New research hub for neurogenetic communication disorders

The second floor of the west side of Munroe-Meyer may not look like much yet, but it will soon be a research hub for speech-language pathologists to call home.

Jordan Green, Ph.D., associate professor, and co-investigator Tiffany Hogan, Ph.D., assistant professor, are still setting up the space that will become the home of the Neurogenetic Communication Disorders Consortium. It’s where they will study what causes speech and language disorders such as apraxia.

“There is a neurologic and genetic basis for these types of disorders, and we plan to use brain imaging techniques to study what causes them,” Dr. Hogan said.

The hope is that the research will lead to interventions that improve the outcomes for individuals with speech and language disorders. Some have trouble forming sentences and learning new words, other children know what to say but have problems with motor control.

“Our research will hopefully be the foundation for treatment,” Dr. Green said. “We are trying to make a quantum leap rather than take incremental steps. There’s no magic bullet, but hopefully the results of our work will help to tailor treatment.”

So far, they’re off to a fast start. Drs. Green and Hogan already have received their first grant from the University of Nebraska Great Plains Health Research Consortium, a $100,000 award to study the biological pathways of speech.

The lab will consist of eight staff members and will become fully operational in mid-November.

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New faculty Q&A

Name: Michael Kelley, Ph.D.

Title: Associate Professor and Director of the Severe Behavior Program

Hometown: Philadelphia

What drew you to the Munroe-Meyer Institute? The opportunity to work in a world-class research and training facility alongside some of the preeminent behavior analysts in the world.

How does the work you do directly impact children/adults with disabilities? Our work in the severe behavior program has the potential to impact families in profound ways. Some families report that they cannot go to church, to restaurants, to the grocery store, or even visit family on holidays due to the disruptive nature of their child’s behavior problem. Our treatments allow families to function more normally in their day-to-day lives. We wish for parents to report to us that their quality of life has increased as a function of receiving our services.

Fun Fact: Dr. Kelley recently received the B. F. Skinner New Researcher Award, an honor for “innovative and important research in behavior analysis conducted within the first seven years of receiving a doctorate.”

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From the director

You may have noticed that MMI has been on the move in the last 6 months, both literally and figuratively.

Starting with the literal moves, members of the Human Genetics Lab recently left the space they occupied on the second floor of the Hattie B. Munroe Pavilion for more than 25 years and moved to newly renovated space on the third floor of the Hattie B. Munroe 1998 addition.

That space, formerly occupied by the molecular genetics department, became available as part of our strategic plan to recruit a cadre of three investigators to expand MMI’s basic research programs. Dr. Shelley Smith moved her lab to C.L. Werner Neurodevelopmental Disabilities Laboratories floor of the Durham Research Center II and was recently joined by our new colleagues. In recognition of this expanded basic research thrust, the department’s name was changed to developmental neuroscience.

The second floor of the HBM Pavilion was renovated and now houses the education and child development department, the Interdisciplinary Center for Program Evaluation, AmeriCorps, space for our students in our Ph.D. program in MSIA and a new collaborative program for Neurogenic Communication Disorders directed by Dr. Jordan Green from UNL’s Barkley Center.

The less obvious movement at MMI has been the forward progress in the translational and applied research arenas. Two additional programs have been established, one of which you read about on the front page. The other is a program on the Neural Basis of Motor Development and Rehabilitation, which was recently approved for five years of funding by the Hattie B. Munroe Foundation.

While much of the previous research conducted at MMI is considered “basic,” our new and expanded programs all have the potential to improve the quality of life for individuals with neurodevelopmental, genetic and other disabilities, and that’s why we’re here.

J. Michael Leibowitz, Ph.D.
Director
Munroe-Meyer Institute
University of Nebraska Medical Center

 Symposium follow-up

The Special Olympics Health Symposium, held on July 17 at UNMC and sponsored in part by MMI, addressed the health concerns faced by people with intellectual/developmental disabilities.

The symposium preceded the 2010 Special Olympics USA National Games in Lincoln. Special Olympics Chairman and CEO Tim Shriver, Ph.D., spoke to the crowd of 100 attendees and issued a challenge – to join the Special Olympics movement’s fight to encourage physical fitness and increase access to health care. Other speakers included Rich Bass, M.D., senior health editor at ABC news, UNMC Vice Chancellor for Academic Affairs Ruben Parra, M.D., and MMI Director Michael Leibowitz, Ph.D., who discussed the impact of the Americans with Disabilities Act.

MMI faculty who presented included Cindy Ellis, MD, Joe Evans, Ph.D., and Wayne Stuberg, Ph.D.

The event included discussions on the inclusion of people with disabilities in regards to health care disparities and best practices for delivering family-centered care.

Special Olympics Chairman and CEO Tim Shriver talks with Shelly Wonder of the UNMC Munroe-Meyer Institute. Wonder is involved with the AmeriCorps program at MMI.

Did you know…?

Photos like the one on the back cover taken by professional photographer Scott Dobry are available for your use. Just click on the photo gallery folder in the shared J drive and view the sheet with all the pictures. Contact public relations for access to the original size photo.

This will be the last printed edition of the MMI newsletter. Based on the results from an Institute-wide survey, which said 72 percent of readers would prefer to receive the newsletter via e-mail as a PDF, the spring issue will be available as an e-newsletter only.

MMI begins fellowship programs

MMI has started a pair of fellowship programs to train clinical geneticists and clinical cytogeneticists to address shortages of professionals in both fields. Below are some facts about the new programs.

What do they do?

Clinical geneticists act as consultants regarding laboratory and clinical diagnosis for a large group of genetic disorders. Cytogeneticists detect chromosomal problems early to provide health care professionals an opportunity to establish a method of treatment.

When did the programs start?

On July 1, two physicians – Lois Starr, M.D., and Eric Rush, M.D. - started the fellowship program in clinical genetics, one of just 39 such programs in the country. The clinical cytogeneticists fellowship will soon restart at UNMC. The program was discontinued 12 years ago because of limited staff and increased requirements.

Who’s eligible?

The clinical fellowship program is open to physicians who have completed their residencies. The cytogenetics fellowship will be open to geneticists with a doctorate degree and to physicians who have completed a residency in pediatrics, pathology, neurology, family practice or obstetrics. Both programs are certified by the American Board of Medical Genetics, a branch of the American Medical Association.

Whom do I contact?

Contact Warren Sanger, Ph.D., at wsanger@unmc.edu or Bruce Buehler, M.D., at bbuehler@unmc.edu for more information about the program.

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New grants and contracts

Received by: Keith Allen, Ph.D.
From: National Institute of Dental and Craniofacial Research
Amount: $185,000
What it will do: evaluate the use of brief scheduled breaks to reduce distress and fear of typical developing children and children with autism and other developmental disorders undergoing restorative dental treatment in an effort to increase access to quality oral health care.

Received by: Joe Evans, Ph.D.
From: Maternal and Child Health Bureau
Amount: $795,000
What it will do: focus upon expansion and evaluation of services to outstate Nebraska families of children with epilepsy using telehealth technology.

From: HRSA Bureau of Health Professions
Amount: $500,000
What it will do: conduct graduate psychology education internship training to address the critical shortage of psychologists practicing in underserved areas.

From: Corporation for National and Community Service
Amount: $500,000
What it will do: focus on providing service opportunities for individuals with and without disabilities as well as enhancing rural behavioral health care delivery and service delivery in urban inner city areas.

Received by: Wayne Stuberg, Ph.D., and Max Kurz, Ph.D.
From: American Physical Therapy Association
Amount: $10,000
What it will do: study the use of gait training with partial weight support and weight training to improve walking in children with cerebral palsy.

From: The Big Splash
Amount: $30,000
What it will do: allow for portable motion analysis technology called Gaitrite to be integrated into current school-based therapy programs and possibly satellite physical therapy clinics in rural Nebraska.

Received by: Lisa St. Clair, Ed.D.
From: Ounce of Prevention Fund
Amount: $75,000
What it will do: study the impact of Educare, a high quality birth to age 5 early childhood program.

From: Learning Community of Douglas and Sarpy counties
Amount: $59,721
What it will do: evaluate the Elementary Learning Centers for the Learning Community of Douglas and Sarpy counties. The information will be used to inform policy makers and leaders of the Learning Community.

Received by: Tina Sedersten and Deb Circo, Ph.D.
From: The Nebraska Council on Developmental Disabilities
Amount: $10,000
What it will do: offer “netiquette” training on social networking for young adults with intellectual impairment.

Received by: Mark Smith
From: The Nebraska Department of Education
Amount: $41,000
What it will do: provide information in addition to leadership and other skill training to family members of young children with disabilities in an effort to increase the participation of families in the Early Development Network across the state.

Received by: Barb Jackson, Ph.D., and Lisa St. Clair, Ed.D.
From: Building Bright Futures Early Childhood Services
Amount: $96,500 and $30,516
What they will do: The first grant assesses the overall quality and effectiveness of child care centers and home day care that serve low income children in Douglas and Sarpy counties utilizing classroom observation measures as well as measure child progress and outcomes using individual child assessments.

The second grant will measure the effectiveness and outcomes of the BBF’s Teen Parent Program, which seeks to help young parents graduate from high school.

Meet Dani Bishay
Title: Genetic Counselor
Department: Genetic Medicine
Years at MMI: 4
Hometown: Chadron, Neb.
The best part about my job is: meeting and speaking to different people every day.
The accomplishment (work related or not) I am most proud of is: I should say getting my master’s degree but really, this year, it was placing seventh at the third Annual Minnow Races in Chadron.
If I had another career it would be: ranching.
Three adjectives that best describe me are: spontaneous, fun-loving and energetic.
If I could interview anyone (living or dead) it would be: Marilyn Monroe because she would have some good stories.
Not everyone knows that I: occasionally sew.

On the job with… Anna Dunaevsky, Ph.D.

Most people don’t find mice all that interesting, Anna Dunaevsky, Ph.D., a researcher in MMI’s newest department of developmental neuroscience, thinks the creatures and their tiny brains are absolutely fascinating.

Dr. Dunaevsky uses mouse models to study connections in the brain called synapses. She and her team of post doc Padmahri Ragunathan, technician Yeous Jung and grad student Ben Rainer are curious about normal brain development and how the brain develops in those diagnosed with Fragile X syndrome.

“Experiments can be tedious sometimes, but when you get an exciting, positive result it’s exhilarating,” she said.

Dr. Dunaevsky believes animal work is important because it allows for the development of therapeutics for humans. She conducted similar research at Brown University prior to her July arrival at UNMC. She is happy to be affiliated with an institute that treats individuals with neurodevelopmental disabilities and she looks forward to meeting patients and their families.

While Dr. Dunaevsky spends a majority of time in her office on the third floor of the Durham Research Center II writing grants and planning future experiments, she also is very involved in the lab work and excited about the potential of her research.

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New Employees

ADMINISTRATION
Sarah Swanson

AUTISM
Kari Adolf
Melissa Bowen
Erika Frieden
Rashea Fuchtman
Eric Grady
Brad Hovenga
Michael Kelley
Jessica Rodenburg
Mindy Schanou

DEVELOPMENTAL NEUROSCIENCE
Jyothi Arikkath
Anna Dunaevsky
Yoosun Jung
Woo-Yang Kim

FEEDING
Tiffany Andreasen
Laura Hartman
Tiffany Schlate
Erinn Swanson

EDUCATION
Nicole Buchhalz
Virginia Marquard
Abbey Munyan
Kristina Norwood
Michelle Simpson

HUMAN GENETICS LAB
Jessica Berry
Amber Carter
Nancy Page
Charles Steele
Heather Vahle

OCCUPATIONAL THERAPY
Kerrie Ivey
Joanne Johnson
Cailin Silcox

PHYSICAL THERAPY
Amber Lawrence

AMERICORP
Nicole Albright
Jami Anderson
Melinda Devore
Phillip Hartwig
Tricia Kaziol
Megan Levesque
Laura Needelman
Brandy Rose
Kristin Sams
Holly Shield
Pamela Staffel
Krista Zarybnicky

Silver U

JUNE
Brigette Vaughan

AUGUST
Joan Dinsmore

OCTOBER
Jody Lieske, Ph.D.

This UNMC award is given to employees who provide consistent performance that exceeds expectations or for other special achievements.

Honors and awards

Beth Conover was chosen as an Organization of Teratology Information Specialists Medical Expert of the Month.
Bhavana Davi, Ph.D., was promoted from associate professor to full professor at MMI.
Deborah Circo, Ph.D., received the Alumni Award for Excellence in Public Service from the University of Nebraska at Omaha.
Erin Kaspar was promoted from Molecular Technician to Cytogenetic Technologist I.
Howie Needelman, M.D., was promoted from assistant professor of pediatrics to associate professor of pediatrics.
Li Zeng, Renae Streblow and Rachel Utter completed the ASCP Certification Examination in cytogenetics and were promoted to cytogenetic technologist II.
Reggie Harbourne, Ph.D., was promoted from assistant professor to associate professor.
Wayne Stubberg, Ph.D., was appointed by Nebraska Gov. Dave Heinerman to the Nebraska State Board of Health.

Fundraiser round-up

Inaugural OwL (Omaha with Lights) bike ride, a nighttime cycling adventure
Held by: The Meyer Foundation for Disabilities
How many: 971 riders, ages 2-70
How much: $20,000 raised for MMI
Fast Fact: 96 percent of riders intend to do the OwL Ride in 2011 and bring friends

The Big Splash, a recreational and competitive swimming fundraiser
Held by: The NU Foundation
How many: 127 swimmers participated
How much: $30,507 raised for MMI
Fast fact: Olympic Gold Medalist swimmer Misty Hyman was the guest of honor at the event.

42nd Garden Walk
Held by: The Munroe-Meyer Institute Guild
How many: 1,300 people
How much: $31,000 raised for MMI
Fast Fact: The next garden walk will be held June 12, 2011

Remembering Shirley Dean

Shirley Dean, a consumer-family coordinator with MMI for four years, died July 2 after a long battle with cancer. She was 68.

“Shirley worked tirelessly in support of individuals with intellectual and other disabilities and their families,” said Mark Smith, a fellow consumer-family coordinator. “She was instrumental in the development of the community services network for individuals with developmental disabilities in Nebraska as well as promoting the self-advocacy movement here and across the country. While she will be greatly missed by her many friends, family and colleagues, the innumerable outcomes of her efforts on behalf of those with disabilities will long succeed her.”

FADENI

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FADENI
Fast Facts 2009-2010

intermediate and long-term training
167 trainees received 99,429 hours of training

core curriculum and leadership seminar presentations
62 different core topics presented to 827 attendees

technical assistance/extension
797 presentations to 30,990 individuals

clinical services
10,542 patients, 5,153 new patients and 5,389 previously served
53,378 total patient visits

research and dissemination
60 papers published in journals, text books and online sites
115 presentations and posters at national and regional conferences
17 grant applications submitted totaling $3,394,863

university courses
34 courses taught at UNMC, UNO, UNL, Metro Community College and the College of St. Mary

Calendar
Walk and Roll – February 20
Trainee research poster session - April 13
Symposium on Cerebral Palsy - April