“There is no joy like the joy of unleashing the human spirit . . . . There is no purpose more noble than to build communities of acceptance for all.”

–Eunice Kennedy Shriver (1921-2009)
Elisabeth Dykens, Ph.D., was named director of the Vanderbilt Kennedy Center (VKC) in September 2009, the seventh director in the Center’s 44-year history.

“Elisabeth is an exceptional researcher of national stature, an experienced administrator, and an individual who cares deeply about the well-being of children and adults with developmental disabilities and their families,” said Jonathan Gitlin, M.D., Assistant Vice Chancellor for Maternal and Child Health Affairs and Chair of Pediatrics. “Her broad expertise in interdisciplinary research on developmental disabilities, combined with her positive vision for integrating disability research, training, and services at Vanderbilt, made her an ideal choice.”

Dykens has served as interim director since October 2008. She has co-directed the Vanderbilt Kennedy Center for Excellence in Developmental Disabilities (VKC UCEDD) since its founding in 2004. She is a professor of psychology (Peabody College).

Dykens was recruited in 2003 as the Center’s associate director. Previously, she served on the faculty of University of California-Los Angeles where she was a member of the Neuropsychiatric Institute. She was associate director for research and training at UCLA’s Tarjan Center for Excellence in Developmental Disabilities. Earlier she served on the faculty of the Yale Child Study Center.

Dykens’s research focuses on families of children with disabilities, including the mental health challenges and unique strengths of persons with genetic syndromes. Long term, these studies shed light on relationships among genes, brain, and behavior.

Dykens is married to Robert Hodapp, Ph.D., professor of special education and VKC UCEDD director of research. They have two sons, Alexander and Benjamin.

We celebrate the life of Eunice Kennedy Shriver, a champion of persons with intellectual disabilities. Her vision and efforts helped to establish the National Institute of Child Health and Human Development in 1962, as well as the Intellectual and Developmental Disabilities Research Centers. The Vanderbilt Kennedy Center, named in honor of President John F. Kennedy, was the second founded, with Mrs. Shriver and Sargent Shriver as National Advisory Committee members. Mrs. Shriver founded Special Olympics and the Shriver Sports Camps.

The late Senator Edward Kennedy was unrelenting in his advocacy for education and health care for individuals with disabilities. He played a key role in every major law and public policy that positively impacts people with developmental disabilities.

With the help of so many, we continue to work to make their vision a reality, inspired by Mrs. Shriver’s and Senator Kennedy’s example and spirit.

Funding for the Vanderbilt Kennedy Center for Excellence in Developmental Disabilities (VKC) is provided by the National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health (NIH). The VKC is one of the country’s original 14 Intellectual and Developmental Disabilities Research Centers. The Center has two branches: the Vanderbilt University Center for Excellence in Developmental Disabilities (VKC UCEDD) and the Vanderbilt Kennedy Institute (VKI).

In this Community Report, we invite you to see how the Vanderbilt Kennedy Center is growing in its mission to discover, empower, and educate. See for yourself how we are building on 44 years of excellence to optimize the life successes of people with disabilities and their families.
How can advances in basic science—chemistry, biology, genetics, and neuroscience—shed new light on the causes and treatments for autism, Down syndrome, and other developmental disorders? VKC researchers answer these pressing questions by studying how cells grow, develop, and interact in typical and atypical ways, and by discovering genes that turn these processes on and off.

**Discover**

**Genetic risk zone for autism is discovered.**
A multi-university team, led at Vanderbilt by Jonathan Haines, Ph.D. (Molecular Physiology & Biophysics), has identified the first common genetic variation associated with autism. This cutting-edge research points to a particular spot in the genome that may increase a person’s risk for autism, and also suggests how molecules that form connections among brain cells are involved in autism.

**FUNDING:** NIH

**Genetic marker is associated with problem behaviors.**
Up to 30% of adults with intellectual disabilities have problems with aggression or self-injury, and treating these problems costs millions. Craig Kennedy, Ph.D. (Special Education), Randy Blakely, Ph.D. (Pharmacology), and John Phillips, M.D. (Pediatrics), located a common variation of a gene involved in regulating serotonin (a neurotransmitter that influences mood and emotion in the brain) that is linked to behavior problems in these adults. By identifying genetic risks for problem behaviors, we will discover new ways of preventing problem behaviors in adults.

**FUNDING:** U.S. Dept. of Ed. and VICTR

**Fragile X model suggests when best to intervene.**
Fragile X syndrome is the most common inherited cause of intellectual disability. Using a drosophila (fruit fly) model, Kendal Broadie, Ph.D. (Biological Sciences), found that correcting an aberrant neural circuit that controls circadian rhythms was successful only during early to mid stages of drosophila development. These novel findings suggest that drug treatments for people with fragile X are more likely to be beneficial in children as opposed to adults, and highlight the importance of interventions for children.

**FUNDING:** NIH

**Brain tissue analyses implicate altered immune responses in autism and schizophrenia.**
Analyzing gene expression in postmortem brains of people with autism or schizophrenia, Karoly Mirnics, M.D. (Psychiatry), identified a surprising immune system activation, suggesting that infections or other problems that spark a mother’s immune system might contribute to these conditions later in life. Mirnics and colleagues confirmed that a “fake infection” midway through gestation in mice causes behavioral and tissue abnormalities reminiscent of schizophrenia and autism in the offspring. Knowing whether a mother had an infection during pregnancy might one day allow physicians to predict a child’s later risk of developing a neurodevelopmental disorder and opens the possibility of interventions to prevent these disorders.

**FUNDING:** NIH

**Empower**

**Laboratory researchers are empowered by meeting people with disabilities.**
The VKC helps basic scientists create bridges from their labs to people with disabilities and their families, which provides motivation and a broader understanding of their work’s significance for individual lives.

**“Meeting children with Angelman syndrome has really put the basic science I do into perspective. Science and discovery is a slow process and cures may be a long time away—yet it is important to know who we are working for and to always carry that knowledge around.”**

—Anthony J. Baucum II, Ph.D., Postdoctoral Fellow, Molecular Physiology & Biophysics

VRC researchers develop genetically altered animal models to study developmental disorders. Above, brain cells were stained to allow researchers to view the changed genetic activation. Photo courtesy of laboratory of Karoly Mirnics, M.D.
I believe the future of research on neurodevelopmental disabilities involves links between genetics and brain structure and function. I came in with expertise in statistical genetics, and the Biobehavioral Interventions Training Program has provided me with the crossdisciplinary training in neuroimaging that I need to conduct such research. I am now well-positioned to become a leader in this burgeoning field.

— Tricia Thornton-Wells, Ph.D., Former BITP Fellow

Renewal of IDDRC Center Grant provides critical services to researchers. Researchers need resources to conduct their experiments, and the VKC provides these to over 90 researchers through a 5-year grant that was renewed this year. This grant designates the VKC as one of 14 national Eunice Kennedy Shriver Intellectual and Developmental Disabilities Research Centers (IDDRC) and provides core research services: Basic Neuroscience, Statistics and Methodology, Clinical Neuroscience, Participant Recruitment and Assessment, and Administrative Services. The competition is open to universities across the nation, and the VKC competed with a record number of applicants. Of the 14 IDDRCs, the VKC is among the few who also are University Centers for Excellence in Developmental Disabilities and who have a Leadership Education in Neurodevelopmental Disabilities training grant. FUNDING: NICHD

V KC Science Day creates collaboration. Researchers need to share ideas, and VKC Science Day accomplishes just that. Over 100 trainees and faculty presented research posters at VKC Science Day 2009. Posters represented labs of 52 VKC researchers in cellular and molecular neuroscience, clinical and behavioral science, and systems neuroscience. Selected posters earned awards, and all became VKC Affiliates, eligible to apply for VKC Travel Awards. To date, 20 Travel Awards have been given to young investigators to present their work at national scientific meetings.

Educate

Training grant prepares new disability researchers. Training the next generation of researchers is a top priority for the VKC and the disability field. The Biobehavioral Interventions Training Program (BITP) trains postdoctoral fellows who are eager to learn new research strategies that unravel the mysteries of developmental disorders. BITP enlists faculty mentors in psychology, education, genetics, medicine, and neuroscience who foster interdisciplinary studies by trainees on the causes and best interventions for children and adults with developmental disabilities. FUNDING: NIH Roadmap Initiative

“Teachable moments” empower through research and training events. Over 70 VKC lectures each year and a dozen journal clubs provide venues for researchers, trainees, clinicians, staff, and community members to come together to learn from one another.

Grow

Hobbs Discovery Grants are a 30:1 return on investment. Scientists need seed money to collect preliminary data to support their research ideas, and these data allow them to successfully compete for larger federal or foundation grants. The VKC provides stellar researchers seed monies through the Hobbs Donor Society. Members contribute $1,000 or more annually. Hobbs Discovery Grants have led to an astounding 30:1 return on investment, and there’s no way to measure the difference that this investment makes in the lives of individuals with disabilities. In one exemplary Discovery Grant, Kevin Ess, Ph.D. (Neurology), developed technology to convert skin cells to stem cells, which can become any of the body’s many cell types. Now Ess is among 14 physician-scientists nationally to receive a 2009 Clinical Scientist Development Award from the Doris Duke Charitable Foundation to expand this research advance, which may lead to new therapies for children with neurological disorders.

Dan Marino Foundation created MARI to power up autism research. Understanding how autism affects families, the Dan Marino Foundation funded the Marino Autism Research Institute (MARI) as a partnership between VKC TRIAD (Treatment and Research Institute for Autism Spectrum Disorders) and the University of Miami’s Center for Autism. In 2009, MARI supported nine projects. In one such award, Nilanjan Sarkar, Ph.D. (Mechanical Engineering), collaborated with Wendy Stone, Ph.D. (Pediatrics), to develop a technology for robots to “read” and react to the emotional states of children with autism. These robots are fun for children and increase their communication and interactions, two of the core areas affected in autism.
**Empower**

Door opens for postsecondary education for students with intellectual disabilities.

Students with intellectual disabilities can now go on for postsecondary education in the Next Step program at Vanderbilt, a 2-year certificate program. The Next Step program is transforming the campus community as Vanderbilt becomes the first college in Tennessee—and the first top-20 university nationally—to offer this initiative. Next Step was made possible through a 3-year grant from the Tennessee Council on Developmental Disabilities and the philanthropy of Mrs. Linda Brooks.

Learning to read makes reading to learn possible.

Struggling readers are at great educational disadvantage and need intervention early. In 2008, the Reading Clinic helped 83 students (K-4th grade) from 7 Middle Tennessee counties make progress in reading, including students with Down syndrome, autism, and other developmental disabilities. Tutors provided intensive, systematic, evidence-based instruction.

“My daughter was soooo far behind and had soooo many obstacles that she has had to overcome. She was headed down a road of giving up on reading. The Reading Clinic is a blessing because she is improving each session. Thank you, thank you, for the tutors, the scholarships and the time you have given her. PS: She got her first certificate ever for most improved reader in her class.”

–Parent of Reading Clinic student

**Discover**

RTI helps meet academic needs of students with serious learning problems.

Response to Intervention (RTI) is an alternative method for identifying learning disabilities in school-age children. Doug Fuchs, Ph.D., Lynn Fuchs, Ph.D., and Donald Compton, Ph.D. (Special Education), are developing a new generation of screening, progress-monitoring measures, and dynamic assessments in reading and math, as well as specific programs to target reading comprehension in first-graders and word-problems capacity in third-graders. These researchers are leading the nation in RTI approaches. FUNDING: NICHD, IES, OSEP

KidTalk intervention helps at-risk children develop language skills.

Communication disorders can isolate children from their social and educational surroundings, making it essential to provide timely intervention. Enhanced Milieu Teaching (EMT), a naturalistic communication intervention, has been shown to help children with intellectual disabilities improve their communication skills. Led by Ann Kaiser, Ph.D. (Special Education), EMT is now being extended to Head Start children who have low rates of language use, toddlers with language delays, and children with autism. FUNDING: NICHD, US Dept of Ed, Autism Speaks

Measuring speech processing can improve grammatical treatments.

Children with specific language impairments (SLI) have particular difficulty with grammar and are slower processors of speech. Because behavioral measures of sound differentiation are inadequate, Paul Yoder, Ph.D. (Special Education), and Stephen Camarata, Ph.D. (Hearing & Speech Sciences), have measured sound differentiation using event-related potentials (ERPs). An ERP is a visual representation of the brain’s electrical responses to an “event” or stimulus. Children who showed better efficiency of speech differentiation in their ERPs responded better to treatment. This study shows that brain function measures can be used in treatment studies, which will lead to better treatments for children with SLI. FUNDING: NIDCD

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–Parent of Reading Clinic student

*LEFT: At the Reading Clinic, students become more fluent readers, and Peabody students prepare to become effective reading teachers. RIGHT: In 2009-10, volunteers are being trained in Nashville, Memphis, Jackson, and Johnson City to serve as advocates during the Individualized Education Plan process.*
A Family Discovery Grant will advance understanding of sensory sensitivity in autism.
As the grandparents of a grandson with an autism spectrum disorder, Bob and Donna Landreth and the Landreth Family understand the varied challenges faced by individuals with autism spectrum disorders (ASD) and their families. The Landreths’ interest in Vanderbilt’s cutting-edge work on autism has led to the Landreth Family Discovery Grant. The recipients, Carissa Cascio, Ph.D., and Jeremy Veenstra-VanderWeele, M.D. (Psychiatry), will conduct studies on sensory sensitivity in ASD, with the long-term goal of improving treatment and therapy options.

A family-endowed memorial gift has contributed to improved education for many.
When Robert Henderson, Sr., and Carol Henderson wanted to honor the memory of their son Britt, they endowed the Britt Henderson Training Series for Educators. Since 1996, school teams have been trained in evidence-based methods to improve instruction and to support positive behavior. Led by Kathleen Lane, Ph.D. (Special Education), the Henderson Series enables schools to make use of the best of educational research in a practical and feasible way.

VKC contributes to disability and special education training for judges and attorneys.
Tennessee’s Administrative Law Judges, who conduct all of the state’s special education mediations and due process appeals, are required to have annual training in special education law and disability issues. In 2008, VKC faculty and staff provided autism-related training for judges. Partnering with community disability organizations, the VKC also provides training to attorneys who work with families regarding educational services.

“[I am] a good, high-quality student, and I would like to go to college any day!”
—Edward Nesbitt

Next Step Class 2011
Melatonin treatment improves sleep disorders in children with autism.
Children with autism spectrum disorders (ASD) often have difficulty sleeping. Beth Malow, M.D. (Neurology), reasoned that children with ASD who have decreased melatonin also have decreased levels of deep sleep. Released during sleep by the pineal gland, melatonin affects sleep rhythms. Malow used melatonin to treat 100 children with ASD who were diagnosed with sleep disorders, and parents reported sleep improvements in 85% of these children. A Hobbs Discovery Grant contributed to the discovery of melatonin as a safe and effective treatment. FUNDING: NICHD

Cognitive behavioral program helps prevent depression in at-risk teens.
Teens whose parents have a history of depression are at high risk of becoming depressed themselves. Judy Garber, Ph.D. (Psychology & Human Development), led a large randomized trial at four national sites that compared usual care with an 8-week cognitive behavioral program that teaches realistic appraisal of stress and problem-solving skills. Teens in the program had fewer episodes of depression over 9 months, especially when their parents were not depressed when the treatment began. Clinicians treating depressed parents should inquire about their children's well-being, as well as the reverse. FUNDING: NIMH

Premature infants need less manganese.
Although manganese (Mn) is an essential nutrient for proper health, it is toxic in high doses. Sick infants requiring intravenous nutrition may be at increased risk for Mn neurotoxicity. Judy Aschner, M.D. (Pediatrics), is comparing unexposed children to infants and young children receiving prolonged Mn-supplemented intravenous nutrition to determine if exposed children perform differently on neurodevelopmental and psychophysiological assessments. Improved understanding of the relationships between Mn exposure and developmental outcomes will lead to altered clinical practices. FUNDING: NIEHS, Gerber Foundation, VICTR

Age and genetics matter in Prader-Willi syndrome.
Prader-Willi syndrome (PWS), the most common known genetic cause of life-threatening obesity in children, is caused by several types of abnormalities on chromosome 15. Elisabeth Dykens, Ph.D. (Psychology & Human Development), compared health, obesity, and problem behaviors in 142 children and adults with PWS. Health and mental health problems waxed or waned depending on both age and the specific type of chromosome 15 anomaly. Findings allow more careful treatment planning and highlight the importance of taking a life-span perspective. FUNDING: NICHD

Model mental health clinic helps teens and adults with intellectual disabilities.
Persons with intellectual disabilities are at high risk for behavioral, emotional, and psychiatric problems. Treatment gaps exist because too few mental health professionals have expertise in intellectual disabilities. Elisabeth Dykens, Ph.D. (Psychology & Human Development), Bruce Davis, Ph.D. (Psychiatry), and a team of interdisciplinary clinicians treating depressed parents should inquire about their children's well-being, as well as the reverse. FUNDING: NICHD

What medical conditions are associated with specific disabilities, and how are they best treated? Beyond treating problems, how do we promote health and social and mental well-being in people with developmental disabilities? The VKC tackles these public health challenges through innovative research and programs in mental and social health, sports, music, and the arts.
"You all are beyond wonderful!!! Thank you to every single person who had a hand in my son’s life during this experience. To those who have donated so that my son could attend camp, a special thanks because this will change his life!"

– Parent of TRIAD Camper

TRIAD Camp fosters social skills.

TRIAD Social Skills Camp fosters social interaction skills in children, teens, and young adults with autism spectrum disorders. Campers with autism and typically developing peers participate side-by-side in specially designed, age-appropriate activities that provide an enriching and fun learning experience. The Neighbor’s Keeper Foundation and Ann Bernard provided scholarships for campers.

Children and adults with disabilities create and exhibit art.

The VKC shines a light on the artistic abilities of persons with disabilities, which often remain hidden. Community partnerships bolstered the reach of this art, with exhibits at the Tennessee Performing Arts Center and the Frist Center, as well as collaborations with the Nashville Mayor’s Advisory Committee for People With Disabilities, Pacesetters, Inc., Autism Society of Middle Tennessee, Davidson County Mental Health Court, and Park Center East. The Education Outreach Program of the Frist Center for the Visual Arts created art with youth in VKC camps, which will be exhibited at the W. O. Smith Music School.

Educate

LEND prepares trainees for future leadership in improving disability services.

Diverse health care providers often lack training in disabilities. Leadership Education in Neurodevelopmental Disabilities (LEND) prepares graduate-level health trainees in 13 disciplines to assume leadership roles in service provision for children with neurodevelopmental disabilities. Directed by Terri Urbano, Ph.D. (Pediatrics), LEND includes faculty from Vanderbilt, Belmont, Tennessee State University, Meharry Medical College, and University of Tennessee. In 2008-09, LEND prepared 75 trainees, and received supplemental funding to expand training in autism and pediatric audiology. FUNDING: John Merck Fund

The STAT™ Test Kit, Tutorial, and workshops train pediatricians to screen for autism.

Too often parents who suspect their young child may have autism are confronted by long waits for assessments because not enough trained professionals are available. A wide variety of professionals can now become certified for independent use of the STAT™ (Screening Tool for Autism in Toddlers & Young Children) through successful completion of the on-line STAT™ Training Tutorial. Developed by Wendy Stone, Ph.D. (Pediatrics), and Opal Ousley, Ph.D., the STAT™ is an empirically derived, interactive, 12-item measure to screen for autism in children, 24 to 36 months. The STAT™ will meet the pressing need for autism screeners.

Grow

Artist’s gift spreads the gift of art.

Mary Jane Swaney and her late husband C. Robb Swaney honored the memory of a friend’s son, Keith Crabtree, by designing and helping to fund an accessible playground for the Susan Gray School. Mrs. Swaney also has infused her love of art into the VKC. An artist herself, her philanthropy has made it possible for the VKC to continue community exhibits of art by children and adults with disabilities and to conduct inclusive art workshops, where the joy of art flourishes.

Donors, volunteers, and the Nashville music community are dream-makers.

For one glorious summer week, individuals with Williams syndrome who love music came from around the country to take part in Music Camp. Campers participated in research, and with the guidance of Nashville songwriter Thom Schuyler and the inspiration of LeAnn Rimes and Kix Brooks, campers wrote an original song that they recorded at Westwood Sound Studio with producer Blake Chancey and special guest Eddie Montgomery. They sang “Keep on the Sunny Side” at the Grand Ole Opry to a standing ovation. The Nashville music community made this happen—from the dynamic leadership of Lorie Hoppers Lytle, to gifts from the Academy of Country Music Lifting Lives Foundation, Neighbor’s Keeper Foundation, Grand Vista, and Ann Bernard.
Empower

The Ann and Monroe Carell Jr. Families First Program provides practical, expert help to parents.

Accessible and affordable services for families of young children with autism are too few. The Carell Family’s generosity made it possible to help parents through free Saturday workshops. Later, at parents’ request, more intensive 4-week evening workshops were added. Over 200 family members have taken part. While most live in Middle Tennessee, many have come from East and West Tennessee, and over 20% have travelled from other states.

Tennessee Disability Pathfinder helps families navigate the service system.

Tennessee Disability Pathfinder, a partnership with the Tennessee Council on Developmental Disabilities and the VKC, helps families navigate complex service systems. Pathfinder is a statewide helpline in English and Spanish for all types of disabilities and all ages. Its resources include a website with a database searchable by county and service type, a calendar, and a resource library.

In 2008, Pathfinder assisted 1,845 callers, 20% of whom were referrals from the Tennessee Disability Pathfinder.

How do we best support families of children with disabilities as they grow into adulthood? What unique gifts and challenges do children and adults with disabilities bring to their families and communities?

VKC researchers and clinicians are charting new territory by studying and supporting family members touched by diverse disabilities.

Discover

Baby siblings of children with autism show cognitive and social delays.

Younger siblings of children with autism spectrum disorders (ASD) are at increased risk for ASD. Wendy Stone, Ph.D. (Pediatrics), Paul Yoder, Ph.D. (Special Education), and Tedra Walden, Ph.D. (Psychology & Human Development), found that baby siblings of children with ASD show weaker performance in nonverbal problem-solving, directing attention, using gestures, and understanding words and phrases. The overall weaker performance of baby siblings may represent an emerging broader autism phenotype that can be used for earlier diagnosis and intervention. FUNDING: NICHD

Interventions should be sensitive to ethnic/racial differences in Down syndrome.

Ethnic/racial differences among mothers of children with Down syndrome (DS) are not well understood. Using State of Tennessee Birth Records, Robert Hodapp, Ph.D. (Special Education), and Richard Urban, Ph.D. (Pediatrics), examined maternal age, education levels, marital status, ethnicity/race, and neighborhood median income. They found differences between African-American mothers and mothers of European descent. Their findings point to the need for targeted health care and social support services for African-American mothers specifically, and young mothers generally, who give birth to children with DS. FUNDING: Jon and Michele Greenfield and Family in Memory of Mark Greenfield, Health Resources and Services Administration.

In pediatric cancer, parent-child communication has long-lasting effects.

One of the most difficult questions facing parents of children with cancer is how to talk with their child about cancer. Bruce Compas, Ph.D. (Psychology & Human Development), is observing communication between parents and children as they discuss the cancer diagnosis, as well as their coping and adjustment over time. This work will provide health care professionals with evidence-based recommendations for facilitating parent-child communication about cancer and decreasing their psychological distress. FUNDING: Hobbs Discovery Grant, National Cancer Institute.

The impact of Disabilities on Families Over the Lifespan

“How do we best support families of children with disabilities as those children grow into adulthood? What unique gifts and challenges do children and adults with disabilities bring to their families and communities?”

VKC researchers and clinicians are charting new territory by studying and supporting family members touched by diverse disabilities.

Children and siblings of children with autism.

“...you gave us the key to unlock any lock. You gave us information, educated us, and brought families together.”

—Families First participant and mother of a three-year-old boy with autism

Children and parents in the Hispanic Outreach support group celebrated at the Opening Ceremony of the 2009 Tennessee Special Olympics. Photo courtesy Tennessee Disability Pathfinder.

Monroe Carell Jr. and Ann Carell’s gifts bring expert knowledge to parents of young children with autism through the Ann and Monroe Carell Jr. Families First Workshops led by TRIAD’s autism specialists.
made 7,440 calls to find help, had 165,000 searches of its website, and served persons from 83 Tennessee counties, 27 states, and 3 countries.

The VKC Hispanic Outreach Program supports Spanish-speaking families. The disability and social service systems are complex to navigate even without language and cultural barriers. Thanks to the Tennessee Council on Developmental Disabilities, Spanish-speaking families can now connect through Hispanic Outreach and Tennessee Disability Pathfinder’s Spanish helpline. Services include case management, a support group for parents of children with autism, and Camino Seguro, a web-based directory of services provided by agencies with staff who speak Spanish.

Siblings of brothers and sisters with disabilities benefit from support. Brothers and sisters will likely be involved in the life of an individual with a disability longer than anyone, including parents. Siblings share most of the same concerns as their parents and can benefit from support. VKC SibSaturdays support siblings, ages 5 to 13. Teen Fusion is a social group for teen siblings, and Tennessee Adult Brothers and Sisters (TABS) is a support and networking group for adult siblings. TABS held its first statewide conference in 2009, and members are active in national efforts aimed at developing policies for adults who care for their siblings with disabilities.

**Educate**

LEND Family Trainees ensure a family perspective is always in the picture. The Leadership Education in Neurodevelopmental Disabilities (LEND) Training Program each year includes a Family Trainee. Directed by Terri Urbano, Ph.D. (Pediatrics), the program prepares health professionals from many disciplines to lead clinical and research advances in the disability field. Family Trainees, who are parents of children with disabilities, help all trainees to see their own disciplines through a family prism and to incorporate family members in service planning. Lessons from families make a long-lasting impact on LEND trainees.

Family Stories inform public policy makers. Family stories are powerful tools to inform public policy makers about what works well and what is lacking in disability policies and services. The challenge is how to collect family stories and make them available. Meeting this challenge, students in a VU Special Education Families Studies course interviewed families referred by The Arc of Tennessee, and learned firsthand of family encounters with services in education, health care, housing, and employment. Family Stories 2008 was distributed to legislators. By sharing their stories, families have educated students and policymakers, necessary steps in building better public policies.

**Grow**

Families generate new knowledge by donating gifts for Discovery Grants. Through Discovery Grants, donors provide essential seed funding for the discovery of new knowledge that will improve the lives of people with disabilities. VKC researchers use Discovery Grants to gather novel data that will strengthen their ideas and competitive edge in obtaining larger federal or foundation grants. Mr. and Mrs. Thomas W. Beasley and Mr. and Mrs. John E. Beasley—two generations—know that Ethan will have the best possible future, both because of their advocacy and love, and because they are supporting innovative research through the Beasley Family Discovery Grant.

Supports are launched for inclusion in religious and spiritual communities. When families share their disability journeys, their stories often include how a faith community has been a crucial support—or has failed to support them. Religious and spiritual leaders and their congregations need training in ministering to persons with disabilities. With support from the Frank Boehm Family, the VKC is launching a speaker series, Inclusion in a Faith Community, to help meet this need. Findings from a VKC survey on Disability, Religion, and Spirituality will inform lectures, community discussions, and field placements. The VKC is among a handful of centers nationwide to support spiritual and religious needs of persons with disabilities and their families.
Discovery is a quarterly publication of the Vanderbilt Kennedy Center designed to educate our friends and the community, from Nashville to the nation. The Center is committed to improving the quality of life for persons with disabilities 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. It is a Eunice Kennedy Shriver Intellectual and Developmental Disabilities Research Center funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development, and a University Center for Excellence in Developmental Disabilities (UCEDD) funded by the Administration on Developmental Disabilities. Discovery is supported in part by Grant No. HD 15052 from Eunice NICHHD, Administration on Developmental Disabilities Grant #90DD0595, and LEND Training Grant: No. T73MC00050 MCHB/HRSA.

kc.vanderbilt.edu (615) 322-8240 (1-866) 936-VUKC [8852]

Elisabeth Dykens, Ph.D., Kennedy Center Director
Louis Muglia, M.D., Ph.D., Associate Director
Tim Stafford, Director of Operations
Jan Rosenmeyer, Ph.D., Director of Communications

UCEDD
Elisabeth Dykens, Ph.D., Co-Director
Elise McMillan, J.D., Co-Director; Services
Terri Urbano, Ph.D., M.P.H., R.N., Training
Robert Hodapp, Ph.D., Research
Jan Rosenmeyer, Ph.D., Dissemination

LEND
Terri Urbano, Ph.D., M.P.H., R.N., Director
Tyler Reimschisel, M.D., Associate Director
Treatment and Research Institute for Autism Spectrum Disorders
Wendy Stone, Ph.D., Director

Discovery
Editor/Writer: Jan Rosenmeyer, Ph.D.
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ANN AND MONROE CARELL JR. FAMILIES FIRST WORKSHOPS
Free monthly Saturday workshops serving parents of children, ages 2-5, diagnosed with an autism spectrum disorder
8:30 a.m.-12 p.m.
Register at
kc.vanderbilt.edu/registration
Information (615) 343-4275
families.first@vanderbilt.edu

• DECEMBER 5*
  Addressing Challenging Behaviors

• JANUARY 30*
  Improving Communication in Children Who Are Talking

• FEBRUARY 27*
  Family Activity Routines: Cores, Cooking, and Family Games

• FEBRUARY 2, 9, 16, 23*
  Beginning Toilet Training Series
  Tuesdays 6:30-8:30 p.m.

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Free annual workshop series for school teams of general and special educators
5-7 p.m. Wednesdays
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Information (615) 343-0706

• JANUARY 27*
  Self-Monitoring

• FEBRUARY 17*
  Behavioral Contracts

• MARCH 3*
  Brushing Up on the Basics: Proactive Classroom Management Strategies That Work

DECEMBER 2*
Developmental Disabilities
Grand Rounds
The Teaching Pyramid: Supporting Young Children’s Social Emotional Development and Addressing and Preventing Challenging Behavior
Mary Louise Hemmeter, Ph.D., Associate Professor of Special Education Wednesday 8 a.m.

DECEMBER 12*
Community Advisory Council Meeting
For details contact (615) 936-5118
Friday 9:30 a.m.-2 p.m.

JANUARY 13*
Developmental Disabilities
Grand Rounds
Understanding Why Infants Begin Reaching For Objects: Towards an Intervention for Infants with Visual Impairments
Amy Needham, Ph.D., Professor of Psychology Wednesday 8 a.m.

JANUARY 14*
Statistics and Methodology
Core Training Seminar
Statistical Methods for Biomarker Discovery
Tatsuki Koyama, Ph.D., Assistant Professor of Biostatistics Thursday 12:30 p.m.
Register at
kc.vanderbilt.edu/registration

JANUARY 21*
Martin Luther King, Jr. Commemorative Lectures & Lectures on Development and Developmental Disabilities
The Epidemiology and Treatment of Silent Cerebral Infarcts in Sickle Cell Disease
Michael R. DeBaun, M.D., M.P.H., Professor of Pediatrics, Biostatistics, and Neurology, Washington University-St. Louis Thursday 12 p.m.

FEBRUARY 3*
Developmental Disabilities
Grand Rounds
Pediatric Obesity: Diabetes Prevention in the Latino Population
Shari Barkin, M.D., M.S.H.S., Professor of Pediatrics, Chief of the Division of General Pediatrics
Wednesday 8 a.m.

FEBRUARY 16
Vanderbilt Kennedy Center Science Day
Details and registration at
kc.vanderbilt.edu
Deadline for poster abstract submission Friday, December 4, Tuesday 8:30 a.m.-3:30 p.m.
Vanderbilt Student Life Center

MARCH 3*
Developmental Disabilities
Grand Rounds
Dopaminergic Modulation of Brain Development and Behavior
Gregg Stanwood, Ph.D., Assistant Professor of Pharmacology
Wednesday 8 a.m.

MARCH 3
Neuroscience Graduate Program Seminar Series
The Role of the Medial Prefrontal Cortex in Mediating Resistance and Vulnerability to Adverse Events
Steven F. Maier, Ph.D., Distinguished Professor of Psychology, Director of the Center for Neuroscience, University of Colorado
Co-sponsor Vanderbilt Brain Institute
Wednesday, 4:10 p.m. Room 1220 MRB III Lecture Hall

Shriver Transitions and Sports Camp

Unless otherwise noted, events are free and open to the public.
Events are subject to change.
Please keep this calendar and check the Event Calendar on the VKC website for updates.
If you wish to receive event announcements by email, send your email address to
amy.potter@vanderbilt.edu.

For disability-related training and other events statewide and nationally, see Pathfinder Disability Calendar

* Event will be held in Room 241 Vanderbilt Kennedy Center/MRL Building
CALENDAR OF EVENTS | DECEMBER 2009-MARCH 2010

Special Lecture for Vanderbilt & Brainstorm Lectures on Development and Developmental Disabilities

Rett Syndrome: Linking Epigenetics to Neuronal Plasticity

Huda Y. Zoghbi, M.D., Professor of Molecular & Human Genetics, Pediatrics, Neurology, and Neuroscience, Baylor College of Medicine

Thursday 4:10 p.m.

Community Advisory Council Meeting

For details contact (615) 936-5118

Friday 9:30 a.m.-2 p.m.

Statistics and Methodology Core Training Seminar

Data Preparation, Standards and Data Integrity: The Devil is in the Detail

Ana Regina de Andrade, Ph.D., Senior Lecturer, Department of Economics, Research Associate, Center for Evaluation and Program Improvement

Catherine Smith, Assistant Professor of Psychology, Cumberland University

Wednesday 12:30 p.m.

Register at kc.vanderbilt.edu/registration

Neuroscience Graduate Program Seminar Series

Role of MeCP2 & HDACs in Regulating Synapse Function and Behavior

Lisa M. Monteggia, Ph.D., Assistant Professor of Psychiatry, UT Southwestern Medical Center at Dallas

Co-sponsor Vanderbilt Brain Institute

Wednesday, 4:10 p.m. Room 1220 MRB III Lecture Hall

TRIAD SCHOOL-AGE SERVICES

With the Tennessee Department of Education, TRIAD offers free autism-specific workshops for parents, school personnel, and the community in locations across the state.

Information and registration, contact Linda.Copas@state.tn.us, (615) 741-7790

See also tennessee.gov/education/special/announcements.shtml

ARTS AND DISABILITIES

Vanderbilt Kennedy Center Exhibits

Monday-Friday 7:30 a.m.-5:30 p.m.

Information contact (615) 343-7046

• Through JANUARY 12, 2010

Creative Expressions XV

• JANUARY 18-MARCH 29 2010

From Heartache to Hope: Middle Tennessee Families Living with Autism

Photo exhibit

Reception 5-6:30 p.m.

Thursday, January 28

BEHAVIOR ANALYSIS CLINIC

For families of children, 3-18, with developmental disabilities

Contact (615) 322-9007

READING CLINIC

For students in kindergarten and early elementary grades

Contact (615) 936-5123

SIBLING SUPPORTS

For children, teens, and adults who have a sibling with a disability, chronic health care issue, or mental health concern

For all programs below, contact (615) 936-5118

roxanne.carreon@vanderbilt.edu

• SibSaturdays*

DECEMBER 12

FEBRUARY 20

Ages 5-7 and 8-12 years

Games, friends, conversation

$10/child or $20/family

Financial assistance available

Advance registration required

SibSaturdays also are offered by the Autism Society of Middle Tennessee and the Down Syndrome Association of Middle Tennessee

• Teen Fusion

DECEMBER 19

MARCH 13

Ages 13-17, Activities vary

ABA Clinics

For children and adults, with and without disabilities

Lynnette Henderson (615) 936-0448

Toll-free (1-866) 936-VUKC [8852]

• Research Family Partners

kc.vanderbilt.edu/rfp

Register and be notified of research studies

• StudyFinder

kc.vanderbilt.edu/studyfinder

View lists of studies, criteria, and contact information

See also VUMC Clinical Trials

www.vanderbilthealth.com/clinicaltrials

TENNESSEE DISABILITY PATHFINDER

Helpline, web, print resources

www.familypathfinder.org

English (615) 322-8529

Español (615) 322-8529 ext. 11

Toll-free (1-800) 640-INFO [4636]

tnpathfinder@vanderbilt.edu