

Transitions

The Intersection between Normal and Abnormal Aging of the Brain

The IOG's burgeoning cognitive neuroscience sector welcomes a new researcher this spring. Dr. Jessica Damoiseaux departs the sunny clime of California's Stanford University in April to investigate brain aging at Wayne State in a joint appointment between the IOG and the Department of Psychology. She studies the



Dr. Damoiseaux poses with a phrenology model, popular in the late 1700's as a way to link personality traits to bumps on the skull. Brain science has come a long way...

intersection between normal and abnormal aging, tracking the point where development deviates and intervention might be possible to slow or stop the changes. "Many researchers are studying Alzheimer's and dementia," she said. "My focus is on early detection, exactly when the dementia starts."

Following in the path of the IOG's other cognitive neuroscientists (Drs. Raz, Ofen and Thomason), Dr. Damoiseaux will form her own cognitive neuroscience lab and has already secured her first grant funding. A native of the Netherlands, she won a grant from the Netherlands Organization for Scientific Research to study functional and structural brain changes over four years in healthy older adults with and without cognitive complaints. Participants will receive periodic MRIs and cognitive testing.

"I am interested in the person who visits their doctor with concerns about their memory," she explained. "The doctor does basic testing, finds no obvious cause, and sends them home. Researchers have found that these people are five to six times more likely to develop a dementia than people without complaints. Their initial subjective awareness of cognitive

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Healing from Spinal Cord Injury

Record numbers of soldiers are returning from Iraq and Afghanistan with serious spinal cord injuries (SCI). While medical advancements can help heal their physical wounds, little is known about how these veterans re-engage with their

communities and rebuild meaningful lives.

"How do they transition back to family and community life and adjust to their physical impairments? How do they reconfigure their

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The Lego robotics team of Muir Middle School in Milford, Michigan, competes to create the best solutions to obstacles faced by older adults (story page 2).

research
education
outreach
partnerships



*Promoting Successful Aging
in Detroit and Beyond*

Lego Robotics Team Gets Crash Course on Senior Needs

IOG Deputy Director Cathy Lysack “connected” with the Lego robotics students of Muir Middle School in Milford to help them research ideas for this year’s competitive challenge. The assigned “Senior Solutions” theme required students to build a Lego robot that improved the lives of older adults to help them live independently. “The Robohawks are a very talented and professional group,” Dr. Lysack said. “Not only very smart, but thoughtful and creative as well. They all have a bright future ahead.”

Dr. Lysack met with the seven-student team at the IOG’s office in Detroit. The budding scientists and researchers asked insightful questions about older adult activities, capabilities and disabilities. They were especially interested in how assistive technology might help a person with Alzheimer’s. The students learned a lot from their interview with Dr. Lysack, according to science teacher and Lego League Coach Jason Vallimont. A few months after the meeting, the Robohawks competed against 24 regional teams to qualify for the State Lego Tournament.

Judging occurred across four “Senior Solu-



Robohawk Lego Team, left to right: Aaron Kruskie, Chris Pietsch, Suzie Harris, Hunter Barnes, Dr. Lysack, Riley Morris, Noah Beattie, Brandon Woolman

tions” themed categories. The Robohawks built a Lego robot to navigate around obstacles, such as stairs and furniture. They performed an original skit in which an adult son takes his father to the doctor to discuss memory loss. They designed a smart phone application to play favorite music from any era, and wrote software to easily program a system that reminds dementia

with her. Coach Vallimont was especially appreciative and said that talking to an actual researcher in gerontology was priceless. “One of my favorite parts of the season,” he said, “was when we left Dr. Lysack’s office and Brandon told me, ‘I always loved earth science and physics, but I never realized how awesome all science is!’”

patients about daily tasks like taking their medications.

Dr. Lysack attended the state competition to cheer on the Robohawks who shared one of their medals

“We’ll search for possible precursors to abnormal brain development.”

– Dr. Damoiseaux

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impairment might be our earliest indicator.”

Dr. Damoiseaux will study 80 people age 55-75 (20 controls and 20 subjects) across two sites: at the IOG and at Leiden University in the Netherlands, dividing her time between both locations. She uses a relatively new brain imaging approach called resting state functional MRI (or rs-fMRI) technology. Resting state means just that; the brain is scanned while the person rests but not sleeps. She also uses diffusion tensor imaging to chart brain connections. “We’ll search for possible precursors to abnormal development,” Dr. Damoiseaux said. “These imag-

ing technologies can show subtle alterations in brain networks.”

Dr. Damoiseaux moves to Wayne State after five years as a post-doctoral trainee at the Stanford School of Medicine. She has amassed research, clinical and teaching experience at Stanford and three university medical centers in the Netherlands. She will tap her teaching skills creating a new “Introduction to Cognitive Neuroscience” class for undergraduates at WSU, the first undergraduate class in cognitive neuroscience offered at the university. “I like teaching,” she said. “It’s challenging. I learn from it.”

The Damoiseaux family includes her husband Jasper, daughter Juno, age 3½, and son

Mika, age 9 months. Juno is excited about the move, bragging to her preschool that she is coming to Michigan. Jasper’s transition should be smooth, too. He works from home as a geotechnical engineer for a Dutch company expanding its presence in the United States. “All the pieces are falling in place perfectly,” Dr. Damoiseaux said. The family will also get to return to the Netherlands each summer while she oversees the Dutch portion of her research grant.

First, though, they want to explore Michigan. “We love the outdoors. We want to hike, to ski, to visit Mackinaw and feel all the seasons,” she said. “This will be a wonderful experience for all of us.”

Hot Topics Ensure Relevant Training

The IOG's continuing education trainings consistently draw large audiences and receive excellent evaluations. Our success derives from our menu of fresh, hard-to-find topics presented by qualified experts who make the material interesting. We were one of the first organizations in the Detroit area to offer CE training on topics such as:

- Legal and Ethical Issues Regarding Medical Marijuana
- Alternative Sexuality and Aging
- Avoiding Rehospitalization
- Helping War Veterans in Senior Housing

The centerpiece of our CE offerings is our *Issues in Aging Conference*, now in its 26th year. This two-day event provides credits in nursing, social work, nursing home administration, and physical and occupational therapy, with a theme-oriented agenda each year. The May 13-14 conference focuses on best practices



in dementia treatment, and how to help frail elders. "We evaluate every program we offer," said Donna MacDonald, director of the IOG's community outreach.

"We follow-up with a survey to participants to ensure that all objectives have been learned and to determine their future needs. We find our topics by browsing medical journals, conversations with researchers and listening to faculty concerns. I'm always trying to predict the information that professionals will need to do their job well."

The medical marijuana training for case

managers at the Area Agency on Aging 1-B arose when home health workers started asking questions about patients who were using marijuana. What is legal? What are the rights of patients to grow and ingest it? Are caregivers implicated if the use is not legal? "The laws were changing so rapidly," Donna said. "No one was certain of how to respond."

Programs are carefully designed by the IOG to reflect the mission and philosophy of the sponsoring organization. The series of trainings co-sponsored by Waltonwood Senior Living

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Life Changing Years as an IOG Trainee

The training offered at the IOG to Wayne State University graduate students is designed to deepen the connection between the students' primary discipline and the IOG faculty's expertise in gerontology. A student studying occupational therapy, for instance, would learn the challenges older adults face in rehabilitation, and how broader aging issues affect OT.

Alum Kathryn Potter, M.S., OTR/L, heaps high praise on her IOG training for its relevance and professional application. "I think back on my experiences at the IOG as truly life-changing," Katy said. She was recently named OTA program director for Baker College in Muskegon, Michigan. "I am excited about this new position and increasingly overwhelmed by gratitude," she told mentor Dr. Cathy Lysack. "You gave so much to me. Thank you for being an excellent mentor."

Katy trained at the IOG in 2001-2003, before she got her doctorate. Her first position was as an occupational therapist with St. John

Health in Detroit before relocating to Muskegon in 2005 to be an OTR team leader in a skilled nursing facility. "I learned a lot about the Eden Alternative (nursing facilities designed to be more person-centered and home-like)," she said, "and even brought my dog to work as a therapy dog." She next became a travel therapist licensed in Michigan, Texas, California and Tennessee. Throughout her years as a clinician, she worked primarily with older adults. "My time at the IOG has been invaluable to my career," she said. Her broad experience includes working with older adults in acute care, long-term care and home care.

Katy's duties as Baker's program director include teaching, which makes her both excited and nervous. "The amazing instructors at Wayne State always made it look so effortless and natural," she said. "I was foolish to believe it!" She looks forward to her new post and sharing her varied clinical experiences. Congratulations to Katy and to all our trainee alums who use what they learned at the IOG to help older adults everywhere.

AWARDS & HONORS

Dr. Lichtenberg wins Call to Justice Leadership Award – IOG Director Peter Lichtenberg became the first educator to receive this statewide Elder Law of Michigan honor for his outstanding contributions as a leader and innovator in changing attitudes and advancing knowledge about aging. The award originally recognized only lawyers working in aging, but now includes academic experts and journalists covering aging topics. Dr. Lichtenberg epitomizes wisdom about older adults, sensitivity to legal issues and involvement in the community. “Peter is one of Michigan’s most visible academics specializing in aging issues,” said Kate Birnbryer White, executive director of Elder Law of Michigan. “He is one of the state’s key educators, researchers and advocates in aging. We need more like him.” The non-profit Elder Law of Michigan promotes and protects the rights, health and economic well-being of older adults and people with disabilities.



Congratulations – Dr. Daniel Paulson will join the University of Central Florida this fall as an assistant professor of psychology. Dr. Paulson was an IOG trainee, mentored by Dr. Lichtenberg, in 2009-2012 as he completed his dissertation and studied vascular depression, frailty and longevity in late life. In January he published, “Does Brain Reserve Protect Older Women from Vascular Depression?” in the *Journals of Gerontology* with co-authors Mary Elizabeth Bowen (another IOG trainee alum) and Dr. Lichtenberg.

Bilingual Batters the Brain – WSU psychology professor and former IOG fellow **Dr. John Woodard** found his name in the press when he commented on research showing that lifelong bilingualism helps to maintain cognitive function as we age. *Prevention Magazine*, among others, interviewed Dr. Woodard for his perspective on the study. “This study provides some of the first evidence of an association between a cognitively stimulating activity and brain function,” he said. Rosetta Stone won’t help, though. Subjects had been bilingual most of their lives.



Students’ Choice Award – Former IOG trainee **Dr. Waverly Duck** received the 2012 Students’ Choice Award from the College of General Studies at the University of Pittsburgh where he is an assistant professor in the Department of Sociology. Dr. Duck credits his IOG mentor, Dr. Lichtenberg, for demonstrating excellence in effective teaching. “I model my interactional style with students after you,” the 2004 alum told Dr. Lichtenberg. “I am still benefiting from your example.” Dr. Duck also received the 2012 Men of Excellence award from the *Pittsburgh Courier* for his leadership and community service.



Heading South – Dr. Lindsey Martin, a pre-doctoral trainee at the IOG in 2006, is now a health services research post-doctoral trainee at the Houston Veterans Administration Center of Excellence. “I’m excited about the opportunity,” Dr. Martin said. “The IOG provided me with so much I can use and apply here.”

Excellence in Research – IOG trainee alum **Dr. Chris Brunt** won the 2012 Frank McDevitt Award for Excellence in Research for his article on the effects of Medicare reimbursement on care quality in the *International Journal of Health Care Finance and Economics*. The award comes with a \$10,000 prize. Dr. Brunt is a faculty member at Lake Superior State University. **Dr. Elham Mahmoudi** won the 2012 Excellence in Research Award for Graduate Students (a \$1,000 prize) for her article in *Medical Care* on racial and ethnic health disparities. Both recipients were students in the WSU Department of Economics and mentored by IOG faculty member **Dr. Gail Jensen Summers**. The awards are granted through the Blue Cross Blue Shield of Michigan Foundation.

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work and their lives?” asks Dr. Cathy Lysack, professor of occupational therapy and gerontology. Drs. Lysack and Mark Luborsky, professor of anthropology and gerontology, are co-principal investigators on a new \$456,000 grant from the Department of Defense to explore those questions. The three-year grant, shared between WSU’s Institute of Gerontology and the University of Maryland, Baltimore County, will study how service members and veterans with SCI reintegrate into society. News of the study was featured on National Public Radio’s evening drive program in February.

“After the medical issues are stabilized, the key to long-term success for patients is how they establish their cultural identities and create meaningful connections to communities,” Dr. Luborsky said. “This project will move the science and research forward toward interventions to help all people with SCI maintain their independence and ability to function in community life.” Insights will resonate to older adults who are wheelchair bound or have difficulty walking.

A total of 60 spinal cord injured veterans will be recruited at three levels of recovery: less than 12 months, 12 to 24 months, and 2 to 5 years after discharge from inpatient rehabilitation. The research teams will interview service members in depth about their long-term goals, values and expectations for meaningful community reintegration and social participation.

“Traumatic spinal cord injury is severe and permanent, but it need not be a catastrophic disability,” said Dr. Lysack. While researchers have learned a lot about how civilians with SCI reintegrate into family and community life, veterans and service members may approach it much differently.

“These are soldiers – *uber* males and females – whose role in the military has been to fight and protect,” she said. “We need to learn how they make a successful transition to civilian life.”

PARTNERSHIP PROFILE

Foundation's \$750,000 Keeps Seniors Healthy at Home

Older adults in southeast Michigan have been hard-hit by the recession and the continued economic slowdown. Many need help with food, home repairs, transportation and serious medical and dental problems not covered by insurance. Since 2007, the American House Foundation has raised more than \$750,000 to help nearly 5,000 Detroit area seniors meet these critical needs.

American House Foundation was established by the founders of the American House Senior Living residences – but its funds are not directed to seniors living in American House facilities. The Foundation provides basic relief for Detroit area seniors, many living in their own homes but with limited resources. American House Foundation also donates 30% of all funds raised to the Institute of Gerontology to support research into issues like dementia and depression that affect older adults.

The Foundation works with select non-profits to identify seniors

in need. The newest organization, Habitat for Humanity of Macomb County joins Lighthouse of Oakland County, Adult Well Being Services, Hannan Foundation, and Area Agency on Aging 1-C and 1-B in meet-

ing American House Foundation's philanthropic mission. Habitat for Humanity will help the Foundation assist seniors with projects like installing wheelchair ramps and retrofitting bathrooms to make them handicap accessible.

Annual Foundation events raise about \$150,000 each year and include winter's Holiday Hope for Seniors (\$35,000 raised to purchase 700 personal items like hats, gloves and blankets for seniors) and the spring Celebration of Dignity and Hope dinner and auction. This year's Celebration will be held on May 2 from 5-8 p.m. at the Birmingham Country Club. To become a sponsor, or donate an auction item to the Celebration, contact Danielle Bruce at dbruce@americanhouse.com.




AMERICAN HOUSE
 FOUNDATION



American House Foundation at work, assisting seniors, and raising funds through holiday giving programs and foundation events.

YES!

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3/13 PRINT

Giving



Promoting Successful Aging in Detroit and Beyond

UPCOMING EVENTS

May 13th & 14th 7:30 am-4 pm

Issues in Aging (12 CEs)

DAY 1: **Contemporary Approaches in
Alzheimer's/Dementia Care**

DAY 2: **Advances in Frailty Care: Lifestyle,
Technology and Pharmacological Interventions**

Dearborn Inn, Conference Center
20301 Oakwood Blvd, Dearborn, MI 48124

June 11 7:30 am-2 pm \$5 Registration Fee

Healthier Black Elders Health Reception Senior & Caregiver Event

Health Screenings • Speakers • Lunch • Fitness • Humor
Greater Grace Conference Center
23500 W. 7 Mile Rd. Detroit, MI 48219

Visit us online at : www.iog.wayne.edu
For more program information & registration

For details contact Donna MacDonald at 313-664-2605

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Communities emphasizes the whole person – mind, body and spirit. Workshops are conducted by experts who address all three areas. Oakmont Senior Communities, dedicated to providing good quality of life, sponsors trainings on life satisfaction and assistive technologies that help older adults with disabilities.

Much thought and research goes into choosing speakers for the programs. First they must be highly qualified and credentialed. The IOG often recruits faculty who are currently researching the topics to insure timely information. Speakers are pulled primarily from Wayne State, Michigan State and the University of Michigan. Nationally recognized speakers are flown in from around the country for *Issues in Aging*. All are thoroughly vetted and must have previous speaking experience. “They know how to engage an audience in the learning experience,” Donna said. The formula works. About 5,000 professionals are trained each year.

“Our overall feedback rating is 97% or above on quality and relevance. We’re proud of that.” The IOG trainings are also conflict-free, never promoting a particular company, drug or service. “We have no hidden motives,” Donna explained. “Our mission is simply to educate for the benefit of older adults everywhere.”

Visit www.iog.wayne.edu for a current listing of all trainings.