

Vanderbilt Kennedy Center for Research on Human Development

Special Issue on Autism



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Memorial
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Gift

Discovery

Autism Research Spectrum

By Jan Rosemergy

Autism is a neurodevelopmental disorder that profoundly affects the lives of thousands of children and adults and their families. It is considered a spectrum disorder because of variations in symptoms, characteristics, and severity. At the Vanderbilt Kennedy Center, an interdisciplinary spectrum of research addresses the many puzzles of autism not only from the angles of diagnosis and intervention but also genetics, brain science, and medical issues.

Early diagnosis. TRIAD—Treatment and Research Institute for Autism Spectrum Disorders—is a keystone in the Vanderbilt effort to diagnose, treat, and understand autism. TRIAD is directed by Wendy Stone, Ph.D. (pediatrics and psychology). The earliest possible diagnosis is a major focus of TRIAD research. Stone and her colleagues have found that autism can be diagnosed accurately in 2-year-old children. Different clinicians agree about whether a child is on the autism spectrum, and the diagnosis appears to be stable over time. This means that intervention can begin early to improve developmental outcomes.

Core characteristics. Stone's research results suggest that the most reliable behavioral indicators of autism in young children are a limited *Continued on page*.



Xavier Trent (right) was diagnosed with autism through a TRIAD research project. He and his older brother Jordan and their parents are now taking part in a genetics study.

Director's Message

Many Perspectives, One Vision



Pat Levitt, Ph.D.

The families of children with neurodevelopmental disorders, such as autism, fragile X, and Williams syndrome, have little time to consider the problems of modern science. Their days are filled with practical concerns—the countless

decisions, details, and challenges to helping their children lead full lives. At the Vanderbilt Kennedy Center, we are dedicated to bringing tomorrow's treatments to children and families, today, through research.

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Eunice Kennedy Shriver Visits the Vanderbilt Kennedy Center



Mrs. Eunice Kennedy Shriver (center), executive director of the Joseph P. Kennedy Jr. Foundation, with Elisabeth Dykens, Ph.D. (left), Vanderbilt Kennedy Center associate director, and Elise McMillan, J.D. (right), Vanderbilt Kennedy Center director of community outreach, Mrs. Shriver visited the Center while in Nashville in February. The establishment of the John F. Kennedy Center in May 1965 was made possible by a grant from the National Institutes of Health, with matching funds provided by Peabody College and the Joseph P. Kennedy Jr. Foundation. The Foundation also supported visiting research professorships for research on intellectual disabilities.

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Autism Research from page one

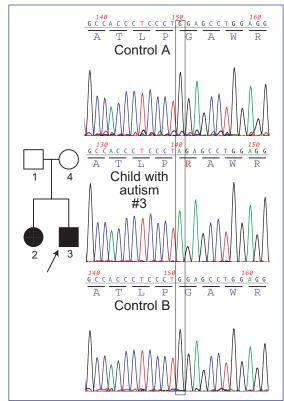
ability to engage in back-and-forth social interactions; a speech delay accompanied by a failure to use nonverbal methods of communication such as eye contact, gestures, and facial expressions; and reduced interest in sharing one's experiences with others, such as pointing to or showing objects.

Screening Tool for Autism in Two-Year-Olds (STAT). The results of Stone's research enabled her team to develop the STAT, a 20-minute play-based measure to identify children at risk for autism. The STAT can be used in community, home, or clinic settings. A variety of professionals, including speech pathologists, pediatricians, psychiatrists, psychologists, early intervention providers, and teachers, have participated in TRIAD's STAT training workshops.

Even earlier diagnosis—siblings. More recently, Stone's research has focused on the behavioral characteristics of autism in children under 24 months. She is studying infants who are at elevated risk for developing autism, following their development over time until they reach the age at which a diagnosis can be made. The high-risk group being studied is later-born siblings of children with autism. While most siblings will not develop autism, the incidence in this group is 5% to 8%.

Stone is collaborating with Tedra Walden, Ph.D. (psychology), and Paul Yoder, Ph.D. (special education), to study social orienting behaviors in groups of younger siblings. Families interested in taking part in sibling studies can call (615) 936-0265.

Genetics. About 10% of individuals diagnosed with autism have an identifiable genetic condition, such as fragile X syndrome or tuberous sclerosis complex. In most cases of autism, no specific underlying cause can be determined, but evidence suggests that the condition results from genetic factors and currently unknown environmental influences. Five to fifteen or more genes may play a role in the development of autism. These "susceptibility genes" confer some degree of elevated risk and may then predispose an individual to the development of autism.



A schematic representation of a family with two parents (1 & 2) and two children affected by autism (3 & 4). A test of the DNA from child #3 shows a change in the DNA in a specific gene (highlighted in the rectangle), which causes a change in the protein code. The change in the DNA may represent a "genetic risk factor."

James Sutcliffe, Ph.D., and Jonathan Haines, Ph.D. (molecular physiology & biophysics, Vanderbilt Center for Human Genetics Research), are collaborators in the Autism Genome Project, a consortium of autism research groups that is the largest ever to focus on the genetics of autism. The research of the Vanderbilt group led by Sutcliffe has resulted in the identification of specific genetic risk factors as well as chromosomal regions that are expected to contain one or more genes involved in the development of autism. Families interested in taking part may call (615) 343-5855.

Brain development. Findings from imaging and behavioral studies in combination with genetic and biochemical studies suggest that autism may be the result of pervasive, early developmental abnormalities affecting neural information processing. Pat

Levitt, Ph.D. (pharmacology), studies molecular and cellular mechanisms that control the development of the forebrain and the causes of developmental and neuropsychiatric disorders, including autism. Genes that cause changes in how the circuits implicated in autism actually develop are being identified, and the Levitt lab is doing studies on these genes in children with autism and their families.

Sleep disorders. Sleep disorders are common in autism and other developmental disorders, and there is evidence that sleep and neuronal activity affect one another. Sleep expert Beth Malow, Ph.D. (neurology), has teamed with Stone (pediatrics) and Craig Kennedy, Ph.D. (special education), to explore the dynamics of sleep in children with autism and its relation to daytime behaviors. Families interested in taking part may call (615) 936-0448.

Language intervention. Developing the most effective treatments for children with autism is paramount. Yoder (special education) and Stone (pediatrics) have collaborated on a study to compare the effectiveness of two communication interventions, the Picture Exchange Communication System (PECS) and Responsive Education and Prelinguistic Milieu Teaching (RPMT), in teaching "commenting" and useful speech. Commenting is an important prelinguistic behavior in which a child initiates joint attention with another person to share a positive interest or feeling. Lack of commenting distinguishes young children with autism from children with nonautistic developmental disorders. Children were randomly assigned to PECS or RPMT treatment. Yoder and Stone found increases in useful speech in both groups, but PECS was superior to RPMT at a clinically significant level in facilitating useful speech and talkativeness. RPMT was more effective than PECS in facilitating increased use of commenting for children who already used some commenting before treatment, but RPMT did not affect children who had none.

Center director Pat Levitt summarized, "The Vanderbilt Kennedy Center, with TRIAD, has brought together a unified team of talented scientists who are working on a collective vision to solve the puzzles of autism and bring better treatments to children and families."

Primer

Autism is a neurodevelopmental disorder that is present from early in life. It occurs in as many as 1 in 500 children and is about 3 times more common in boys than in girls.

There are no medical tests for autism. The diagnosis is based on the presence of a pattern of behavioral symptoms:

- Difficulty interacting with others
- Impaired understanding and use of language
- Restricted patterns of activities and interests
 Although all three features must be present for a diagnosis of autism, the specific behaviors

 exhibited can vary widely from person

exhibited can vary widely from person to person.

Autism is considered to be a spectrum disorder because the symptoms and characteristics can be present in different combinations and at different levels of severity. The disorders on the autism spectrum are:

- Autistic disorder
- Asperger's disorder
- Rett's disorder
- Childhood disintegrative disorder
- Pervasive developmental disorder not otherwise specified (PDD-NOS)

The specific causes of autism are not yet known, though there is consensus that genetic vulnerability and unidentified environmental factors cause atypical brain development. Early identification and early intervention are key components to optimizing outcomes for children with autism spectrum disorders.

Internet Resources

- TRIAD (Treatment and Research Institute for Autism Spectrum Disorders)
- www.TRIADatVanderbilt.com
- Autism Spectrum—Health Topics, Monroe Carell Jr. Children's Hospital at Vanderbilt

www.vanderbiltchildrens.com/autism

- Autism Society of Middle Tennessee www.autismmidtenn.org
- Autism Society of America www.autism-society.org
- Cure Autism Now
- www.cureautismnow.org/
 National Alliance for Autism Research
- www.naar.org/Tennessee Disability Pathfinderwww.familypathfinder.org

Director's Message from page one

Imagine the problem-solving ability of some of our nation's top behavioral and brain scientists, educators, neuroimaging specialists, pediatricians, and language experts working on a single issue like autism. Now imagine the typical situation at most universities where they work in isolation. We try to do it differently at the Vanderbilt Kennedy Center, finding ways to encourage and support a team approach to solving the mysteries of developmental disabilities. Our work in autism—the theme of this issue of Discovery—is led by Dr. Wendy Stone's multidisciplinary TRIAD program, and is representative of what can be accomplished by an

enthusiastic group of scientists and clinicians.

We are closing in on identifying genes that increase the risk of autism. Our scientists are exploring the architecture of the developing brain to discover how it may be disrupted in autism. We are investigating how the brain recognizes faces and objects to better understand the social impairments that are the hallmark of autism. And we are studying the relationship between sleep and developmental disorders such as autism.

Center investigators are pioneering methods for the early detection of autism and intervening to promote the best outcomes. We are helping children with developmental disabilities overcome barriers to speech and language. Working with

early childhood educators, we are developing strategies to integrate children with autism and other disabilities into classrooms at the earliest possible ages. Our researchers are finding ways to reduce and manage problem aggressive behaviors in children and adults with developmental disabilities. We are investigating how developmental disabilities like autism affect family relationships, and how we can improve outcomes.

Please take a few moments to read about the wonderful accomplishments of some of our top researchers in autism. The stories reflect the breadth and depth of our talented Vanderbilt Kennedy Center investigators, the value of teamwork, and the great hope on the horizon.

A Family Perspective

By Stephanie Comer

A child's first birthday is typically one of celebration. But for Jon and Michelle Moore, it was the beginning of questions concerning their twin sons Cole and Alex. "Cole had a flat affect. He didn't want to touch his cake or open his presents. Something didn't feel right," said Mrs. Moore. After months of uneasiness and at a friend's suggestion, she called the Autism Society of Middle Tennessee.

"The Autism Society suggested TRIAD," said Mrs. Moore. "TRIAD took considerable time asking questions about Cole's development. They listened to my concerns. TRIAD knew what to look for, when others didn't. Cole was diagnosed with autism at 26 months of age."

Alex was different because he was more social than Cole. However as they learned more about autism spectrum disorders, they noticed Alex's repetitive behavior.



Cole and Alex Moore

"Spinning and running were all he wanted to do. His eye contact seemed to be decreasing. He had acquired some language, but it was out of context. Three months after Cole's diagnosis, Alex received a PDD-NOS diagnosis," said Mrs. Moore.

Since visiting TRIAD, Mr. and Mrs. Moore have become involved in both research and clinical services.

"We participated in Dr. Stone's study 'Autism Screening for Children Under 24 Months.' The staff was genuinely concerned about our boys and our family. They made sure we were comfortable."

The Moores also took part in TRIAD's Enhancing Interactions (EI) class, which emphasized learning the skills needed to best interact with Cole. TRIAD spent a great deal of time getting to know Cole's individual characteristics and taught the Moores how to function better day to day. What differentiated TRIAD's EI class from other services the Moores had received was being able to observe the methods used successfully with Cole. TRIAD displayed an activity, and the Moores practiced while teachers were present to provide feedback and support.

"Our experience with the EI class raised the level of hope we have for our boys. When following their suggestions, the boys' level of communication went up. Seeing the progress gives us the motivation to keep going," said Mrs. Moore.

Cole and Alex Moore are now 2 1/2 and are making great strides due to the attention they receive from TRIAD.

"If the boys' autism had not been identified early, we shudder to think where they would be right now. With early identification and intervention, they have made—and continue to make—wonderful progress."

TRIAD Helps Families and Professionals

By Traci Fleischman



TRIAD (Treatment and Research Institute for Autism Spectrum Disorders) is dedicated to improving assessment and treatment services for children with autism spectrum disorders and their families while advancing knowledge and training. It is a program of the Vanderbilt Kennedy Center, the Monroe Carell Jr. Children's Hospital at Vanderbilt, and the Department of Pediatrics/Center for Child Development.

TRIAD's mission is to offer a broad range of services to children and families in the community; to provide exemplary training to parents, service providers, and professionals; and to conduct state-of-the-art research to increase the understanding of the development and

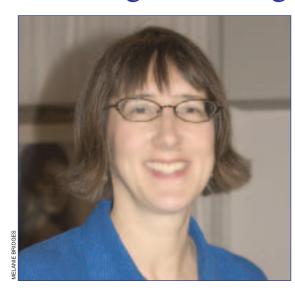
treatment of autism and related disorders.

The clinical programs of TRIAD are available to families, schools, and professionals. Programs for families include behavior management classes; social skills groups; medical evaluation, treatment, and follow-up; TRIAD summer camp; and Enhancing Interactions (EI) classes. EI classes teach parents of children under 3 methods for interacting with and teaching their children during daily routines and activities.

Educators have a variety of programs available to them, including child-focused consultation, program consultation, specialized internship programs, and TRIAD Teacher Training (TTT). Under the TTT program, TRIAD

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Leading the Vanguard of Discovery



WENDY STONE, PH.D.

Professor of Pediatrics and Psychology & Human Development

Director of TRIAD (Treatment and Research Institute for Autism Spectrum Disorders) Vanderbilt Kennedy Center Investigator Joined Vanderbilt Kennedy Center 1990

Research Interests

Autism: early identification, relation of early social and communicative development to later outcomes, evaluating efficacy of early interventions

Principal Investigator for

Early social orienting in siblings of children with autism spectrum disorders, National Institute of Child Health and Human Development

Predicting responsiveness to imitation intervention, National Institute of Child Health and Human Development

Mentor-based postdoctoral research fellowship, National Alliance for Autism Research

Clinical Interests

Helping parents understand, interact with, teach, and enjoy their young children with autism

National Service

- Editorial Board, Journal of Autism and Developmental Disorders, Infants & Young Children
- Co-chair, National Alliance for Autism Research/National Institute of Child Health and Human Development Baby Siblings Research Consortium
- Chair, National Institutes of Health Workgroup on Treatment Outcome Measures for Children with Autism, Birth to Five

Selected Publications

Turner, L. M., Stone, W. L., Pozdol, S. L., & Coonrod, E. E. (in press). Follow-up of children with autism spectrum disorders from age 2 to age 9. *Autism*.

Stone, W. L., Coonrod, E. E., Turner, L. M., & Pozdol, S. L. (2004). Psychometric properties of the STAT for early autism screening. *Journal of Autism and Developmental Disorders*, *34*, 691-701.

Coonrod, E. E., & Stone, W. L. (2004). Early concerns of parents with autistic and nonautistic disorders. *Infants & Young Children*, *17*, 258-268.

Education

B.A., 1975, Psychology, Williams College M.S., 1978, Psychology, University of Miami, Coral Gables

Predoctoral internship, 1980-81, University of North Carolina School of Medicine/Division TEACCH

Ph.D., 1981, Clinical Psychology, University of Miami, Coral Gables

Attraction to Developmental Disabilities Research

As long as I can remember, I have been interested in the relationship between the brain and behavior. I was awed by the range of variations in human development. My first exposure to children with autism led to a fascination with the disorder that has never waned. Working with these children is like solving a puzzle; behaviors that initially seem erratic and unpredictable can be understood and improved with specialized treatment strategies. It is an exciting time for autism research, as our knowledge about its causes and treatment is growing at a rapid rate. I am constantly learning from the children and families I see, and it is very gratifying to think that in some small way, something I learn may improve their lives.

Reasons for Kennedy Center Membership

The Vanderbilt Kennedy Center has been an invaluable resource in my development as a researcher. As a young investigator, it provided the supports necessary to "grow" a research program: assistance with grant preparation, statistical consultation, and recruitment of families. As my research program has become more established, the Kennedy Center has enabled me to stretch the boundaries of my work through collaborations with investigators in other disciplines, such as special education, neurology, and genetics. One of the unique features of the Kennedy Center is the role it plays in bringing together scientists from a variety of training backgrounds; these interdisciplinary collaborations enable us to ask more far-reaching questions and to move more quickly along the road to solving problems related to development and learning.

New Grants

Contrast mechanisms in diffusion weighted MRI

John C. Gore, Ph.D. (Radiology & Radiological Sciences)

National Institute of Neurological Disorders and Strokes

The Engagement Classroom: A model for preschool inclusion

Robin McWilliam, Ph.D. (Pediatrics) U.S. Department of Education, Office of Special Education Programs

Periadolescent noradrenergic regulation in the

BNST [bed nucleus of the stria terminalis]
Danny G. Winder, Ph.D. (Molecular Physiology & Biophysics)

National Institute on Drug Abuse

Vanderbilt Kennedy Center Nicholas Hobbs Discovery Grants

Shaping a morphogen gradient

Michael K. Cooper, M.D. (Neurology), Bruce H. Appel, Ph.D. (Biological Sciences)

Reading development and its neurological basis among students

Lynn S. Fuchs, Ph.D. (Special Education), Adam W. Anderson, Ph.D. (Biomedical Engineering), Donald L. Compton, Ph.D. (Special Education), John C. Gore, Ph.D. (Radiology & Radiological Sciences), Robert Hodapp, Ph.D. (Special Education)

Estimating risks of hospitalization for mothers of children with disabilities

Stephanie A. So, Ph.D. (Economics), Robert Hodapp, Ph.D. (Special Education), Richard C. Urbano, Ph.D. (Pediatrics)

Vanderbilt Kennedy Center Family Research Program Discovery Grants

Parent and child communication about childhood cancer

Bruce E. Compas, Ph.D. (Psychology & Human Development), Mary Jo Gilmer, Ph.D. (Nursing)

Understanding family caregiver strain

Craig Anne Heflinger, Ph.D. (Human & Organizational Development)

Routines-based interview to plan interventions and measure family quality of life

Robin McWilliam, Ph.D. (Pediatrics), P. J. McWilliam, Ph.D. (Special Education)

Towards unraveling the genetic etiology of autism

James S. Sutcliffe, Ph.D. (Molecular Physiology & Biophysics), Randy D. Blakely, Ph.D. (Pharmacology), Jonathan Haines, Ph.D. (Molecular Physiology & Biophysics)

New Grants from page four

Parent socialization of emotion regulation in preschool children who stutter

Tedra A. Walden, Ph.D. (Psychology & Human Development), Edward G. Conture (Hearing & Speech Sciences)

Preliminary investigation of sibling relationship and adjustment in Prader-Willi syndrome and Williams syndrome

Melissa Maxwell—Mentor: Elisabeth A. Dykens, Ph.D. (Psychology & Human Development)

Familial abuse in individuals with disabilities

Marisa Sellinger—Mentor: Robert Hodapp, Ph.D. (Special Education)

Parent-child interactions in depressed mothers vs. fathers: Effects of treatment

Rachel Swan—Mentor: Judy Garber, Ph.D. (Psychology & Human Development)

Sibling use of responsive interaction strategies

Alacia Trent—Mentor: Ann P. Kaiser, Ph.D. (Special Education)

Outreach Grants

Elise McMillan, J.D. (Vanderbilt Kennedy Family Outreach Center):

Family support 360 grant [planning family

one-stop centers]
Administration on Developmental Disabilities

Conexion [Disability Hispanic outreach] Administration on Developmental Disabilities through Tennessee Council on Developmental Disabilities

Arts build communities—Vanderbilt Kennedy Center Arts Initiative

Metropolitan Nashville Arts Commission

Where to Find Help

Vanderbilt Kennedy Family Outreach Center

Supported by the Lili Claire Foundation and the Brooks Family Discovery Fund (615) 936-5118

Tennessee Disability Pathfinder

(800) 640-INFO [4636] (615) 322-8529 (Nashville) www.familypathfinder.org

Taking Part in Research

See Study Finder http://kc.vanderbilt.edu/studyfinder

Leading the Vanguard of Discovery



JAMES SUTCLIFFE, PH.D.

Assistant Professor of Molecular Physiology & Biophysics

Vanderbilt Kennedy Center Investigator Joined Vanderbilt Kennedy Center 1997

Research Interests

Genetic basis of autism spectrum disorders; genetics of neuropsychiatric disorders, including major depression, anxiety, obsessive compulsive disorder

Principal Investigator for

Genetic analysis of 15q11-q13 in autism, National Institute of Mental Health

Mentor-based postdoctoral research fellowship, National Alliance for Autism Research

Clinical Interests

Clinical assessment of individuals with autism to establish correlations with emerging genetic data, in particular for derivation of novel, genetically relevant trait-based subsets of the broader autism phenotype

Honors

- March of Dimes, Basil O'Connor Starter Scholar Research Award
- Vanderbilt Kennedy Center Family Research Program Discovery Grant

Selected Publications

McCauley, J. L., Li, C., Jiang, L., Olson, L. M., Crockett, G., Gainer, K., Folstein, S. E., Haines, J. L., & Sutcliffe, J. S. (2005). Genome-wide and ordered-subset linkage analyses provide support for autism loci on 17q and 19p with evidence of phenotypic and interlocus genetic correlates. *BioMed Central Medical Genetics*, 6, 1.

Nurmi, E. L., Dowd, M., Tadevosyan, O., Haines, J. L., Folstein, S. E., & Sutcliffe, J. S. (2003). Exploratory subsetting of autism families based on savant skills improves evidence for genetic linkage

to 15q11-q13. *Journal of the American Academy of and Child Adolescent Psychiatry*, 42, 856-863.

Nurmi, E. L., Amin, T., Olson, L. M., Jacobs, M. M., McCauley, J. L., Lam, A. Y., Organ E. L., Folstein, S. E., Haines, J. L., & Sutcliffe, J. S. (2003). Dense linkage disequilibrium mapping in the 15q11-q13 maternal expression domain yields evidence for association in autism. *Molecular Psychiatry*, *8*, 624-634.

Education

B.S., 1986, Biochemistry, Auburn University Ph.D., 1992, Biochemistry/Human Genetics, Emory University

Postdoctoral Fellow, 1992-97, Department of Molecular & Human Genetics, Baylor College of Medicine

Attraction to Developmental Disabilities Research

I have been attracted to this area since graduate school, when I was involved in the cloning of the fragile X syndrome locus. I continued work to solve genetic puzzles related to developmental disabilities as a postdoctoral fellow studying Prader-Willi and Angelman syndromes, involving deficits of imprinted gene expression in 15q11-q13. I developed this work into the genetics of autism, initially with a focus on duplications of this region in a small percentage of the autism population. I have extended these efforts across the genome in collaborative efforts to discover the nature of genetic variation underlying autism. Understanding genetic risk factors for autism will aid in diagnosis and early intervention. Studying how systems are affected by risk factors may ultimately lead to improved therapeutic options for this vulnerable population.

Reasons for Kennedy Center Membership

The Vanderbilt Kennedy Center is unique as a transinstitutional center with activities spanning an extraordinary spectrum from community outreach and family support to basic research. It is this reach across so many disciplines that I find so compelling, because it provides opportunities to bring different kinds of expertise and investigators together to attack the problem of diagnosing, treating, and deciphering the underlying biological basis of a developmental disorder. My research into unraveling the complex genetic etiology of autism requires detailed clinical assessment of affected individuals, but equally involves parents and other family members. Thus our research is dependent on participation of the family unit to find the genes underlying this disorder. The Kennedy Center Research Program on Families represents an excellent example of how the Kennedy Center facilitates our efforts.



Susan Gray School for All Children Vanderbilt Kennedy Center • Peabody College

Graduate Research on Child Interventions

By Stephanie Comer



Holley Thomas is studying the effects of group friendship activities.

When the Vanderbilt Kennedy Center was founded in 1965, Dr. Susan Gray urged that it include an on-campus school devoted to educational research. Working in partnership with teachers and families in the Susan Gray School (SGS), Kennedy Center investigators were pioneers in early childhood and special education. Today, SGS classrooms offer a model site for observing developmentally appropriate practices for toddlers and preschoolers and developing new practices for children with and without disabilities. One of the School's primary missions is to facilitate research by creating learning environments that support both faculty and students.

"I am always excited when a researcher approaches me about conducting a study in the School," said Ruth Wolery, Ph.D., SGS director and assistant professor of the practice of special education. "And when one of our Peabody College students wants to conduct research in the School, I'm delighted!"

Peabody graduate students Holley Thomas and Jeff Hine contribute to the mission of the School as they develop research projects to benefit children in inclusive early childhood programs.

Promoting Friendships

When Holley Thomas came to Peabody as a graduate student in special education, it did not take her

long to find a calling. "One of my first classes was focused on engagement," she said. "Each student was paired with a child, and the child I was paired with had autism. It was so interesting to watch his 'up days' and 'down days,' to witness different mannerisms, and to see what worked with him and what did not."

As Thomas pursued her master's degree, she was placed on a grant focusing on autism with Vanderbilt Kennedy Center investigator Mark Wolery, Ph.D., professor of special education. This gave Thomas a chance to work with children with autism in a new way while looking for effective techniques to increase social interaction in SGS children with intellectual disabilities.

Thomas is studying the effectiveness of group friendship activities in increasing the social interaction of children with disabilities in inclusive classrooms on the playground. Group friendship activities involve typical preschool songs and activities modified to include varying types of social interaction and affectionate responses such as hugging, giving high-fives, and tickling.

In Thomas' study, an SGS classroom has a group of four children with one of the children having an intellectual disability, such as autism, and little to no social interactions. This child is selected by the teacher as a child likely to benefit from the friendship activities.

Everyday, the teacher leads the group in a 7- to 10-minute group friendship activity. The teacher

has a pool of songs such as "Happy and You Know It." First the children simply sing the songs in the normal fashion. During the intervention component, the group friendship activities are adapted with an affection component. At this point, instead of singing "If you're happy and you know it, clap your hands," the teacher may lead the children in singing, "If you're happy and you know it, hug a friend." The question is whether the added "friendliness" will carry over to the playground, where children engage in activities that are not teacher-led.

Thomas takes data on the playground daily to determine whether the group friendship activities are an effective intervention in increasing social interactions between a child selected for the intervention and other group members.

"I hope to determine whether group friendship activities are a useful tool for teachers to use in their classrooms in increasing social interaction between children with intellectual disabilities and their typically developing peers," said Thomas.

When Thomas graduates with her M.Ed. in May, she hopes to continue her work with children with developmental disabilities, and autism in particular. "At the School, I've had the unique opportunity to observe best practices with all children—those with disabilities and those with typical development," she said. "I've also had the chance to learn from and work with excellent teachers and children. This has provided rich experiences that I would not otherwise have been exposed to."

Modeling Play

After receiving a bachelor's degree in psychology and communications from the University of California-Santa Barbara (UCSB), Jeff Hine took a position that eventually helped him find a new path. "I worked in a few residential facilities," he said. "A number of adolescents living in these homes had been diagnosed with autism, and they had very little exposure to intervention services throughout their life." This initial experience coupled with an internship at the UCSB Autism Research Center peaked Hine's interest in the variety of interventions available for children with autism.

Hine's relationship with SGS began even before he was a student at Vanderbilt. "I visited the School when I was touring potential graduate programs. I thought it was fantastic to study at a university that had direct access to research The Susan Gray School provides inclusive education for young children with and without disabilities and support for their families. Its fourfold mission is providing high-quality service, supporting research, contributing to the training of future teachers and researchers, and demonstrating recommended practices as a national model. It is a program of the Vanderbilt Kennedy Center and Peabody College.



opportunities. I'm very interested in sifting through current interventions and trying to understand the things that make them work."

Hine's master's thesis involves an intervention study with two SGS children who have been diagnosed with autism. He is using video modeling to teach a variety of typical play actions that children with autism can use during sensory activities in the classroom.

Each child watches a video clip, filmed from the child's perspective, in which a child sees a variety of ways to manipulate sensory materials. The aim of the study is to demonstrate whether video modeling not only can teach young children with autism different play skills, but also can facilitate generalization of such skills into the classroom. This could help children with autism play with their peers and participate more during preschool activities.

"I hope to find what the characteristics of video modeling interventions are that facilitate acquisition and generalization of play skills and what type of child will benefit most from these interventions," said Hine.

The School has provided a supportive context for Hine to conduct his thesis intervention. "The SGS teachers were more than willing to help me attain the outcomes intended for my study and have been open to the often changing and hectic schedules and ideas of the graduate students electing to do a classroom-based intervention study." For Hine, having access to SGS has made doing a thesis and other research projects "a more inviting and rewarding experience."

Hine's experiences at Vanderbilt and SGS have secured his plans after his upcoming May graduation. "I definitely plan on working with children and families of children with autism. I'm still very interested in in-home therapy, but I would like to work with teachers in setting up their classrooms and curricula to best suit children with autism and other children who would benefit from such adaptations."

SGS News

Child Psychiatry Fellows Train at SGS

By Stephanie Comer

The Susan Gray School (SGS) provides a unique training opportunity for fellows in the child psychiatry rotation at Vanderbilt University Medical Center. The inclusive environment provided by the School gives fellows the chance to observe preschool children who are typically developing as well as to observe preschoolers with developmental disorders. It is the broad mission of service, training, demonstration, and research that makes the SGS an outstanding environment for a rotation in the child psychiatry fellowship.

Each of the fellows is in the second year of training in a specialized child psychiatry fellowship program. They have completed medical school and a residency in adult psychiatry. One of the major goals of the program is to have the fellows interact with educators of preschool children while gaining valuable observation experience.

"Fellows in training in child psychiatry attend the Susan Gray School one morning per week for at least one month," said Catherine Fuchs, M.D., associate professor of psychiatry. "They are trained to understand psychiatric illness in children and adolescents. To do this well they must have an understanding of

the developmental milestones in children, both physically and emotionally."

When visiting the SGS, fellows have the option to observe or participate within the classroom or to observe from mirrored observation rooms. They may attend a weekly staff meeting where they can learn from the team and provide medical discussions about specific developmental disorders.

"The School gives the fellows opportunities to see children in a structured environment where there is a planned focus to help children master language, social, cognitive, motor, and adaptive skills," said Ruth Wolery, Ph.D., SGS director.

After a rotation at SGS, fellows continue their training at other locations such as the Center for Child Development, Vanderbilt Community Mental Health Center, and schools throughout the area.

SGS sets a high standard for teamwork. "This is an opportunity for the fellows to observe the role of educators in the life of preschool children, highlighting the importance of the collaboration between educators and child psychiatrists," said Fuchs.

Eunice Kennedy Shriver Visits the Susan Gray School



Mrs. Eunice Kennedy Shriver (right), executive director of the Joseph P. Kennedy Jr. Foundation, with SGS director Ruth Wolery, Ph.D. Mrs. Shriver visited the School while in Nashville in February. When the John F. Kennedy Center was founded, Peabody psychologist Susan Gray, Ph.D., urged that it include an on-campus, research-oriented "Experimental School." Sargent Shriver, then a member of the Kennedy administration, had visited Dr. Gray's Early Training Project to *improve the educability of young* children at risk because of poverty. He credited Dr. Gray with the inspiration for founding Head Start.

Outreach News

Vanderbilt Autism Experts Host Media Representatives

By Melanie Catania and Clinton Colmenares

Autism diagnoses are growing at the alarming rate of 10% to 17% per year, according to the U.S. Department of Education and other federal agencies. It is estimated that the number of Americans diagnosed with autism, 1.5 million in 2004, could reach 4 million by 2010. The spike in diagnoses, advances in genetic testing, and debate regarding how best to treat autism are changing the landscape of diagnosing, educating, and understanding children and adults with autism.

To explore how this complex disorder is com-

municated to the public, Vanderbilt University, in conjunction with the Council for the Advancement and Support of Education (CASE), is hosting a fellowship April 10-13, for a limited number of print, broadcast, and experienced freelance journalists. The fellowship, Living with Autism: Rates, Causes, and Treatment, will bring together Vanderbilt Kennedy Center and other researchers, education experts, advocates, parents, and individuals with autism to discuss with journalists the latest research, the rising incidence of autism, the debate over its causes, and needed educational and policy changes.

Through interactions with faculty, tours of classrooms and laboratories, and small-group discussions, journalists will have the opportunity to learn more about this complex disorder and hear the stories that aren't being told.

The keynote speaker is Temple Grandin, Ph.D., who has autism. In her books *Emergence: Labeled Autistic* and *Thinking in Pictures*, she paints with remarkable clarity the world in which she lives. Other guest speakers are Marshalyn Yeargin-Allsop, Centers for Disease Control, and Andy Shih, National Alliance for Autism Research.

Topics covered include defining the autism spectrum; autism on the rise—increased incidence, better diagnoses, or increased reliance on social services; closing in on the genetic basis of autism; the vaccine question; parents' views of the daily challenges of living with autism; the importance of early diagnosis and intervention; understanding and addressing language and behavioral needs; the whole health picture; brain imaging; and a journalists roundtable on how to most effectively report on autism.

Vanderbilt Kennedy Center presenters are Pat Levitt, Ph.D. (pharmacology); Wendy Stone, Ph.D., and Michael Aschner, Ph.D. (pediatrics); Jonathan Haines, Ph.D., and James Sutcliffe, Ph.D. (molecular physiology & biophysics); Craig Kennedy, Ph.D., Mark Wolery, Ph.D., and Paul Yoder, Ph.D. (special education); Elisabeth Dykens, Ph.D. (psychology & human development); Isabel Gauthier, Ph.D (psychology); Beth Malow, Ph.D. (neurology); and John Gore, Ph.D. (radiology and Vanderbilt Institute of Imaging Science). Other Vanderbilt faculty are Kathryn Edwards, M.D., and Susan McGrew, M.D. (pediatrics). Parents include Debbie Derryberry, Leisa Hammett, Pat Sanders, and John Shouse.

TRIAD Helps from page three



Fun at TRIAD summer camp

offers district-wide in-service training workshops for school personnel.

"Educators interact with the children and learn through a variety of hands-on activities," explained Wendy Stone, Ph.D., TRIAD director and professor of pediatrics and psychology & human development. "We teach them how to assess social skills and develop programs, goals, and strategies for the children, how to communicate with the children, and how to improve the children's communication skills. We also teach how to prevent behavior difficulties or how to intervene when a difficult behavior arises."

Several programs address the needs of both parents and professionals: Applied Behavior Analysis Workshops, Make-It/Take-It Visual Supports Workshops, and Individualized Education Plan Workshops. Through the Make-It/Take-It workshops, parents and teachers create individualized visual supports to help children learn to accept changes in routines, organize their time, understand and anticipate events, learn new skills, and understand behavioral expectations.

For information about TRIAD services, contact Penny Hamm, (615) 936-1705, penny.hamm@vanderbilt.edu or the TRIAD Web site at www.TRIADatVanderbilt.com.

National Focus on Autism

The Vanderbilt Kennedy Center and TRIAD were part of the February 21 week-long national focus on autism by NBC News Networks and *Newsweek* titled *Autism: The Hidden Epidemic?* NBC News programs *Today* and *Nightly News with Brian Williams*, as well as CNBC, MSNBC, NBC's owned-and-operated stations, Telemundo, and MSNBC.com all featured coverage of autism.

- MSNBC did a live interview of Vanderbilt Kennedy Center director Pat Levitt, Ph.D., focused on the neurobiology of autism.
- CNBC interviewed TRIAD director Wendy Stone, Ph.D., concerning research on younger siblings of children with autism.
- Newsweek February 28 cover was infant Lauren Lanning; the Lannings, a Nashville family, are taking part in TRIAD research on siblings of children with autism. The cover story "Babies and Autism: Why New Research on Infants May Hold the Key to Better Treatment" by Claudia Kalb quoted Stone.
- NBC's Today Show featured a week-long series on autism that included several mentions of Vanderbilt Kennedy Center services and research.

New York Times Science Article

"Focus Narrows in Search for Autism's Cause," by Sandra Blakeslee, February 8, reported on a neuroscience "autism summit" organized by Levitt and sponsored by the Cure Autism Now Foundation; the article quoted Levitt.

Web access to coverage kc.vanderbilt.edu/kennedy/research/autismstudies.html www.msnbc.msn.com/id/6844737/

Outreach News

Biscuit and Alyssa Capucilli visit Nashville

By Jan Rosemergy

Preschoolers, beginning readers, and other book lovers were treated to a week of events in November featuring children's author Alyssa Satin Capucilli and Biscuit, the golden puppy who is the star of her popular *Biscuit* series.

Capucilli is author of more than 30 children's books, including *Biscuit*, the popular best seller used to launch the *My First I Can Read* series from HarperCollins. *Biscuit* has been deemed a modern classic and has been translated into numerous languages worldwide. Proceeds from the sale of *Biscuit* books during Capucilli's Nashville visit benefited Vanderbilt Kennedy Center programs, thanks to the generosity of the Capucilli family and HarperCollins. Capucilli is the sister of Harla Levitt, wife of Vanderbilt Kennedy Center director Pat Levitt and member of the Center's Leadership Council.

"Biscuit and Alyssa Capucilli are a perfect match for the Vanderbilt Kennedy Center's interest in promoting children's reading," said Elise McMillan, the Center's director of community outreach. "The Vanderbilt Kennedy Reading Clinic helps strug-



gling readers, and books like the *Biscuit* series designed for beginning readers are so important. Mrs. Capucilli is deeply committed to helping children of all abilities enjoy the gift of reading. We're so grateful to her and her husband Bill for spending a week in Nashville and doing so many programs for children."

Biscuit and Capucilli delighted children—and parents and teachers—from the Susan Gray School, Vanderbilt Child Care Centers, Vanderbilt Kennedy Reading Clinic, Monroe Carell Jr. Children's Hospital at Vanderbilt, Gordon Jewish Community Center, Buena Vista and Eakin Elementary Schools, and Currey Ingram Academy. At the schools, Capucilli introduced children to the process of writing, illustrating, and printing books, as well as

leading children in reading favorite *Biscuit* books aloud. Children received Biscuit bookmarks and activity sheets. Books were donated to many of the programs Capucilli visited. The new Biscuit theme song written by Peter Capucilli, a Vanderbilt student, premiered in Nashville at the Vanderbilt Kennedy Center children's event.

Capucilli also met with future early childhood and elementary teachers enrolled in Peabody College's Department of Teaching & Learning course "Exploring Literature with Children." "Children's lives are transformed through literature, but young adults' lives are changed as well," said Mary Jean Jewell, Ed.D., who leads the course. "I'm grateful that Alyssa Capucilli took a special interest in the lives of our students at Peabody. Her passion for serving children is inspiring."

Capucilli also did book signings at Borders Books Music & Cafe in Brentwood, Barnes & Noble Booksellers in Opry Mills, and David-Kidd Booksellers in Green Hills.

The *Biscuit* series has appeared on the *New York Times* children's best-sellers list and on the American Booksellers Association Pick of the Lists. Biscuit titles have sold more than 6 million copies worldwide. Two of Capucilli's books won the Oppenheim Toy Portfolio Gold Award in 2004.

The Biscuit character made his television debut on "Captain Kangaroo," and the book series has been featured in the Captain's Storybook Corner. *Biscuit* appears on hundreds of recommended reading lists for kindergarten and first grade, has been included in the Scott Foresman Reading program, and is a featured Scholastic Book Club selection.

For information on Capucilli and Biscuit, see www.alyssacapucilli.com.

Korean Early Childhood Leaders Visit



A delegation from the Samsung Child Education and Culture Center and Samsung Welfare Foundation of Korea visited the Vanderbilt Kennedy Center, December 10, to observe early childhood education programs that include children with disabilities and to speak with early childhood education researchers and administrators about implementing inclusive preschool programs. They are shown here visiting a preschool classroom in the Susan Gray School. Left to right are Dr. Aeyeol Yoo, Foundation vice president and Center director, Gichan Choi, general manager, and Jungyoon Choi, manager of the division of child studies.

Better Together— The Vanderbilt Pediatric Network

etter Together" expresses the commitment of Vanderbilt professionals to collaborate on activities with the goal of promoting the development of children with disabilities to their fullest potential while providing guidance and support to their families. The Vanderbilt Pediatric Habilitation and Rehabilitation Network coordinates services from the Monroe Carell Jr. Children's Hospital at Vanderbilt, Vanderbilt Bill Wilkerson Center, Center for Child Development, Home Care Services, Vanderbilt Kennedy Center, Stallworth Rehabilitation Hospital, and Susan Gray School. Team members provide medical, therapeutic, assessment, consultation, and support services for children in both inpatient and outpatient settings. For a list of these Vanderbilt services, see www.vanderbiltchildrens.com/rehabservices. Subscribe to the free brief quarterly electronic newsletter at www.vanderbiltchildrens.com/bettertogether.

Spotlight

The Ties That Bind

LORIE LYTLE

By Traci Fleischman

When Leadership Council member Lorie Lytle was asked to define the Vanderbilt Kennedy Center in as few words as possible, her immediate response was "propelling science and enriching lives." The Kennedy Center is near and dear to Lytle's heart and her brief description of the Center says it all.

"It was scary having a child who could not communicate," explained Lytle, who has two children. Her daughter Eden is 6 and her son Luke is 4. Lytle became involved with the Vanderbilt Kennedy Center after Luke, then 2 1/2, was diagnosed with expressive-receptive language disorder, a disorder that poses a problem in processing what is being said, as well as expressing it. Luke's inability to communicate left both him and his parents frustrated.

"The people at the Kennedy Center not only love



John and Lorie Lytle with Eden and Luke

the science of what they do, but they also love the families that their science touches," Lytle said. "The researchers and staff members are passionate about enriching the lives of individuals with developmental disabilities." As a result, Luke was enrolled in the Child Language Intervention Project (CLIP), a program of the Vanderbilt Kennedy Center and the Vanderbilt Bill Wilkerson Center.

"It wasn't until we met with Steve and Mary Camarata that we had a clear picture of how Luke would develop and that he, indeed, would be a typically developing child by the time he was in kindergarten," continued Lytle. "Luke is now a happy, charming, and gregarious little boy. I saw first-hand the difference early intervention can make in a child's life."

Over the past year, Lytle has become an active part of the Kennedy Center. In June 2004, she joined the Center's Leadership Council, and she and her husband became members of the Nicholas Hobbs Donor Society.

"So many people have family members with a developmental disability and have no idea where to turn for the latest research or treatment. I want to help spread the word about the Center," Lytle commented.

Lytle has been involved with the Nashville music industry since 1987. Her background is

in publicity. She has been volunteering her time and expertise to the Center to help connect the music industry and the Center, and she is currently busy recruiting members of the music community to become involved in the upcoming Williams syndrome summer music camp that will be co-sponsored by the Kennedy Center.

"Now that I have found the Vanderbilt Kennedy Center, I am very involved in promoting the Center so that other families can have the same opportunity that my family had—an opportunity for early intervention and peace of mind," explained Lytle. "I am both humbled and honored to be even a small part of a place that is improving the quality of life for so many people, especially children."

Hobbs Society Reaches Goal of 100+

The Nicholas Hobbs Society, made up of donors who give \$1,000 or more annually to the Center or one of its programs, reached 100 members in December—a landmark achievement made possible by the Vanderbilt Kennedy Center Leadership Council.

"We're grateful to every single member of the Hobbs Society," said Center director Pat Levitt. "We want to express special appreciation to Barbara Gregg Phillips, chair of our Leadership Council, and to Ann Eaden, who challenged us to reach 100 members."

"Ann Eaden has said that we want to be sure that the Kennedy Center is **Judy Clave not* a well-kept secret," said Barbara Gregg Phillips, Leadership Council chair. "Last October, Ann and I told Harry Jacobson, Vice Chancellor of Health Affairs, that we were nearing the goal of 100 members. Without hesitation he said that we had the momentum to get to 1000. We welcomed that encouragement as a challenge, and we believe that we can reach higher goals in the days to come. So let's just think that this is one tenth of where we are going soon."

The leadership of the Hobbs Society would like to extend special recognition to two member couples for their extraordinary gifts



Judy Claverie, Ann Eaden, Barbara Gregg Phillips

this year—Ann and Jobe Bernard, for their support of the new summer camps program, and Lorie and John Lytle for their support of the Vanderbilt Kennedy Reading Clinic scholarship program.

The Hobbs Donor Society was established in 1997 with the leadership of Annette Eskind, founding chair of the Council. Through gifts and volunteer resources, Hobbs Society members advance groundbreaking research in human development. Due to space constraints, we are not able to list all the Hobbs Society members in this issue, please see Giving - Hobbs Society on our Web site.

Tribute Gifts

In memory of Mrs. Penny Arnett

Drs. Marshall and Karen Summar

In memory of Mr. Sam A. Brooks, Jr.

Mr. William H. Hess

In memory of Ms. Jillian Heil

Drs. Marshall and Karen Summar

In memory of Ms. Rosemary Kennedy Mr. Donald K. Routh

In honor of Dr. and Mrs. Pat Levitt

Levitt Laboratory Members

In honor of Mr. William A. Spickard, IV for Vanderbilt

Kennedy Reading Clinic

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on, and wits. David in

Ms. Katherine Post

Mr. Roderick Mck. Ramsav

Ms. Jessica M. Reddinger

Mr. and Mrs. Millard P. Robinson, Ir.

Mr. and Mrs. Thomas G. Sanford

Ms. Ann M. Simon

Dr. and Mrs. Robert A. Simpson

Mr. Denton J. Stewart

Mr. William R. Wiley

Mr. and Mrs. Henry P. Winetsky

For information about joining the Nicholas Hobbs Donor Society or making Honor or Memorial gifts, contact the

Development Office,

(615) 343-5322. Every effort has been made to ensure the accuracy of this report. If an error has been made, we offer our sincerest apology

and ask that you bring it to our attention by contacting the Development Office.

Lili Claire Foundation Evening of Change

The Vanderbilt Kennedy Family Outreach Center, supported by the Lili Claire Foundation, was recognized for its growth and achievements in its first year at the Lili Claire Foundation's Seventh Annual Benefit Dinner and Auction held November 16, at the Century Plaza Hotel in Los Angeles. "An Evening of Change" was the theme.

The Lili Claire Foundation's mission is to create community-based programs and services that make a positive difference in the lives of children living with neurogenetic disorders, while providing hope and resources for the families who love them.

"Lili Claire passed away when she was 5 1/2 months old," said Keith Resnick, Lili Claire's father and executive director of the Foundation. "Now, every day since she was born we've done what we can to honor her memory."

At the dinner, Leslie Litt-Resnick and Keith Resnick emphasized the need to overcome insensitivity and stereotyping of persons with intellectual disabilities. "Like us, many are born with remarkable talents that can flourish when given the opportunity."

This theme was demonstrated by the exceptional musical talent of Trieana Moon, one of the evening's featured performers. A talented singer who has Williams syndrome, Moon has been singing and playing music since age 4.

The annual dinner and auction is one of

the Foundation's primary ways for funding its programs for children and families with its three University Partners—the Vanderbilt Kennedy Family Outreach Center, the Lili Claire-UCLA Family Resource Center, and the Lili Claire-University of Las Vegas Life Skills Center.

The dinner was hosted by Matthew Perry of *Friends* fame. Performances were by Boyz II Men, Goo Goo Dolls, Mya, and Kathy Griffin.

Attending the dinner for the Vanderbilt Kennedy Center were Pat Levitt, director; Elisabeth Dykens, associate director; Elise McMillan, director of community outreach; BethAnn McLaughlin, Kennedy Center faculty director of community and special projects; Carol Rabideau, Outreach Center social worker; Teresa Turnbo, Outreach Center coordinator; Barbara Gregg Phillips, Leadership Council chair; and Colonel Robert Phillips, Jr., and Lorie Lytle, Leadership Council members.

"Teresa and I talk with families every day at the Family Outreach Center," said social worker Carol Rabideau, "so we know what a truly remarkable gift it is to have the support of the Lili Claire Foundation, which makes these services possible. The Resnicks, the Lili Claire Foundation, and all those who generously donate to the Foundation make a tremendous difference in the lives of so many children and families."



Emmy-nominated actor Matthew Perry hosted the Benefit.



Our Vanderbilt Kennedy Center "stars"

Celebrity Rags 4 Charity Riches



Cynda West Johnson, Elisabeth Dykens, Renee Layher

Celebrity Rags 4 Charity Riches held an online auction on e-Bay in October that benefited the Vanderbilt Kennedy Center. Our thanks to Cynda West Johnson and Renee Layher of Rags 4 Riches; to Heather Bohn, BethAnn McLaughlin, and Lorie Lytle; and to all the celebrities who donated items and the persons who purchased them.

Memorial Foundation Gift Expands Outreach

The Vanderbilt Kennedy Center has received a \$100,000 grant to expand the Vanderbilt Kennedy Reading Clinic and Behavior Analysis Clinic to serve more families who might not otherwise be able to afford their state-of-the-art services.

"So many families need expert services to help children overcome major difficulties in learning to read or in managing challenging behavior," said Pat Levitt, Ph.D., Center director. "We are so grateful for this very generous gift from the Memorial Foundation because it will allow us to meet this growing need. Thanks to the Memorial Foundation, we'll be able to train additional service providers and so serve many more families, without financial barriers. It also will allow us to continue to develop new training partnerships with schools, community centers and organizations."

The Vanderbilt Kennedy Reading Clinic, directed by Doug Fuchs, Ph.D., Nicholas Hobbs Chair in Special Education and Human Development, provides intensive systematic, research-based instruction and assessment for students in the early elementary grades. For information, call (615) 936-5123.

The Vanderbilt Kennedy Behavior Analysis Clinic, directed by Craig Kennedy, Ph.D., professor of special education and pediatrics, serves individuals with developmental disabilities and severe problem behaviors. The Clinic provides comprehensive health, educational, and behavioral assessments to identify causes of behavior problems and then develops community-based interventions. For information, call (615) 322-8185.

The Memorial Foundation's mission is to enhance the quality of life in Middle Tennessee by providing economic support to nonprofit organizations. It responds to diverse community needs, assisting agencies that focus on health and rehabilitation, youth and children, senior citizens, education, human and social services, and substance abuse.

Leadership Council of Vanderbilt Kennedy Center

Mrs. Barbara Gregg Phillips, Chair Mrs. Annette Eskind, Past Chair

Mrs. Honey Alexander

Ms. Sissy Allen

Mrs. Madge Bass

Mrs. Ann Bernard

Mrs. Barbara Bovender

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Mrs. Ruth Johnson

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Ms. Laurie Lee Sisk

Mr. Richard and Mrs. Rhonda Small

Dr. Karen L. Summar

Mrs. Beth Tannenbaum

Ex-Officio Members:

Dr. Pat Levitt

Mrs. Elise McMillan

Mr. Tim Stafford

Hold the Date



Waddell & Reed Financial Services Charity Golf Tournament Vanderbilt Legends Golf Club Benefiting the Vanderbilt Kennedy

JUNE 1-5 Tennessee Disability Mega Conference Nashville Airport

Autism Society of America National Conference

July 13-16 Nashville Convention

Center

Marriott



Center

Discovery is a quarterly publication of the Vanderbilt Kennedy Center for Research on Human Development designed to educat our friends and the community, from Nashville to the nation.

The Vanderbilt Kennedy Center is committed to improving the quality of life of persons with disorders of thinking, learning, perception, communication, mood and emotion caused by disruption of typical development. The Center is a university-wide research, training, diagnosis, and treatment institute; and a National Institute of Child Health and Human Development designated National Mental Retardation and Developmental Disabilities Research Center.

ON THE WEB: kc.vanderbilt.edu (615) 322 8240

Pat Levitt, Ph.D., Vanderbilt Kennedy Center Director

Elisabeth Dykens, Ph.D., Vanderbilt Kennedy Center Associate Director and Director of Mood and Emotion Research Program

Kendal Broadie, Ph.D., Director of Neurobiology and Plasticity Research Program

Stephen Camarata, Ph.D., Director of Communication and Learning Research Program

Ann Kaiser, Ph.D., Director of Families Research Program

Robert Hodapp, Ph.D., Assistant Director of Families Research

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Jan Rosemergy, Ph.D., Director of Communications

Editor/Writer: Jan Rosemergy, Ph.D. Assistant Editors/Writers: Stephanie Comer, Traci Fleischman

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Vanderbilt Kennedy Center for Research on Human Development

Spring 2005 Calendar of Events

Unless otherwise noted, events are free and open to the public. Events are subject to change. Please check the calendar on our Web site kc.vanderbilt.edu or call (615) 322-8240. For disability related training and other events statewide and nationally see www.disabilitytrainingtn.org.

April

APRIL 2-9

Nashville Week of the Young Child

Vanderbilt and community sponsors See kc.vanderbilt.edu/kennedy/woyc for complete event listing Contact Nashville Area Association for the Education of Young Children (615) 383-6292

APRIL 5 & 7

Nashville Week of the Young Child Helping Children Love Reading

The Vanderbilt Kennedy Reading Clinic is partnering with Metro Public Library on a free session for parents, teachers, and caregivers on how to foster a love of reading in preschool children. Children will attend a Library Storytime for Preschool Children while adults attend their program.

- Tuesday 10:30 a.m. Bordeaux Library 4000 Clarksville Pike For information and reservations call (615) 862-5856
- Thursday 10 a.m. Edmondson Pike Library 5501 Edmondson Pike For information and reservations call (615) 880-3957

Nashville Week of the Young Child Workshop on Switch and Adaptive Toys

Having age-appropriate toys that motivate children to play, learn, and explore their environment is important for all children, but especially so for children with vision or other developmental problems. A variety of toys will be demonstrated, and participants will learn how to adapt toys. Space is limited. Free child care is available.

Sponsor Tennessee Infant Parent Services School, with Technology Access Center Registration (615) 741-5002 Thursday 6:30 p.m. Room 241 Kennedy Center/MRL Building



Developmental Disabilities Grand Rounds Sleep in Children with Autism

Beth Malow, Ph.D., Associate Professor of Neurology Light breakfast provided Continuing Education Credit offered Co-Sponsor Center for Child Development, **Pediatrics** Wednesday 8 a.m. Room 241 Kennedy Center/MRL Building

Neuroscience Graduate Seminar Aneuploidy and Chromosomal Mosaicism in Brain Development and Function

Jerold Chun, M.D., Ph.D., Professor of Molecular Biology and Pharmacology University of California at San Diego Co-Sponsor Vanderbilt Brain Institute Wednesday 4 p.m.

Room 1220 MRB III Lecture Hall

APRIL 15-JUNE 30

Arts and Disabilities Exhibit

Esteemed Colleagues

Untitled Group artists led by Lain York paired with artists with disabilities Monday-Friday 7:30 a.m.-5:30 p.m. Lobby of Kennedy Center/MRL Building Artists Recognition Reception Day and time to be announced Contact Teresa Turnbo, (615) 936-5118 teresa.turnbo@vanderbilt.edu

APRIL 16

Sibshop

Games! Fun! Support! For kids, ages 7-12, with a brother or sister with a disability Lunch provided. Advanced registration required. Contact Teresa Turnbo, (615) 936-5118 teresa.turnbo@vanderbilt.edu Saturday 10 a.m.-2 p.m. Room 241 Kennedy Center/MRL Building

Lectures on Development and Developmental Disabilities

The Autistic Brain: Perspectives from **Affective Neuroscience**

Richard Davidson, Ph.D., Vilas Professor of Psychology and Psychiatry, Director of the W.H. Keck Laboratory and Laboratory of Affective Neuroscience University of Wisconsin-Madison Thursday 4 p.m. Room 241 Kennedy Center/MRL Building

Ninth Annual Britt Henderson Training Series for Educators

Designing a Positive Behavior Support Plan to Better Serve Elementary School Students

Conclusion of year-long workshops Poster presentations and reception Contact Elise McMillan, J.D., (615) 343-2540 elise.mcmillan@vanderbilt.edu Wednesday 4-6 p.m.

Room 241 Kennedy Center/MRL Building

May

Developmental Disabilities Grand Rounds International Adoption: The Child and the Family

Alice Rothman, M.D., Assistant Professor of Pediatrics

Linda Ashford, Ph.D., Assistant Professor of Pediatrics

Light breakfast provided

Continuing Education Credit offered Co-Sponsor Center for Child Development, **Pediatrics**

Wednesday 8 a.m.

Room 241 Kennedy Center/MRL Building



Vanderbilt Kennedy Center for Research on Human Development

ΜΔΥ Δ

Neuroscience Graduate Seminar A Basal Ganglia Circuit Essential for Vocal Learning

David Perkel, Ph.D., Associate Professor of Biology and Otolaryngology, University of Washington

Co-Sponsor Vanderbilt Brain Institute Wednesday 4 p.m.

Room 1220 MRB III Lecture Hall

MAY 23 (tentative)

Attachment Conference

Scholars will present on emotional attachment, e.g., attachment disorders, parent-child interaction therapy, animal models of maternal-infant care, and policy issues regarding children in foster care

Patti van Eys, Ph.D., Elisabeth Dykens, Ph.D.,

Conference directors

Monday 8:15 a.m.-4 p.m.

Room 241 Kennedy Center/MRL Building

June

JUNE 17

Waddell & Reed Financial Services Charity Golf Tournament Benefiting the Vanderbilt Kennedy Center

Great golf, door prizes, cold beverages, lunch provided! Entry fee \$100 per player. Variety of company sponsorship opportunities at different levels available.

To register contact Jenny Alford (615) 343-5322 jenny.alford@vanderbilt.edu Friday 8 a.m. Shotgun start Vanderbilt Legends Golf Club

JUNE 22

Dual Diagnosis Conference

Sponsored by the Vanderbilt Kennedy Behavior Analysis Clinic's Community Inclusion Project, this statewide conference is designed for those who work with individuals with a dual diagnosis of developmental disabilities and mental illness.

Wednesday 8 a.m.

Theater/Conference Center, Monroe Carell Jr. Children's Hospital at Vanderbilt Contact Teresa Turnbo, (615) 936-5118 teresa.turnbo@vanderbilt.edu

Summer Camps

June 13-July 1

TRIAD Social Skills Summer Camp for children with autism and peers

July 6-30

Explorers Unlimited Academic Camp for teens and young adults with Down syndrome

Co-Sponsor Down Syndrome Association of Middle Tennessee

July 24-July 30

Williams Syndrome Music Camp for teens and young adults with Williams syndrome

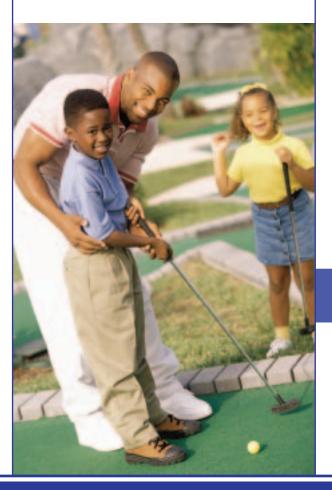
Co-Sponsors Vanderbilt Blair School of Music, National Williams Syndrome Association

Community Events

JUNE 1-5

3rd Annual Tennessee Disability Mega Conference

Sponsored by coalition of more than 50 Tennessee disability related organizations, including the Vanderbilt Kennedy Center Regular registration deadline May 15 Contact www.tndisabilitymegaconference.org or call (800)-835-7077 Nashville Airport Marriott Hotel and Conference Center





APRIL 9 & MAY 7

Down Syndrome Association of Middle Tennessee

Circle of Friends

Recreational and social skills development program for individuals with Down syndrome ages 12 and over Registration required Contact DSAMT (615) 386-9002

10 a.m.-3 p.m. Westminster Presbyterian Church

MAY 19 & JULY 21

Autism Society of Middle Tennessee Events Autism Orientation

Registration required Contact ASMT (615) 385-2077 Thursday 6:30-8:30 p.m. Room 241 Kennedy Center/MRL Building

JULY 13-16

36th Annual Autism Society of America National Conference ASA at 40: In Tune with the Future

Registration available after March 1 Information asa.confex.com/asa/2005/ Nashville Convention Center

Take Part in Research

The Vanderbilt Kennedy Center welcomes the participation of children and adults, with and without disabilities, in research studies. To view a list of projects seeking participants, see kc.vanderbilt.edu/studyfinder/ or call (615) 936-5118.

Number 8

Spring 2005