A passion for research

New faculty member brings 10 years psychiatry research to U. of Iowa

By Sean Thompson
HIND-Sight Editor

Megan Smith, Ph.D., speaks convincingly about her enthusiasm for research.

“It’s largely why the new University of Iowa Assistant Professor of psychiatry came here to work in Huntington disease research and on the PREDICT-HD study. “I’m just really passionate about research and there are few opportunities as great as working on a project this large that includes so many different aspects of functioning,” Smith said. “It’s really exciting to be here.”

After finishing her postdoctoral work at Brown University, Smith came to the UI in August. She is balancing her research with clinical work in the monthly COE HD Clinic where she sees patients.

“It’s important to me because I use my clinical work to inform my research work and vice versa,” Smith said.

Smith will be working with cognitive aspects of the PREDICT-HD study and coordinating efforts to publish cognitive research findings.

“It’s unusual to have a study that’s this big, much less one that’s international,” Smith said. “It opens the door to all kinds of different questions that can be asked of the data.”

As a neuropsychologist, Smith will examine changes in the brain in early HD and how they affect cognitive and emotional functioning.

In September, Smith experienced her first HD conference at the World Congress on Huntington’s Disease in Vancouver. She was wowed by the high level of participation of families affected by HD.

“I was really impressed that everyone was so open to sharing their experiences and to hold researchers accountable,” Smith said. “There was a lot of discussion that we need to move faster and that a treatment is overdue, and I think that people need to hear that.”

Walking for HD research

Photo courtesy Iowa Chapter of HDSA
(from left to right) PREDICT-HD Coordinator Pat Ryan and Research Assistants Eli Waterman and Stephen Cross represented the UI at the Iowa Chapter of the HDSA’s Second Annual Team Hope Walk for HD in Des Moines. The event raised more than $7,000 for HD research. Read more about the walk inside this issue.

New cognitive research results

ADHD drug may not benefit people with HD, but other trials continue to recruit

A new study from UI researchers suggests a common attention-deficit/hyperactivity disorder drug is not effective at improving attention or psychiatric and motor symptoms in people with early HD.

The study by Leigh Beglinger, Ph.D., and others published in the October issue of the Journal of Clinical Psychopharmacology, shows no significant improvements in cognition for those who took atomoxetine versus those who took a placebo. The hope was that a medication approved for ADHD, a condition which produces similar cognitive impairments in attention and executive functions, would be effective in patients with early HD.

Taking atomoxetine did improve self-reported attention, Beglinger said, but the placebo group also reported the same improvement.

“Although this drug was not effective at improving cognition in patients with Huntington disease, there are more clinical trials targeting symptoms that people with HD experience now than there have ever been in the past,” Beglinger said. “So it’s an exciting and hopeful time in that we are exploring a number of treatments.”

A study examining the effect on cognition of citalopram (CIT-HD) is enrolling at the UI, the University of Rochester, Rochester, N.Y., and the Mayo Clinic Arizona in Scottsdale, Ariz. Also, the HORIZON study, detailed further in this newsletter, will begin enrolling soon.
Trying to “turn off” HD

With research grant, U of Iowa fellow making advances in HD research

A UI researcher is making strides in HD genetic therapy thanks to the Lori C. Sasser Foundation.

Ryan Boudreau, Ph.D., is a post-doctoral fellow in the research lab of Beverly Davidson, Ph.D., at the UI. He is also the recipient of the Lori Sasser Fellowship, a $60,000 grant awarded in 2008. Boudreau spoke in September at the UI HD Support Group about the research he is conducting with RNA interference (RNAi).

According to an article on the Lori C. Sasser Foundation Web site, a major breakthrough was published in 2005, when Boudreau and others found that HD was a viable candidate for RNAi-based therapeutics. The general idea behind such therapy is to silence or “turn off” the disease-causing gene.

In Boudreau’s research, RNAi was used to silence the expression of the mutant huntingtin protein in an HD mouse model. The treated HD mice showed improved behavior and motor skills, and prolonged survival as compared to untreated mice.

In an article published earlier this year in Molecular Therapy, Boudreau and others discovered that turning off both the normal and mutant huntingtin proteins simultaneously was beneficial to HD mice. It had been previously unknown whether silencing the normal huntingtin protein would be tolerated in the brain.

Such a strategy may be necessary for RNAi therapy since targeting the mutant huntingtin protein alone could be difficult.

“These are exciting and surprising advances which support further investigation of RNAi as a therapeutic strategy for HD,” Boudreau said.

Going forward, Boudreau hopes his HD RNAi research will include pre-clinical testing of HD RNAi therapies in non-human primates.

According to its Web site, the Lori C. Sasser Foundation partners with top researchers in the fight to end HD. The foundation honors the memory of Lori Sasser, who lost her seven-year battle with Huntington’s disease in 2007.

HDSA Walk a success in Des Moines

The walk was followed by the inaugural Iowa Chapter family picnic, sponsored by Lundbeck. Staff from the UI Center of Excellence visited with families about HD specifics and encouraged participation in research studies. It was a very successful day for all involved.

HD Support Groups:

Des Moines
Valley View Village Conference Room
2571 Guthrie Avenue
Third Sunday at 1:30 p.m.
Mark Hillenbrand
(515) 208-3511

Omaha, Nebraska
Perkins Restaurant
108 L. Street
Second Monday at 6 p.m.
Cathy McNeil
(402) 537-0739

Iowa City
University of Iowa Hospitals and Clinics
Della Ruppert Conference Room
Fourth Sunday at 1 p.m.
Anne Leserman
(319) 353-4307

Reminder: Holiday Party Dec. 13

Make plans to attend The University of Iowa HD Support Group Holiday Party Dec. 13 from noon to 2 p.m.

Lunch will be provided, and members of the UI research team will be on hand to celebrate the holidays with the support group.

The party will be held in the Della Ruppert Conference Room at UI Hospitals and Clinics. RSVP by contacting Anne Leserman at anne-leserman@uiowa.edu or call (319) 353-4307.

We hope to see you there!

On the Web
For more information on HD RNAi research, visit www.healthcare.uiowa.edu/labs/davidson/index.html

Photo courtesy Iowa Chapter of HDSA

Grey’s Lake Park in Des Moines, Iowa, provided picturesque scenery and paved walking trails for the Second Annual Team Hope Walk for HD on Sept. 12 in Des Moines. To see more photos from the walk, visit www.hdsaiowa.org. For more information on the nationwide campaign, visit www.hdsa.org.

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From the Editor

Greetings from a progressively colder Iowa City! Brrr, winter is coming! We are trying out a new way to keep you informed. Please follow us on Twitter at UIowa_HDCenter.

As is always the case, feel free to contact me with feedback at sean-thompson@uiowa.edu or (319) 384-4094. Also, if you want to write something for HIND-Sight, please contact me with your ideas!

Sean Thompson, HIND-Sight Editor
New study to begin recruitment

The exponential growth of clinical drug trials targeting thinking in HD is continuing with the new HORIZON trial. HORIZON will examine the effectiveness of Dimebon, an experimental drug, on cognitive abilities and overall functioning in people with HD. The trial will also evaluate behavior and motor symptoms.

The UI is a pending HORIZON site. There are currently 17 sites confirmed to enroll participants in this international trial.

“This trial is exciting because it’s an international effort,” said Dr. Karl Kieburtz, professor of neurology at the University of Rochester and HORIZON principal investigator. “This is the first time that we have had global collaboration on a clinical trial for Huntington’s Disease.”

Trial participants should be at least 30 years old, have tested positive for the HD gene, have clinical features of HD and have some difficulty with thinking abilities.

Participants will either receive daily oral doses of Dimebon or a placebo for 26 weeks. Eight visits and one phone interview will evaluate general health, thinking abilities, memory, mood, and overall functioning and movement.

The goal of this trial is to confirm positive results of an earlier study that suggested Dimebon may improve thinking abilities in persons with HD.

The trial is sponsored by Medivation, Inc. in collaboration with Pfizer, Inc., and is an official Huntington Study Group trial.

Other Studies Currently Enrolling at the Center of Excellence

We are looking for volunteers for the following studies:

**PREDICT-HD:** Contact Stacie Vik, (319) 353-3716, stacie-vik@uiowa.edu.

**COHORT:** Contact Anne Leserman, (319) 353-4307, anne-leserman@uiowa.edu.

**CIT-HD:** Contact William H. Adams, (319) 353-4411, william-h-adams@uiowa.edu.

**2CARE:** Contact Nancy Hale, (319) 353-4537, nancy-hale@uiowa.edu.

**HART:** Contact Nancy Hale (see above).

Shop to help the COE raise money for HD patient care

Shopping certainly has many benefits, including the benefit of getting new stuff.

But with Community Day 2009, your shopping can also benefit individuals with HD being served by the UI HDSA Center of Excellence.

Coupon booklets are on sale now from the COE for $5 and can be used on Saturday, Nov. 14 in the following stores: Younkers, Bon-Ton, Bergner’s, Boston Store, Carson Pirie Scott, Elder-Beerman and Herberger’s. Booklets include a $10 off coupon, six tiered 20% off coupons, a 30% off early-bird coupon and more.

Coupons can be used on Nov. 14 beginning at 6 a.m. If you cannot shop that day, you can “presale” items up to 10 days before and pick them up on or after the event. Most coupons can be used for online shopping as well.

If the UI HDSA COE sells 75 booklets or more by Nov. 14, it will qualify for extra funds raised on Community Day. Every booklet sold raises money that will go to the COE’s patient care fund to assist HD patients in accessing needed services.

If you’re interested in assisting the UI COE by purchasing a booklet, please contact Leann Davis at leann-davis@uiowa.edu or (319) 353-5668.

Confused by health care terms?

The efforts of President Obama and Congress to pass health care reform in the United States have sparked a national debate on the subject. Many terms have been thrown around, and often without explanation. Here are some common health care definitions, provided by www.pbs.org.

**Universal coverage:** The proposal that all people could get health insurance, regardless of the way that the system is financed.

**Group Insurance:** Health insurance offered through business, union trusts or other groups and associations. This is the most common system in the United States, in which the cost of insurance is based on the age, sex, health status and occupation of the people in the group.

**Single Payer System:** A proposal in which health care costs are paid by taxes rather than by the employer and employee.

All people would have coverage paid by the government.

**Health Maintenance Organization (HMO):** A health plan provides comprehensive medical services to its members for a fixed, prepaid premium. Members must use participating providers and are enrolled for a fixed period of time. HMOs can be either on for-profit or not-for-profit.

**Cooperatives/Co-ops:** HMOs that are managed by the members of the health plan or insurance purchasing arrangements in which businesses or other groups join together to gain the buying power of large employers or groups.

For more information on the UI HDSA Center of Excellence, visit our Web site at:

www.uihealthcare.com/depts/huntingtonsdisorder/

And, we are now on Twitter! Follow us at: UIowa_HDCenter.
Are multitaskers mediocre? Study says yes.


Read it and gloat. Last week, researchers at Stanford University published a study showing that the most persistent multitaskers perform badly in a variety of tasks. They don’t focus as well as non-multitaskers. They’re distractible. They’re weaker at shifting from one task to another and at organizing information. They are, as a matter of fact, worse at multitasking than people who don’t ordinarily multitask.

But wait, should it be breaking news that a single person can’t juggle knives and explain quantum physics while polishing off an artichoke?

Breaking news, and a shock to the researchers themselves, as it turns out. Originally, the team of researchers, whose findings are published in the Aug. 24 issue of the Proceedings of the National Academy of Sciences, were trying to find out what unusual cognitive gifts multitaskers possessed that made them so successful at multitasking.

They’re still looking.

“Multitaskers were just lousy at everything,” said Clifford I. Nass, a professor of communication at Stanford and one of the study’s investigators. “It was a complete and total shock to me.”

The study’s results were so strong and unexpected that the researchers are planning a series of follow-up experiments. “It keeps me up late at night,” Professor Nass said. “I worry about both the short-term and long-term effects of multitasking. We’re going to be testing the heck out of high and low multitaskers.”

To the rest of the world, though, the people who trudge through life excited and unnerved by an occasional cell phone call while walking or watching the sun set (isn’t that multitasking?), the study’s findings aren’t quite so shocking. A constant state of stress, deluges of ever-changing information, the frenzied, nanosecond-fast hustle and bustle — this is bad for you? It’s surprising and it’s news that it’s bad for you? Before they lie down to take a well-deserved and uninterrupted nap, the trudgers of the world would like to say, “We told you so!”

“It keeps me up at night. I worry about both the short-term and long-term effects of multitasking.”

Clifford I. Nass, Professor of Communications, Stanford University