemination of information to parents and schools.

• Four Centennial celebration events during 2011 including one for pediatricians and primary care providers that will be available online for continuing medical education credits.

• Revised and updated website with an average of nearly 500 hits each day with nearly 175,000 in total during the past year.
PUBLICATIONS

- Nearly 400 scientific papers and chapters.
- 16 Books.
- 11 Journal Editors/Associate Editorships.

(see http://childstudycenter.yale.edu/publications10-11 for a full list)

FACULTY AND TRAINEE ACCOMPLISHMENTS

- Endowed Chair: Flora Vaccarino, M.D. Harris Professor of Psychiatry
- Jamie McPartland, Ph.D. named Atherton Investigator by NARSAD
- Laurie Cardona, Psy.D. received the 2011 Peterson Prize from Rutgers University
- Nancy Close was the recipient of the Jane Borne Award presented by the Connecticut Association for Infant Mental Health
- Drs. Bettyle Fletcher Comer and James P. Comer were honored by the Bank Street School for their outstanding contributions to education

NEW FACULTY MEMBERS

Mary Best Ph.D.
Gwen Lopez-Cohen M.D.

TRAINEE AWARDS

- Eric Arzubi, M.D., Yale Child Study Center fellow: Resident Physician Community Service Award by the American Academy of Medical Colleges
- Chris Hammond, M.D., National Institute of Mental Health Outstanding Resident Award
- Kyle Williams, M.D., and Tamara Vanderwal, M.D., AACAP Pilot Research Awards
- Ellen J. Hoffman, M.D. was granted the 2011 AACAP Junior Investigator Award

Child Study Center Physicians Recognized For Excellence Again By New York Magazine and Connecticut Magazine.

- Sandra P. Boltax-Stern, M.D.
- Julian B. Ferholt, M.D.
- Robert King, M.D.
- James Leckman, M.D.
- Janet A. Madigan, M.D.
- Jean P. Marachi, M.D.
- Andrés S. Martin, M.D.
- Robert S. McWilliam, M.D.
- Joan F. Poll, M.D.
- Kyle D. Pruett, M.D.
- Dorothy E. Stubbe, M.D.
- Fred Volkmar, M.D.

FACULTY PROMOTIONS

Kevin Pelphrey, Ph.D. to Associate Professor with tenure
Matthew State M.D., Ph.D. to Professor
Young-Shin Kim, M.D., Ph.D. to Associate Professor
George Anderson, Ph.D. to Senior Research Scientist
Denis Sukhodolsky, Ph.D. to Research Scientist
New Assistant Professors:
Michael Bloch, M.D., Frederick Shic, Ph.D., Hanna Stevens, M.D., Ph.D.
Research

INTRODUCTION

Research activities at the Child Study Center range from the study of basic genetic and brain mechanisms to family, cultural, and social policy issues relevant to children and families. Intrinsically interdisciplinary, our work attempts to advance knowledge and train the next generation of leaders in research. Work being conducted at the Center has recently been featured in stories in the New York Times and the Wall Street Journal as well as leading scientific journals including the Journal of the American Medical Association, Nature, and the New England Journal of Medicine.

AUTISM

Research on autism and related conditions has included studies of development, neuropsychology, speech-language and communication, the social brain, outcome, adaptive skills, neurobiology, genetics, and innovative treatments. The Autism Program is one of the National Institutes of Health Autism Centers of Excellence. Research activities include: early detection of autism in infants; studies of basic mechanisms of socialization such as babies’ preferential attention to the eyes, gaze and voice of others; clinical studies of diagnostic profiles and stability and predictors of outcome; studies of language acquisition and communication, including novel treatments to promote voice, language, and communication skills; studies of learning styles and remedial treatments capitalizing on identified strengths; functional neuroimaging studies; gene finding and related neurophysiologic pathways to social disabilities; and the study of new drugs to alleviate impairing symptoms as well as parent-training and treatments to improve competence.

James McPartland, Ph.D. demonstrates a clinical assessment. Photo credit: Robert Lisak
In the area of tics and Tourette’s disorder, Obsessive-compulsive disorder (OCD), and Attention Deficit hyperactivity disorder (ADHD), Child Study Center researchers have developed and tested novel behavioral, pharmacological, and physiological therapeutic interventions. Under the direction of Michael H. Bloch, M.D., M.S., the Child Study Center has been involved in testing the value of N-acetylcysteine (NAC) in the treatment of tics, OCD and trichotillomani (hair-pulling). NAC is a natural supplement which acts as an antioxidant and glutamate modulating agent. Lawrence Scahill, M.S.N., Ph.D, and Denis Sukhodolsky, Ph.D., continue to evaluate the Comprehensive Behavioral Intervention for Tics (CBIT). This intervention uses Habit Reversal Training (HRT) for the treatment of tics through two NIH funded clinical trials. James Leckman, M.D., has been involved in the development of new approaches for the treatment of tics, including initial testing of repetitive Transcranial Magnetic Stimulation (rTMS) and Deep Brain Stimulation (DBS) in the treatment of severe tics. This is proceeding in concert with Functional Magnetic Resonation Imaging (fMRI) studies showing brain regions that malfunction in TS and adapt with symptom remission. Dr. Bloch has also been funded by the National Institutes of Health to complete a longitudinal study of young adults who were evaluated more than a decade ago. The goal of his project is to identify changes in brain structure and function and to identify predictors of outcome based on the results of their initial evaluation at the Center as children. Together with the School of Epidemiology and Public Health, the group has been exploring the complex temporal relationships between antecedent psychosocial stress and physiological stressors (including streptococcal infections) and future exacerbations of tic and obsessive-compulsive symptoms. Through ongoing collaborations with the departments of Genetics, Neurobiology, Psychiatry, and Immunobiology, Child Study Center researchers have discovered genes, identified cellular abnormalities in postmortem brain tissue of patients with severe tic disorders, and explored the role of important mediators of the immune response in these disorders. Dr. Leckman continues his work with Dr. Susan Swedo in the Pediatrics Developmental Neuroscience Branch of the National Institute of Mental Health to study children with autoimmune forms of OCD. These projects are expected to improve our understanding of the etiology and pathogenesis of early onset OCD and to set the stage for the development of animal models and more efficacious treatments.

A generous bequest has established the Yale Child Study Center Program for Anxiety Disorders to further research and treatment of pediatric anxiety disorders, the most frequent mental health problem of children and adolescents. While the formal search for the director of the program continues, a busy clinical and nascent research program is underway under the leadership of Robert King, M.D., along with Lawrence Vitulano, Ph.D. and Heidi Grantz, M.S.W. Program fellow, Eli Lebowitz, Ph.D., is working on developing novel treatment strategies for otherwise treatment refractory anxious children, based on an understanding of how children’s anxiety can adversely shape family dynamics by coercively eliciting from parents counter-productive constant reassurance or efforts to help the child avoid anxiety. Several publications and an ongoing treatment trial based on this approach explore the potential benefits of offering parents guidance and support in minimizing excessive accommodation that may hamper the child’s recovery and lower motivation for treatment. Collaborative work with Michael Crowley, Ph.D. and the Laboratory of Developmental Neurophysiology explores the neurobiological roots of children’s vulnerability to anxiety. Dr. Crowley and colleagues have developed a novel, child-friendly, behavioral assessment which the team has used to show how reward-based brain processes support avoidant behaviors. This assessment has promise for identifying children “at-risk”. Dr. Crowley also has emerging lines of research examining heightened threat detection in child anxiety and the use of biofeedback to teach children to calm the “worried mind.”

Dr. Robert King
The Trauma Section, led by Steven Marans, M.S.W., Ph.D., offers clinic and community-based interventions for children and families impacted by trauma. The Trauma Clinic provides comprehensive assessment and treatment for children and families exposed to violence and other potential trauma who are referred by law enforcement, Yale-New Haven Hospital Sexual Abuse Clinic, the CT Department of Children and Families, and community based providers. In addition to utilizing existing evaluation and long-term treatment approaches, the Trauma Section has developed a brief evidence-based early intervention for children 7-18, which significantly reduces post-traumatic stress reactions and onset of PTSD by increasing communication and family support. The Child and Family Traumatic Stress Intervention (CFTSI) grew out of two decades of responding collaboratively with law enforcement and child protective services partners to provide acute and on-scene interventions to children and families who had been exposed to violence and other potentially traumatic events. As a result of this work, the need for an evidenced-based early intervention that would fill the gap between the provision of standardized acute interventions and evidence-based, longer-term treatments that are required to deal with enduring post-traumatic reactions became clear. In a recently completed randomized controlled trial, CFTSI was shown to significantly prevent the development of PTSD compared to a psychoeducational comparison condition. CFTSI is being implemented successfully at the Safe Horizon Child Advocacy Centers in New York City and through the Penn Center for Youth and Family Trauma Response and Recovery at the University of Pennsylvania. A national Learning Collaborative has been launched by the Trauma Section to train six agencies to implement CFTSI over the coming year. The Learning Collaborative approach focuses on spreading, adopting and adapting best practices across multiple settings, and on creating changes in organizations that promote the delivery of effective interventions and services. The ultimate goal is to provide high-quality training in best practices of trauma-focused treatments in diverse settings and to ensure the sustained use of those practices. The Trauma Section works in close collaboration with the Sexual Abuse Clinic of Yale-New Haven Hospital, and continues to work in partnership with the New Haven Police Department to respond to children and families referred following incidents of violence. As part of a specialized home-based intervention for children and families impacted by domestic violence, teams of police patrol officers, community outreach advocates, and child mental health professionals work together to provide information, support, and comprehensive social services. In addition, Dr. Carla Stover has developed the program, Fathers for Change, which provides treatment to fathers with co-occurring substance abuse and domestic violence issues. It is designed to utilize the parenting role to motivate fathers to decrease their use of violence and substance abuse and improve their parenting skills. A pilot evaluation of Fathers for Change is currently underway.

Clinical research in the section of Outpatient Services, led by Joseph Woolston, M.D., is focused on effectiveness of psychosocial treatments and salient treatment characteristics of children and families living in psychosocial adversity. Intensive, In-home Child and Adolescent Psychiatric Services (ICAPS) has started a multi-year randomized controlled trial, the Family Health and Development Project, that will examine effectiveness of ICAPS in comparison to care coordination in the treatment of children at risk for requiring institutional-based psychiatric treatment. The Outpatient Clinic for Children and Families is pursuing a multi-year investigation of treatment, client, and family factors that influence engagement in effective treatment. These research efforts are part of ongoing efforts to create a self-sustaining, self improving system of outpatient mental health care for children and families.
The Laboratory for the Study of Affective and Social Development in High Risk Families coordinated by Dr. Linda Mayes covers three related thematic areas—the impact of perinatal events, including prenatal drug exposure and/or maternal depression — on children's emotional, neurocognitive, and social development, the impact of early stressors, including growing up in economic adversity, on later stress regulation in adolescence and the relation to risk-taking behaviors including drug use, and the impact of substance use on parental sensitivity to infants’ cues including cries and facial emotional expressions. The research team has followed several cohorts of children longitudinally including one from birth through now age 16 and another from early school age to early adolescence. They are now enrolling two cohorts of families in collaboration with colleagues at the University of North Carolina and Baylor University to study the impact of addiction on the basic neural circuitry of attachment in first time mothers. The Mayes lab also collaborates with the Interdisciplinary Stress Consortium in the Department of Psychiatry with a focus on adolescence and the impact of early adversity on adolescent stress reactivity. The laboratory uses a range of methods from basic behavioral observation to dense array electrophysiology and neuroimaging.

Katarzyna (Kasia) Chawarska, Ph.D. leads the Yale Early Social Cognition Laboratory. Her work is focused primarily on young children with Autism Spectrum Disorders (ASD) as well as on infants who are at risk for developing the disorder due to genetic factors. Using advanced eye-tracking, computational, and statistical approaches, the lab examines face and gaze processing, regulation of social and nonsocial attention, and observational learning in young children with ASD. Recently, in collaboration with colleagues at the Statistics Department at Yale, the lab has been working on advancing the understanding of atypical patterns of morphological growth (including head size) in infants with ASD, and their relation to causes and symptoms of ASD. Dr. Chawarska and her research team have also been studying several aspects of parent-child interactions in infants at high risk for ASD, and the feasibility of adapting evidence-based naturalistic behavioral treatments to use with the infants and their parents. The work, which holds important implications for designing early diagnosis and intervention methods, is funded by grants from federal and private foundations. Dr. Chawarska also directs clinical operations of the Toddler Developmental Disabilities Clinic, a diagnostic clinic for toddlers suspected of ASD.

The Laboratory of Developmental Communication Disorders (LDCD), headed by Rhea Paul, Ph.D., CCC-SLP, engages in research and clinical services around children’s difficulties in speech, language, and communicative development. Research focuses on communication disorders in children with developmental disorders or at risk for such disorders. Recent findings include delays in the early vocal behavior of infant siblings of children with ASD. A recently completed randomized controlled trial of two methods of teaching speech to nonverbal preschoolers with ASD will help clinicians determine which approach will work best for particular children, based on their profile of pre-treatment skills.
PEDiatric Psychopharmacology and Psychosocial Intervention

Under the direction of Lawrence Scabell, M.S.N., Ph.D., the Research Unit on Pediatric Psychopharmacology and Psychosocial Intervention has launched three multisite clinical trials in the past year. The first is a five-year, federally funded study of parent training in young children with autism spectrum disorders and disruptive behavior. In this study, 180 children ages 3 to 7 will be randomly assigned to a systematic parent training program or a structured parent education and support program for six months. The parent training program was developed by Dr. Karen Bearss with funds from the Yale Center for Translational Science Awards. The parent training program teaches parents the principles and techniques of behavior modification, while the parent education program presents information on autism spectrum disorders – including, current status of interventions (medications and behavioral), genetics, school planning and long-term considerations. We expect that both treatments will be beneficial, but we predict that parent training will be more effective for reducing disruptive behavior and enhancing daily living skills.

The second study will evaluate the effectiveness of guanfacine for the treatment of school age children autism spectrum disorders accompanied by hyperactivity. Hyperactivity, impulsiveness, and distractibility are common complaints by teachers and parents of school age children with autism spectrum disorders. The standard medication for this set of problems are stimulant medications. We know from previous studies that stimulant medications such as methylphenidate (Ritalin) are not always effective for treating these problems in children with autism spectrum disorders. Guanfacine is not a stimulant. It has recently been approved for the treatment of Attention Deficit Hyperactivity Disorders in typically-developing children, but it has not been studied in children with autism spectrum disorders. This trial may expand the options for treating hyperactivity in children with autism spectrum disorders.

The third study also examines the effectiveness of guanfacine. But the focus of the study is on the treatment of tics in school-age children with Tourette’s syndrome. Guanfacine has been evaluated in children with Tourette’s syndrome, but these studies have not resulted in clear guidance on the use of this medication in children with Tourette’s syndrome. This study, which is funded by the Shire Pharmaceutical Company, is important because guanfacine is commonly used in the treatment of children with Tourette’s syndrome. The study was designed by Yale investigators and will be carried out independently from the company.

We have also begun a series of fledgling projects with experimental medications that, based on their pharmacological mechanism, may be helpful in autism or Tourette syndrome. These medications are not yet on the market and are only available through partnership with pharmaceutical companies. The studies begin with an initial trial in adults. If initial results are positive, we will proceed with trials in children.

DEVELOPMENTAL ELECTROPHYSIOLOGY

The Developmental Electrophysiology Laboratory (DEL) serves as a core resource for both the Child Study Center and the School of Medicine. Providing resources for dense array electroencephalography and assessments of psychophysiology, this DEL is an interdisciplinary program coordinated by Linda Mayes, M.D., James McPartland, Ph.D., and Michael Crowley, Ph.D. with collaborations in the departments of Neurosurgery, Psychiatry, Diagnostic Imaging, the Haskins Laboratories as well as the Child Study Center with additional collaborations at University College London. The DEL resources offer three electroencephalography labs and also basic physiology monitoring capabilities. Studies using the DEL resources involve infants, young children, adolescents, young adults, and elderly adults. A fourth lab, designed specifically for infants, is currently under construction and will expand capabilities to study brain development in the first year of life. The focus of the DEL is both on
the normative developmental progression of cortical maturation as well as electrophysiological markers of current psychopathology. Examples include Dr. Linda Mayes’ work (with Dr. Helena Rutherford) on parental processing of infant visual and auditory cues, Dr. James McPartland’s work on the the brain bases of social perception in normally developing children and those with autism, and Dr. Michael Crowley’s work on cognitive appraisal of consequences in risk-taking situations and his work on avoidance, threat detection, and worry in child anxiety. With funding through an NIMH Career Award, Denis Sukhodolsky, Ph.D. is using electroencephalography to evaluate habit reversal training on cortical control of tics. Examples of collaborations include new work with Judson Brewer, M.D., Ph.D. in Psychiatry on biofeedback and with Hal Blumenfeld, M.D., Ph.D., in Neurosurgery on cognitive processing in chronic epilepsy. This resource also provides training for beginning investigators in the electrophysiology methods relevant to behavioral, social, and cognitive neuroscience and serves as a core training resource for masters and doctoral students as well as summer research interns.

**CHILD NEUROSCIENCE**

Kevin Pelphrey, Ph.D., directs the Yale Child Neuroscience Laboratory along with associate directors, Brent Vander Wyk, Ph.D. and Martha Kaiser, Ph.D. Their program of research employs the techniques of social, cognitive, and affective neuroscience (neuroimaging, imaging genomics, eye tracking, and virtual reality) to understand the brain basis of autism and related conditions with the goal of improving diagnosis and treatment and prevention. Work has focused on brain mechanisms that underlie development of social cognition including social perception (the ability to evaluate the intents and goals of others by analysis of biological motion cues), theory of mind (the ability to make inferences about mental states of others), and perception and regulation of emotion. By studying normal ontogeny of brain mechanisms that underlie social cognition and abnormal development in children with disabilities, the Yale Child Neuroscience Laboratory is working to uncover the neurobiological substrates of social cognition.

**GENETICS**

Elena Grigorenko, Ph.D., heads a research team at the Center that focuses on a number of interrelated areas including: (1) genes involved in language disorders in a geographically isolated Russian population; (2) genes involved in learning disabilities and related cognitive processing, with special emphasis on individuals from minority or impoverished backgrounds in the US and other countries; (3) cognitive and linguistic adaptation of international adoptees in the US; (4) learning disabilities in Africa and their relationship to chronic infections and poverty; (5) intellectual giftedness and its manifestations around the globe; and (6) the interplay between genetic and environmental risk factors for conduct problems and the role of these factors in response to interventions in juvenile detainees in Connecticut.
The Laboratory of Developmental Neurochemistry (LDN) is directed by Dr. George M. Anderson who also directs the Core Resource Laboratory of the Yale Inter-Disciplinary Research Consortium on Stress, Self-Control and Addiction. The LDN has a record of extensive collaboration with investigators at Yale University, as well as a large number of national and international collaborations in the fields of biological psychiatry, psychopharmacology, and analytical chemistry. Research includes studies on the neurobiology of childhood neuropsychiatric disorders including autism, Tourette’s syndrome and ADHD, as well as adult depression, PTSD and addiction, with special interests in stress response systems, serotonin neurochemistry and psychopharmacology, and early biomarkers.

NEUROGENETICS

The Yale Program on Neurogenetics, co-directed by Matthew State, M.D., Ph.D. and Murat Gunel, M.D., the Nixdorff-German Professor of Neurosurgery, has continued its ongoing search for genes contributing to childhood neuropsychiatric and neuro-developmental disorders. Over the past year the group was the first to use a new type of approach to DNA sequencing to identify genes critical for the early development of the human brain, work cited by Science magazine as one of the top 10 scientific breakthroughs of 2011. This was the second time in the past 6 years that researchers from the Neurogenetics program have been accorded this recognition. The group has made substantial progress in gene discovery with respect to autism, intellectual disability, disorders of brain structure, neurovascular syndromes, and Tourette disorder and many of these findings are now being pursued as the basis for the development of novel therapies for these conditions.

MOLECULAR NEUROBIOLOGY

The Laboratory of Molecular Neurobiology, directed by Paul Lombroso, M.D., has focused on the ways learning and memory is disrupted in various disorders. This effort has centered on the study of regulatory proteins involved in synaptic plasticity in the brain. The group has characterized a family of proteins that normally oppose the strengthening of synaptic connections between neurons. This protein family, called STEP, removes glutamate receptors from synaptic membranes. These receptors are required for turning short-term memories into long-term memories. STEP levels are elevated in several disorders, including Fragile X syndrome, schizophrenia, and Alzheimer’s disease. The elevation of STEP has now been shown to contribute to the pathophysiology in these disorders, and this process is believed to lead to the cognition deficits in these disorders. A major focus of the lab is to discover small compounds that inhibit STEP activity that could be used to reverse some of the cognitive deficits that are present.

Associate Judith Meyers talks with Drs Fred Shic and Kasia Chawarska about work being done at the Yale Early Social Cognition Laboratory

Ruth Lord and Phyllis Cohen, Ed.D.
The Laboratory of Developmental Neurobiology is directed by Flora Vaccarino, M.D. and the efforts of this group have been to understand the factors that control the growth and differentiation of neural stem cells in the mammalian brain, including the human brain. Specifically, this laboratory is interested in how stem cells regulate the surface area growth of the cerebral cortex, the number of excitatory and inhibitory neurons in the brain and recovery from perinatal brain injury. We suspect that altered stem cell development is responsible for dysregulated brain overgrowth in autism and for deficiencies of inhibitory neurons in Tourette’s syndrome, autism, and other mental disorders. Hence, altered regulation of stem cells in embryonic and early postnatal development can have long-term effects on inhibitory brain systems that regulate impulsive behavior and cognition. This work has focused not only on understanding how the brains of mammals develop and maintain the circuits needed for cognition and social interaction, but also on how this circuitry is modified by environmental enrichment or hypoxic insults and stress. In the past year, Dr. Vaccarino and her team have begun a new study on the analysis of gene transcripts by RNA sequencing in the cerebral cortex and basal ganglia of persons with severe Tourette’s syndrome. The Vaccarino lab has also begun and is maintaining a repository of human fibroblasts and induced pluripotent stem cell (iPSC) lines and is currently working on the neural differentiation of these cells, comparing normal individuals with those affected by autism spectrum disorders with increased brain size. This project has been created under the auspices of the Program in Neurodevelopment and Regeneration, and with funds from NIMH and the Simons Foundation.

The Program in Neurodevelopment and Regeneration was founded in 2009 by Dr. Flora Vaccarino and other investigators within the Child Study Center and the Departments of Genetics, Neurobiology, Neurology, Pathology, Biomedical Informatics, and Molecular Biophysics and Biochemistry. The objectives of the Program are to generate induced pluripotent cells (iPSC) by reprogramming somatic cells from patients with neuropsychiatric disorders and use these cells to study neuronal development in vitro in cells derived from specific individuals. This will allow different investigators participating in this program to perform cellular, molecular, genetic, epigenetic and functional studies of these cell lines. The Program in Neurodevelopment and Regeneration has begun a repository of fibroblasts and iPSC lines from patients with autism spectrum disorders and this year will begin collecting fibroblasts from patients with Tourette’s syndrome. With funding from NIMH, the State of Connecticut, the Simons Foundation, and the Brain and Behavior Research Foundation (NARSAD), investigators in this program are performing cellular and functional studies of human neural cell development to understand the biological mechanisms of neuropsychiatric disorders. The ultimate scientific goals of the program are to correlate cellular and functional events in neural development with underlying changes in genomic sequence, epigenomic imprinting and regulation of gene expression, and develop in vitro models for small molecules/drug screening for neuropsychiatric disorders.
Philosophy and Mission: Our mission is to provide the full range of the highest quality services to children and families dealing with developmental and psychiatric disorders. We strive to continuously improve our services through ongoing evaluation. Children and families whom we serve are full partners in this process. We extend our treatment approaches through training, research publications, and a range of outreach activities.

Overview of Services: The Child Study Center/Department of Child Psychiatry provides an array of hospital-based and outpatient services for children and their families who range in age from infancy to young adulthood. These children cope with various problems ranging from the impact of acute and chronic trauma to the effects of genetic disorders. At Yale-New Haven Children’s Hospital, we offer the full continuum of hospital-based services from emergency evaluation, inpatient treatment, and partial hospital programs. The outpatient programs at the Child Study Center provide services for the entire spectrum of developmental and psychiatric disorders. The use of practice generated data helps us continuously refine our program and we are committed to an integrated treatment approach so that children and families served can move from one service to another seamlessly.

Services Delivered: In the past year more than 3,000 children and families were provided some form of clinical assessment. These included outpatient and specialty clinical programs (18,000 visits), the Emergency Department at Yale-New Haven Hospital (1,200 visits), consultations in Yale-New Haven Hospital (300 visits), and admissions to our inpatient and partial hospital programs (over 300 and 50 visits respectively).

Child Study Based Services: The Outpatient Clinic, an Enhanced Care Child Guidance Clinic, has continued to expand its delivery of data informed services by providing over 11,000 patient visits to children and families living in New Haven metropolitan area. These services include evidenced based treatments for children struggling with disruptive behavior, anxiety, and trauma. Clinical research at the Outpatient Clinic is focused on understanding patient, family and environmental characteristics that influence successful treatment outcomes. In addition to our outpatient clinic, our outpatient services include specialized programs in Anxiety Disorders, Autism & Developmental Disabilities, Trauma, Psychological Assessment and Learning Disorders, Tic Disorder/Obsessive Compulsive Disorder, and Young Child Clinic. These specialty clinics are fully represented at Child Study Center at Madison, a two year old practice that is also a training site for child psychiatry. The Center has been a national leader in developing new models of clinical care to provide services in homes and other settings in an effort to prevent child placement outside the family and support families coping with multiple problems. These programs include our Intensive In-home Child and Adolescent Psychiatric Service (IICAPS), Intensive In-home Child and Adolescent Reintegration Service, Family Based Recovery, Intensive Family Preservation Program, Intensive Safety Planning, and Program for HIV Affected Children & Families. With the leadership of Child Study based IICAPS Services, IICAPS is now delivered throughout Connecticut, with almost 2,000 children and families having completed treatment in the past year. IICAPS Services has initiated the Family Health and Development Project, a randomized controlled evaluation of the efficacy of IICAPS.

Yale-New Haven Hospital Based Services: In its 25th year of operation, the Children’s Psychiatric Inpatient Service (CPIS) continued to provide comprehensive psychiatric, psychosocial and educational evaluation, as well as short-term treatment, for children ages 4 to 14 with serious neuropsychiatric, developmental, and behavioral problems. Parents are encouraged to join the multidisciplinary treatment team to help better understand their child, initiate active treatment, and develop an effective, comprehensive discharge plan. All children are enrolled in our Connecticut State certified special education school during their inpatient stay. In addition to the central role of child psychiatry and psychology trainees in the unit’s operation, CPIS continued to serve as the central hub of training for third and fourth year Yale medical school students. The CPIS has maintained its gain in substantially reducing the use of seclusion, and in eliminating the use of physical restraints. This effort, which began in earnest in 2005, has been replicated, serving as a
model to other programs in this country. The Child Psychiatric Partial Hospital Program serves children 4 to 14. In addition to children discharged from an inpatient setting, the program accepts referrals from community providers, clinics, and schools.

Building on a long-standing tradition of excellence in treating cancer at Yale, the Section of Pediatric Oncology, in partnership with the Child Study Center, has developed a model program in Pediatric Oncology Psychosocial Services to address this unmet need among children and families confronted with a cancer diagnosis. For children with cancer and for their families, early mental health intervention and assessment is vital to reducing the likelihood of developing serious adjustment problems and to promoting adaptive functioning. The pediatric oncology psychosocial team provides a range of psychosocial services to children and their families during their outpatient and pediatric oncology clinic visits or inpatient admissions at Yale-New Haven Hospital. The Yale program is committed to strengthening the link between physical care and emotional health in order to meet the growing need among cancer patients, survivors, and their families. In this embedded providers model, mental health clinicians work in partnership with members of the medical team to provide a continuum of care. This model of care facilitates multidisciplinary communication, influences medical and psychological care, and fosters collaborations in research and training.
Education and Training

CHILD AND ADOLESCENT PSYCHIATRY

We offer a fully accredited two-year clinical child and adolescent psychiatry training program for six to eight fellows annually. Fellows choose a training emphasis within either the Child Study Center/Riverview Hospital for Children and Youth that has a primary focus on experiences with seriously emotionally disturbed children in a public psychiatry setting; or the New Haven Track which highlights specialty clinic and innovative models of evaluation and treatment. The Albert J. Solnit Integrated training program is a 6-year academic training track that accepts two trainees annually. This track emphasizes research training in pediatric psychiatric disorders and developmental neuroscience embedded within a rigorous clinical curriculum. All fellows are immersed in intensively supervised clinical and didactic experiences within a multidisciplinary and collaborative model of care. Child and adolescent psychiatry graduates pursue careers in academic child and adolescent psychiatry, or eclectic careers providing comprehensive assessment, treatment, and advocacy to children and families with a range of psychiatric disorders in a variety of mental health care settings. Our graduates frequently become leaders in the field.

PSYCHOLOGY TRAINING PROGRAM

The Psychology Training program is a two-year integrated fellowship program designed to develop leaders in research, teaching, clinical services, and advocacy for medically underserved populations. During the first year, fellows complete our American Psychological Association accredited pre-doctoral internship, which emphasizes community-based intervention and psychological assessment. During the second year, fellows focus on research, clinical services to specialized populations, and hospital-based work with children suffering from severe psychopathology. Trainees select one of five areas of specialization: Autism, Anxiety Disorders, Early Childhood, Pediatric Psychology, and Children and Trauma. Each fellow has an individualized course of study and engages in clinical services, consultation, teaching, and research with these specialized populations over their two years at the Child Study Center. The Psychology Training program continues to attract highly skilled students from leading universities around the country. Program graduates have gone on to a variety of careers in academia, hospital-based practice, community-based practice, and the public policy arena.

SOCIAL WORK

The post-graduate social work training program offers a one-year fellowship, which includes a rich array of multi-disciplinary and discipline-specific didactics along with intensively supervised direct clinical experience within the Child Study Center’s outpatient and in-home clinical programs. Graduates pursue careers in clinical practice, administration, and public policy arenas.
RESEARCH TRAINING
The Center’s NIH funded research training program in childhood-onset neuropsychiatric disorders is completing its 26th year. A broad range of disciplines are represented with postdoctoral trainees from a number of disciplines ranging from services research to genetics, developmental and cognitive neuroscience, in vivo brain imaging, clinical trials, biostatistics, and evidence-based medicine. A major strength of the program continues to be its interdisciplinary character. The Albert J. Solnit Integrated Research training program, which focuses on training the next generation of academic leaders in child and adolescent psychiatry, has now been in place since 2004. We are fortunate that a number of the recent graduates of these programs have elected to remain at Yale on our faculty including: Hanna Stevens, M.D., Ph.D. and Michael Bloch, M.D., M.S.

MEDICAL STUDENT TEACHING
Course work is provided in child development and developmental psychopathology. The Donald Cohen/Klingenstein Fellowship Program, funded by the Klingenstein Foundation, provides mentored clinical experiences with children and families for first and second year medical students. During years 3 and 4 medical students may select a child and adolescent psychiatry emphasis for their psychiatry clinical rotation. Medical students frequently work with faculty in research.

MSC IN PSYCHODYNAMIC DEVELOPMENTAL NEUROSCIENCE
The masters program in psychodynamic developmental neuroscience is a joint program between the Yale School of Medicine/Child Study Center and University College London and the Anna Freud Centre. The program is entering its sixth year and is attracting scholars from around the world. While at Yale, students attend classes to learn about neuroimaging techniques and their application in clinical settings, as well as seminars discussing both historical and contemporary psychoanalysis. Students are mentored by Child Study Center and Yale faculty in completing a research thesis that incorporates both psychoanalytic and neuroscientific theory. The research thesis includes the analysis of both behavioral and/or neuroimaging data, and themes have included social and emotional processing in autism, adolescent risk-taking, and maternal emotion regulation and reflective functioning. This work has laid the foundation for published empirical studies and review papers in journals relevant to psychology, psychiatry, and neuroscience. Approximately half of the graduating students continue into Ph.D. and research programs with the remaining graduates beginning clinical training or other employment opportunities.

Associates Chuck and Carol Schaefer with Dr. Larry Vitulano
Community and School-based Services

IN-HOME CLINICAL PROGRAMS (IHCS)

Clinical services whether delivered in a clinic, hospital, school, or in-home venue share a common goal of helping children to maximize their ability to develop into functioning individuals and adapt to the expected and unexpected vicissitudes of their lives. Child Study Center clinical faculty and trainees provide a range of developmentally informed, clinically responsive, theory and research based services to promote positive child and family functioning in the real world. By taking some of these services directly into the homes, schools, and communities in which children live, we enhance the accessibility, acceptance, availability and appropriateness of our efforts and recognize the importance of an ecological approach to mental health care. This section describes some of these programs.

IN-HOME CLINICAL PROGRAMS (IHCS) Five separate but theoretically related intensive home-based programs offer population specific interventions for families with children whose behavioral problems are responsive to or exacerbated by persistent, severe environmental stress, often affecting the entire family system. Directed by Jean Adnopoz, M.P.H. with Joseph Woolston, M.D., these programs treat children and parents in an effort to maintain the integrity of the family structure, meet the mental health needs of the child, recognize the stresses associated with parenting, and reduce the probability that the child’s primary relationships will be substantially disrupted. At Yale, from July 1, 2010 to June 20, 2011, these programs served 720 families, many with more than one child who received service. Two treatment models developed at Yale and replicated throughout Connecticut are Intensive In-Home Child and Adolescent Psychiatric Service (IICAPS) which served 192 children with psychiatric disorders severe enough to hospitalize them or place them at risk for hospitalization and 90 additional children who were also involved in the juvenile justice system (IICAPS/CSSD). The second treatment model is Family Based Recovery (FBR) a combined drug treatment and parent/child relationship program for families in which children are affected by parental substance abuse. FBR served 28 families in the greater New Haven area. Statewide, IICAPS provided treatment for close to 2,000 children and families at 20 sites; while FBR served 167 families at 6 sites.

Intensive Family Reintegration Service (IICARS), a program for children and adolescents returning to the community from long-term residential placements, provided service to 98 youth and their caregivers; while Intensive Family Preservation (IFP) which along with FBR and IICARS is funded by the Department of Children and Families (DCF), primarily for treatment of children in the Protective Service system, served 257 families. With the support of the Probate Court we initiated an IPF program for families in which the court has an interest and placement disruption appears likely. Fifty-four children and families received service from Positive Intervention for Families with HIV/AIDS (PIFA). Amongst this year’s most significant achievements has been the implementation of the Family Health and Development Project, (FHDP) a randomized trial of the IICAPS model, which is designed to test its effectiveness.

SCHOOL DEVELOPMENT PROGRAM (SDP)

Developed by child psychiatrist Dr. James P. Comer and colleagues at the Yale Child Study Center in collaboration with the New Haven Public Schools, the School Development Program (SDP) is a research-based, comprehensive K-12 education reform program grounded in the principles of child, adolescent, and adult development. First introduced in two low-achieving schools in New Haven in 1968, over the years the SDP has been implemented in hundreds of schools in more than 20 states and the District of Columbia, Trinidad and Tobago, South Africa, England, and Ireland.

Dr. Comer and the SDP faculty work at the local, state, and national levels to infuse knowledge of the developmental sciences into the policies and practices of schools, districts, schools of education, and education policy makers. For example, at the national level he has been working with organizations such as the National Council for Accreditation of Teacher Education (NCATE), the American Association of Colleges of Teacher Education, and other groups to increase the application of the developmental sciences in educator preparation programs.

World renowned early childhood scholars and policy makers meet in Bellagio, Italy to draft the evidence framework to inform global and national policies for young children.
Currently at the local level the SDP is providing professional development and implementation support to schools in New Haven, Connecticut and Hartsville, South Carolina. Dr. Comer is exploring systemic implementation of the SDP model in high-needs schools and districts with the Connecticut State Department of Education and the State Board of Education. For more information about the School Development Program, please see:
www.schooldevelopmentprogram.org
www.youtube.com/comersdp

THE YALE AUTISM RESOURCE PROGRAM

Supported by Associates of the Center, the Yale Autism Resource Program (YARP) is concerned with bridging the gap between research and its application. This new program conducts outreach activities at various levels: local, regional, national, and international. Activities have included a range of lectures, workshops, onsite training, collaboration, and publications. Brian Reichow, Ph.D., a special education teacher, and others work with school districts in the state and region. As part of this program two books for parents and teachers and a series of freely available lectures on autism (available at www.autism.fm) have been produced.

PSYCHOBIOLOGY OF PARENTING AND PARTNERSHIPS

Started a year ago, the Program on the Psychobiology of Parenting and Partnerships is a consortium of investigators in the Center and in the Department of Psychiatry who focus on parenting and adult partnerships with addictive disorders. Studies within the group include programs to enhance parenting and marital/parental relationships, the role of emotional self-regulation in parenting development, how the neuroscience of parental care informs interventions for families at risk, twin, adoption and molecular studies on the interplay of social and genetic influences on parenting and adult partnerships and how to introduce an intergenerational perspective in psychiatric and pediatric resident training.
Social Policy & International Outreach

INTRODUCTION

We have a 100-year history of freely giving away science in an effort to improve the laws and policies that impact our children and families. We continue to expand on this important aspect of our work at local, state, federal, and global levels.

THE EDWARD ZIGLER CENTER IN CHILD DEVELOPMENT AND SOCIAL POLICY

The Zigler Center, directed by Walter S. Gilliam, Ph.D. and founded in 1978 by Edward Zigler, Ph.D., is responsible for much of the domestic and international policy efforts regarding children and families. The mission of the Zigler Center is to bring the results of research on child development into the policy arena, in order to improve the lives of children and families through informed social policy. Although the Zigler Center is a component of the Child Study Center, its affiliated faculty represent a broad array of departments within the university, such as psychology, pediatrics, nursing, law, public health, economics, political science, and sociology.

A primary service of the Zigler Center is providing policy consultation to state, federal, and international governmental bodies. The Zigler Center has been instrumental in the development and support of federal and state programs for children, such as Head Start, Early Head Start, and state-funded prekindergarten, which annually serve almost two million children nationwide. Our faculty works closely with leading political figures in the U.S. and abroad on initiatives such as the federal Family and Medical Leave Act, obtaining Connecticut’s 16-week family leave, and assisting over 40 countries in improving their early childhood development policies. Through our School of the 21st Century program, we provide support and technical assistance to more than 1,300 public schools across the nation undergoing comprehensive school reform and host an annual conference of educational leaders to support this effort. Our Mutt-i-grees social and emotional curriculum, developed by Associate Director Matia Finn-Stevenson, Ph.D., is being implemented in preschool and elementary school programs in several states. This innovative curriculum uses dogs and puppets to teach young children the social and emotional skills they need for educational and life success. International efforts, coordinated by Pia Rebello Britto, Ph.D., are highlighted by the Zigler Center’s role as the official secretariat for UNICEF’s international work on bridging developmental science and policy, and ongoing collaborations in several countries, including a new set of collaborative projects with the Ministry of Education in the People’s Republic of China. In addition to policy consultation, we conduct rigorous evaluations of large scale social programs, such as our ongoing statewide random-controlled evaluation of the Early Childhood Consultation Partnership, an early childhood mental health consultation service infused into child care programs throughout Connecticut. This program is now serving as a model for several states and has attracted considerable federal attention, especially from the Congressional Black Caucus which has endorsed it as a positive means for reducing preschool expulsions.

The Zigler Center Fellowship program, coordinated by Sandra Bishop-Josef, Ph.D., trains each year more than 50 young emerging professionals across a variety of disciplines to work at the intersect of child development research and policy construction, having graduated over 650 leaders, including the Education Deans at Stanford and Harvard and prominent figures in academia, federal and state government (including the incoming
Commissioner of Education for Connecticut), and advocacy. Our course on child development and social policy has the distinction of being one of only two courses offered at Yale that is open to and regularly attended by the public, with many of the guest lectures by prominent leaders around the globe accessible as free netcasts. Each year, our fellows are treated to a trip to Washington to meet with federal officials to learn about how policy is developed and experience firsthand the legislative and executive process.

The Center’s mission to understand and help children and families has no geographical boundaries. Consequently, we work with organizations, research collaborators, and clinical programs in 70 countries around the world. This includes collaborative studies, programs and policies, as well as assisting in the development of programs to train professionals who serve children and their families such as an International Training School for Infancy and Early Years (ITSIEY) coordinated jointly by the Center with the Anna Freud Centre and Tavistock Clinic in London. The Center also has long standing relationships with the International Association of Child and Adolescent Psychiatry and Allied Professions (IACAPAP), the World Health Organization, UNICEF, UNESCO and other UN agencies. We bring the world to the Center through convening conferences and inviting scientists clinicians and practitioners to learn at the Center and to share their expertise to improve our own work. We take the Center to the world when we visit other countries to conduct training, research and policy development and analysis. We also encourage and facilitate international learning experiences for our trainees. Teaching and learning are wonderfully reciprocal and linked with our research and scholarship so that international work improves all that we do and disseminates the latest information across geographic and cultural boundaries to improve services, patient care and policy both within the U.S. and around the world. One of our goals during the coming year is to more actively use web-based technologies for international outreach. As noted previously one of our accomplishments this past year was the development of a set of teaching tools on autism now posted on the Yale YouTube web site and available around the world. This work, supported by interested Associates, is one example of the way we can extend our work globally. Major continuing collaborations include our work with the Anna Freud Center and our joint Master of Science program with University College London. This multidisciplinary program bridges neuroscience and developmental psychopathology and brings a range of young scholars to the Center on a regular basis. Additionally the Bridge programs with the Anna Freud Centre and UCL offer regular clinical training conferences and doctoral/postdoctoral research experiences. Other long-standing collaborations include a number of projects in Israel, Russia, Italy, and other European countries along with several multi-site international research projects in low and middle income countries.

A student at the kindergarten program at Renmin University of China in Beijing teaches Dr. Walter Gilliam how to say “ice cream” in Chinese, as her classmates and Postdoctoral Associate Dr. Tong Liu watch.
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2010 - 2011 Expenses

- Assessments 19.00%
- Non Salary Expenses 30.00%
- Fringe Benefits 13.00%
- Support Staff 13.00%
- Faculty 25.00%

2010 - 2011 Revenue

- Grants & Contracts 65.00%
- Sabbatical Support 1.00%
- Hospital 3.00%
- Other 6.00%
- Endowments 10.00%
- Gifts 6.00%
- General Appropriations 1.00%
- Clinical Operations 8.00%
The Associates are committed and dedicated partners who advance the goals of the Center in both science and service. They share our vision, advocate for our mission, and support our work locally, regionally, nationally, and around the world. This group began in the late 1970’s when then Director Albert J. Solnit met with Irving Harris who shared the Center’s vision for fostering children’s mental health and development and who organized a small group to interact with the faculty, exchange ideas, and share their own experiences with children. Under the subsequent leadership of Dr. Donald Cohen, the Associates began meeting annually and now includes several hundred individuals from both the U.S. and around the world. An Executive Council of this group meets several times a year to foster communication between faculty of the Center and interested friends, corporations, and foundations.

The Associates have encouraged new lines of research and service by providing seed funding for new, cutting edge programs. They have supported basic and clinical research as well as new initiatives in training and dissemination of findings. The support of the Associates has fostered the careers of a number of young scientists and clinical scholars. Over the past year the Associates of the Center have supported a number of new initiatives including:

- A series of events celebrating the 100th anniversary of the Center – including an educational event for pediatricians available online
- Basic research in genetics and neurobiology
- Early intervention programs designed to support the development of infants at risk
- New initiatives in autism including a new program of training focused on adolescents and adults, translation of research methods to school settings, and dissemination of course work (via Yale YouTube) and books to help parents and teachers around the world
- Innovative programs to support treatment of Tourette’s syndrome as well as Obsessive Compulsive Disorder and other anxiety disorders
- A new program to support the mental health needs of children with cancer and for helping parents with cancer support their own children
- The development of in-home services for vulnerable children and families and coordination with the range of community services available
- Our pioneering child psychiatry integrated training program
- A new program designed to bring students from Native American colleges to Yale for work on child development issues which brought 14 students to campus for training this summer
- Each October, the Center invites our Associates to New Haven for two days to hear presentations about current and planned clinical, educational, and research programs, to participate in group discussions, and to meet with individual faculty members engaged in work of mutual interest.

**EXECUTIVE COUNCIL**

Phyllis Cohen, Ed.D.
Deborah Hilibrand (Chair)
Thomas Israel
Richard Joslin
Diana Levinson
Prisca Marvin
Barbara Nordhaus, M.S.W.
Judith Rivkin
Lolli Ross
Carol Schaefer
John Schowalter, M.D.
Alison Tepper Singer
Susan Turben
David Wittels

**ASSOCIATES OF THE CHILD STUDY CENTER – PARTNERS IN SCIENCE AND SERVICE**
Ladder Faculty, Coordinators & Training Directors

JEAN A. ADNOPENZ, M.P.H.
Clinical Professor, Director of In-Home Clinical Services

Interests: Effectiveness of treatment models that provide intensive, home-based, family focused care for children who have experienced psychiatric hospitalization or are at risk of placement because of chronic pervasive, stress secondary to neglect, violence, parental substance abuse, or chronic illness.


GEORGE M. ANDERSON, PH.D.
Senior Research Scientist

Interests: Neurochemical research on childhood neuropsychiatric disorders including autism, Tourette’s syndrome, and ADHD. Special interests include central and peripheral serotonin, the pineal hormone melatonin, and stress response systems.


KARYN BAILEY, M.S.W.
Clinical Social Worker, Director of Social Work training

Interests: Supporting families of young children with autism.

MICHAEL H. BLOCH, M.D., M.S.
Assistant Professor

Interests: Tourette’s syndrome, OCD and trichotillomania across the lifespan.


PIA R. BRITTO, PH.D.
Associate Research Scientist

Interests: International early childhood programs and policy.


LAURIE CARDONA, PSY.D.
Chief of Psychology, Associate Research Scientist, Co-Director of the Child Study Center Pediatric Consultation-Liaison Service

Interests: Cognitive-Behavioral interventions to address severe childhood psychiatric disorders.


KATARZYNA (KASIA) CHAWARSKA, PH.D.
Associate Professor; Director, Toddler Developmental Disabilities Clinic

Interests: Autism Spectrum Disorder, Diagnosis and Treatment, Social Development, Infancy.

NANCY L. CLOSE, PH.D.
Assistant Professor

Interests: Evaluation and treatment of young children, attachment and reflective functioning, early childhood education, reflective programs for young parents, Minding the Baby.

PHYLLIS COHEN, ED.D.
Associate Clinical Professor

Interests: Child psychoanalysis, autism and early childhood.

JAMES P. COMER, M.D., M.P.H.
Maurice Falk Professor of Child Psychiatry; Associate Dean, School of Medicine

Interests: The application of child and adolescent development and public health principles to school functioning, student development and academic learning.


MICHAEL CROWLEY, PH.D.
Associate Research Scientist; Associate Director, Developmental Electrophysiology Laboratory

Interests: Child and adolescent anxiety, biofeedback, social affective neuroscience, emotion regulation, adolescent risk taking, attachment processes.


CHRISTINE S. DAUSER, PSY.D.
Associate Research Scientist; Director of the Yale Outpatient Psychiatric Clinic for Children

Interests: Use of engagement strategies in an outpatient setting; predictors of early attrition in treatment; Impact of goal striving on reducing attrition.

WALTER S. GILLIAM, PH.D.
Associate Professor of Child Psychiatry and Psychology; Director, The Edward Zigler Center in Child Development and Social Policy

Interests: Dr. Gilliam’s research involves early childhood education and intervention policy analysis, ways to improve the quality of prekindergarten and child care services, and effective methods for reducing classroom behavior problems and reducing the incidence of preschool expulsion.


MICHELE GOYETTE-EWING, PH.D.
Director of Psychology Training, Associate Research Scientist

Interests: Psychological assessment, learning and developmental disorders.


ELENA GRIGORENKO, PH.D.
Associate Professor

Interests: Cognitive development, learning and language disorders, intelligence, giftedness, decision-making, juvenile delinquency, conduct disorders, etiology of developmental disturbances.

ROBERT KING, M.D.
Professor; Medical Director of the Tourette’s/OCD and Anxiety Disorders Clinic

Interests: Tourette’s, OCD, PANDAs, Anxiety disorders and adolescent suicide in U.S. and in Israel.


JAMES LECKMAN, M.D.
Nelson Harris Professor


PAUL J. LOMBROSO, M.D.
Elizabeth Mear and House Jameson Professor, Child Study Center and Departments of Psychiatry and Neurobiology, Member Interdepartmental Neuroscience Program and Director, Laboratory of Molecular Neurobiology

Interests: My laboratory studies mechanisms by which cognitive deficits arise in several neuropsychiatric disorders, including fragile X syndrome, schizophrenia, and Alzheimer’s disease.


STEVEN R. MARANS, MSW, PH.D.
Harris Professor of Child Psychiatry, Professor of Psychiatry, Director of the National Center for Children Exposed to Violence (NCCEV)

Interests: Child and adolescent psychoanalysis and psychotherapy; early intervention and prevention of PTSD; response to terrorism and natural disaster.

ANDRÉS MARTIN, M.D., M.P.H.
Riva Ariella Ritvo Professor and Director of Medical Studies. Medical Director, Children’s Psychiatric Inpatient Service, Yale-New Haven Children’s Hospital

Interests: Psychosocial aspects of childhood cancer, inpatient psychiatric care, pediatric psychopharmacology, and medical student education.


JAMES C. MCPARTLAND, PH.D.
Assistant Professor, Director of Undergraduate Studies

Interests: Brain bases, diagnosis, treatment of autism spectrum disorders.


BARBARA NORDHAUS, M.S.W.
Assistant Clinical Professor

Interests: Psychoanalysis, divorce and custody issues.

RHEA PAUL, PH.D., CCC-SLP
Professor

Interests: Communication disorders in autism; preliteracy development in disadvantaged preschoolers.


KEVIN A. PELPHREY, PH.D.
Harris Associate Professor, Director of the Child Neuroscience Laboratory

Interests: Social neuroscience and autism.


YANN B. PONCIN, M.D.
Assistant Professor. Medical Director, Child Psychiatric Consultation Service to the Pediatric Emergency Department and Child Psychiatry on Pediatrics, Yale-New Haven Children’s Hospital. Medical Director, In-Home Child & Adolescent Reintegration Service (ICARS), Intensive In-Home Child & Adolescent Psychiatric Service (IICAPS), Intensive Family Preservation (IFP), and Positive Intervention for Families with HIV/AIDS (PIFA)

Interests: Care of individuals and their families who present with complex psychosocial distress across multiple domains and in crisis.

KYLE D. PRUETT, M.D.
Clinical Professor of Psychiatry and Nursing

Interests: RCT of intervention to prevent and reduce childhood abuse and neglect in at-risk families by positive paternal engagement with very young children.


DAVID REISS, M.D.
Clinical Professor

Interests: The interplay of genetic and social influences on development across the life span; links between childhood and aging; criteria for disorders of relationships.


LAWRENCE D. SCAHILL, M.S.N., PH.D.
Professor of Nursing & Child Psychiatry


JOHN E. SCHOWALTER, M.D.
Albert J. Solnit Professor Emeritus

Interests: Adolescence.

MARY SCHWAB-STONE, M.D.
Associate Professor

Interests: Consultation liaison psychiatry, mental health and religion interface, psychiatric epidemiology.


FREDERICK SHIC, PH.D.
Assistant Professor

Interests: Visual social cognition in autism; eye-tracking; augmentative and alternative communication.

Recent Publication: Sanders, S.J., Ercan-Sencicek, A.G., Hus, V., Luo, R., Murtha, M.T., Moreno-De-Luca,
DENIS G. SUKHODOLSKY, PH.D.
Research Scientist

Interests: Effectiveness and mechanisms of cognitive behavioral therapy for children with neuropsychiatric disorders.


FLORA M. VACCARINO, M.D.
Harris Professor of Child Psychiatry and Professor of Neurobiology

Interests: Neural stem cells; cerebral cortex; neuronal progenitors; tyrosine kinase growth factors; excitatory neurons; GABAergic neurons; postmortem human brain; induced pluripotent stem cells; hypoxia.


DOROTHY E. STUtte, M.D.
Associate Professor, Director of Residency Training

Interests: Psychiatric education, serious psychiatric disorders, attention-deficit/hyperactivity disorder, school consultation, psychopharmacology.


BRENT C. VANDER WYK, PH.D.
Associate Director, Yale Child Neuroscience Laboratory; Associate Research Scientist

Interests: Autism, depression, social cognition, fMRI.

FRED R. VOLKMAR, M.D.
Irving B. Harris Professor, Director, Chief of Child Psychiatry Yale-New Haven Children’s Hospital.

Interests: Autism and other developmental disorders, training, research dissemination and social policy.


JOSEPH L. WOOLSTON, M.D.
Albert J. Solnit Professor of Child Psychiatry and Pediatrics

Interests: Development and refinement of data driven interventions for psychiatrically disabled youth living in psychosocial adversity.

Ladder Faculty, Coordinators & Training Directors (continued)

EDWARD ZIGLER, PH.D.
Sterling Professor of Psychology, Emeritus;
Director Emeritus, The Edward Zigler Center
in Child Development and Social Policy.

Interests: Child Development and Social Policy
and Developmental Psychopathology.

Recent Publication: Burack, J., Hodapp, R., Iarocci,
of Intellectual Disability and Development,
New York, NY: Oxford University Press.

ASSISTANT CLINICAL PROFESSORS
IN SOCIAL WORK

Carrie Epstein, M.S.W.
Sandra Gossart-Walker, M.S.W.
Karen E. Hanson, M.S.S.A.
Christiana Mills, M.S.W.
Elizabeth Rodriguez-Keyes, M.S.W.

ASSOCIATE RESEARCH SCIENTISTS

Maysa Akbar, Ph.D.
Kathleen M. Balestracci, Ph.D.
Baoyuan Bi, M.D., Ph.D.
Sandra J. Bishop-Joseph, Ph.D.
Daniela Blum, M.S.W.
Leah L. Booth, M.A.
Fay E. Brown, Ph.D.
Sasha L. Durso, M.S.N.
Christine Emmons, Ph.D.
Adife G. Ercan-Sencicek, Ph.D.
Matia Finn-Stevenson, Ph.D.
Hilary Hahn, M.Ed., M.P.H.
Lesley Hart, Ph.D.
Yuko Kataoka-Sasaki, M.D., Ph.D.
Kathy Koenig, M.S.W.
Pradeep Kotapurathu Kurup, Ph.D.
Nicole Landi, Ph.D.
Suzanne Macari, Ph.D.
Sarah S. Nicholls, Ph.D.
Sayoko Nishimura, M.D. Ph.D.
Dean Palejew, Ph.D.
Brian Reichow, Ph.D.
Cecelia T. Rowland, Ed.D.
Dale H. Saul, Ph.D.
Caley Schwartz, Ph.D.
Cecelia Singh, Ph.D.
Karen Muller-Smith, Ph.D.
Sherin S. Stahl, Ph.D.
Amanda Steiner, Ph.D.
Katherine D. Tsatsanis, Ph.D.
Pamela Ventola, Ph.D.
Erin M. Warnick, Ph.D.
Julie M. Wolf, Ph.D.
Jian Xu, Ph.D.

CLINICAL INSTRUCTORS IN SOCIAL WORK

Diana Abate, M.S.W.
Jennifer Dussich Cunningham, M.S.T.
Lauren Nasat Dennehy, M.S.W.
Diane Dodge, M.S.W.
Heather Dowling, M.S.W.
Judith Eisenberg, M.S.W.
Sara Fleming, M.S.W.
Jennifer Lee Grimsley, M.S.W.
Kristen Hammel, M.S.W.
Kristin Holdt, M.S.W.
Elizabeth Kimball, M.A.
Bethany Kleine, M.S.W.
Megan Lyons, M.S.W.
Katherine Malensek, M.A.
Amy J. Myers, M.S.W.
Jennifer Noto, M.S.W.
Signy Peck, M.S.W.
Jeanette Radawich, M.S.W.
Elana Raphael-Tomkins, M.S.W.
Camilla Schnaitmann, M.S.W.
April N. Smoke-Collins, M.A.
Michelle St. Pierre, M.S.W.
Lilia Urquiza, M.Ed.
Kelly Voccola, M.S.W.
Joshua Watson, M.A.
Virginia Zecchini, M.Sc.

CLINICIANS

Miriam Berkman, M.S.W.
Jeanne Croy, M.A.
Alisa L. Fulvio, M.S.W.
Adriana Gonzalez, M.A.
Shelby Kuhn, M.S.W.
Jennifer Lewis, M.S.W.
Haley Neidich, M.S.W.
Katherin Rubiano-Marciniak, M.A.
Elif O. Tongul, M.A.

LECTURERS

Camille J. Cooper, M.Ed.
Mary Gunsalus, M.S.
Saylor Heidmann, M.Sc.
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History of the Center

The first Director of what would become the Child Study Center was Arnold Gesell, Ph.D., M.D. (1880-1961). Dr. Gesell, a psychologist and subsequently a pediatrician, is often considered the father of child development in the United States. In 1911 he instituted a clinical service that became the Yale Clinic of Child Development. A meticulous observer and researcher, Gesell is best known for his studies of normal child development and his use of new approaches in doing so.

Following Gesell’s retirement, Milton J.E. Senn, M.D. was recruited to serve as both Chairman of the Department of Pediatrics and Director of the reorganized Child Study Center. The designation as a Center indicated the University’s desire for a multidisciplinary program focused on child development. An innovator in pediatrics, Senn introduced many changes in pediatric care including rooming in. He was succeeded in 1966 by Albert J. Solnit, M.D. who had been the first resident in Child Psychiatry at Yale.

Al Solnit was a child psychiatrist, pediatrician, and psychoanalyst who pioneered work on social policy and child custody. He fostered collaborations with the Department of Pediatrics, Yale Law School, and oversaw the establishment of the Center as a Department of the Yale School of Medicine and of Yale-New Haven Hospital. He expanded the research program in neurobiology by recruiting Donald Cohen, M.D. who would succeed him in 1983 as the fourth Director of the Center.

Donald Cohen stimulated the growth of one of the nation’s leading programs with a focus on brain mechanisms along with a strong commitment to clinical service, social policy, and international activities. Under his leadership programs of research and clinical excellence were developed in several areas, including autism and Tourette’s disorder. His impact on the field remains powerful, despite his premature death in 2001.

John E. Schowalter, M.D., a child psychiatrist, became Interim Director of the Center following Donald Cohen’s death. Dr. Schowalter was a national and international leader in child psychiatry and served as Director of Child Psychiatry Training here for almost three decades. He was followed, in 2002, by Alan E. Kazdin, Ph.D., a clinical psychologist with a strong interest in treatment evaluation and work in the area of conduct disorder. He was succeeded in 2006 by Fred Volkmar, M.D.

Fred Volkmar came to Yale as a trainee in 1980, joined the faculty in 1982, and worked with Donald Cohen to develop our world renowned autism program. A child psychiatrist, Dr. Volkmar is the author of several hundred scholarly works in the area of autism, is the Editor of the Journal of Autism and Developmental Disorders, and has been active in advocating for dissemination of research findings into homes, schools, and communities.

Throughout its history, the Center has had an outstanding group of faculty and trainees. Many have achieved clinical renown, successful research careers, and international recognition. The primary goal for the Center always remains excellence in science, clinical services, and training in order to enhance child mental health world-wide.

Over the course of 2010-2011 we have hosted four events celebrating our 100th Anniversary. We look forward to our next century of research and service for children and their families.