

# Transitions

## Memory Complaints as an Early Clue to Alzheimer's

What if your sense that your memory was slipping was actually an early predictor of Alzheimer's? Thousands of older adults see physicians each year with memory complaints. Many pass the standard cognitive testing and go home with no diagnosable problem. This should be a relief. Yet research shows these people have a higher risk of eventually developing dementia. What do those subjective memory complaints detect that basic cognitive testing cannot?

Jessica Damoiseaux, Ph.D., wants to find out. Since joining the IOG from a postdoc position at Stanford, and the doctorate program at VU University Medical Center in the Netherlands, she has looked for connections between memory complaints and brain changes. "A cognitive test may not see a difference," she said, "but MRI scans could show alterations in connectivity between brain regions, or changes in the volume of the hippocampus. We're looking for patterns in these subtle changes."

The project includes data from the Netherlands and the IOG with two groups of 40 older adults, one with memory concerns and one without. Every participant had baseline MRI scans and extensive cognitive testing. Eight-

teen months later they returned for the same round of tests. "The baseline data do show differences, and we've almost finished the follow-up," Dr. Damoiseaux said.

One test flashed pictures of indoor and outdoor scenes to participants while the MRI scanned their brains. After they exited the machine, they were shown old and new pictures and asked which ones they remembered seeing before. Their ability to remember was then correlated to the brain scans to see what types of encoding activity led to successful remembering. "Individuals with subjective memory complaints show different brain activation when they encode memories," Dr. Damoiseaux said. Their brains – though

they do remember – may not encode as efficiently. If this is an early indicator of Alzheimer's, perhaps a treatment could be developed to reverse this.

### Finding Funds for MRIs

Cognitive neuroscience research can be expensive; each one-hour session in the MRI costs about \$600. Dr. Damoiseaux recently won \$35,000 in pilot funding from the Michi-

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– Dr. Damoiseaux



Institute of Gerontology  
Promoting Successful Aging in Detroit and Beyond



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# Art of Aging Successfully

## IOG Senior Conference Ages Successfully

*Every year it sells out, often by more than 100. Guests range in age from 55 to 95. Comments from the overwhelmingly positive evaluations glow with praise. "Excellent conference!" "I learned a lot." "Can't wait till next year." "Thank you, thank you, thank you." How did the IOG's premiere community event come about? Follow our timeline to find out . . .*

*Left to right: Finding the right word at 2017 memoir writing workshop; photographer C.F. Steen exhibits at Art of Aging; Outreach Director Donna MacDonald (center) helps guests share their wisdom at morning kick-off*



### 1995 Legacies Contest

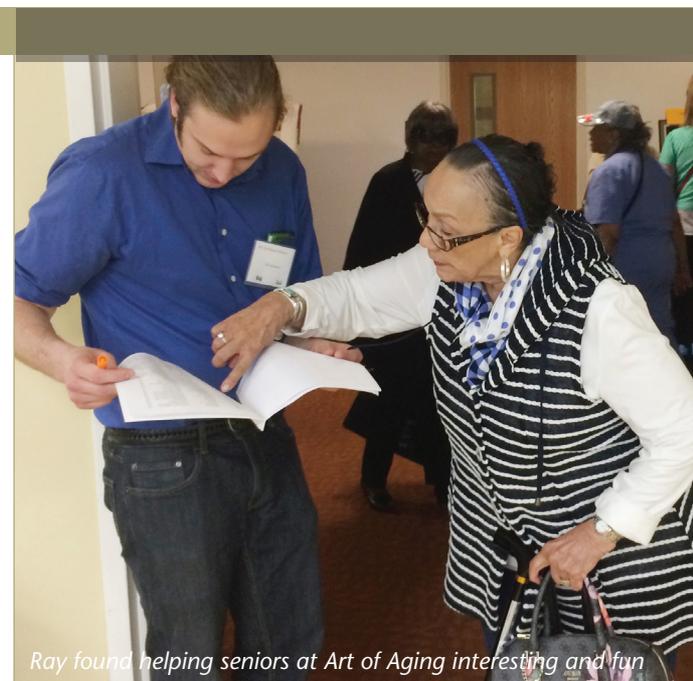
The IOG primary focus is research, preparing the professionals who work with older adults, and advocacy. Faculty member **Dr. Ruth Ray**, an author jointly appointed to the Department of English, seeks to connect more directly with seniors. She holds the IOG's first writing contest; winners go on to a national "Legacies" competition. Dr. Ray conducts writing workshops for area seniors to help them prepare manuscripts. The IOG hosts a reception for the winners.

## Everybody Likes Ray

Ray Viviano walks the walk. He doesn't just study older adults; he engages with them. As a graduate student in behavioral and cognitive neuroscience, Ray assists in the IOG's Connect Lab, processing research

participants for MRI scans and cognitive testing. Then he helps out at IOG outreach events, like the annual Art of Aging Successfully Conference, setting up displays, answering questions and escorting guests to workshops. "It was fun, lively. I was scrambling around making sure things were working well, doing some temperature control. I enjoy interacting with older adults," he said.

Ray got a BS in psychology and neuroscience from the University of Michigan and is now finishing his master's proposal at WSU: *Anterior and Posterior Hippocampal Functional Connectivity in Subjective Memory Complaints*. The long title translates to studying changes in the hippocampus, a small structure in the center of the brain critical to learning and memory, and is an aspect of the work done in Dr. Damoiseaux's lab (see cover story). "Losing memory is one of the biggest fears people have," Ray said. "I want to be part of



the movement that tries to solve that problem."

All IOG trainees are encouraged to volunteer at outreach events, a requirement Ray embraces. Earlier in the year, he worked registration at the Healthier Black Elders Lunch & Learn program on Medicare and Medicaid.

## 1996 Elder Advisors

The IOG forms an Elder Advisory Board of 17 community members, age 60 and up, to provide feedback and advice on its research, education and service activities.

**Dr. Elizabeth Chapleski**, a social worker on the IOG faculty, chairs. She remains on the EAR until her retirement from the IOG in 2005.



DR. CHAPLESKI

## 1998 The Idea

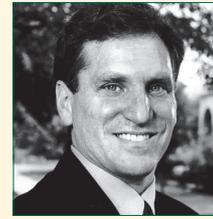
**Dr. Peter Lichtenberg** is named acting director of the IOG. The Elder Advisors to Research (as they are now called) continue to provide critical feedback to faculty and colleagues on issues such as healthy aging, recruitment and retention of older adults in research, and retirement. Members are also guest speakers on courses offered through the IOG. Dr. Lichtenberg meets regularly with EAR members. He senses they would

like to do even more for the area's older adults, something upbeat and positive. He suggests a conference on successful aging.

## 2000 Life is Growth

Dr. Lichtenberg becomes director of the IOG. The EAR has embraced the conference idea, an event run *by* seniors and *for* seniors that celebrates creative approaches to growing older. Titled the "Art of Aging Successfully," Dr. Lichtenberg dedicates staff resources to assist in its launch.

The May 3 event runs from 9 am – 3 pm in the lobby and conference rooms of a WSU administrative building. Dr. Ray's earlier writing contest transforms into the Art of Aging's Creative Expressions, to which 104 older, non-professional writers submit personal essays about aging. An EAR subcommittee reviews each and chooses six as outstanding, with special recognition in the program.



DR. LICHTENBERG

**Esther Shapiro**, the first director of Detroit's Consumer Affairs Department, keynotes with "*I May be Old but I'm Not Stupid.*" The event includes health and community presentations, lunch, live music, and a "*Wisdom of the Elders*" panel with former labor organizer and assistant to Walter Reuther, **Mildred Jeffrey**.



MILDRED JEFFREY

## 2002 Stay Active Spiritually Mentally & Physically

EAR members who organized this first event included **May Berkley, Lois Hitchcock, Mildred Jeffrey, Maryanne Mahaffey, Marion McCarthy, Frank Singer, Gloria Sniderman** and **Betty Welsh**. These members remained on the EAR for many years.

Held at Burton Manor in Livonia, sessions included, "How Yoga Can Increase Energy," "Native American Gardening," and long-

"That presentation was quite interactive. People are uncertain of those programs right now," he said. "There were lots of questions."

Ray's interest in gerontology is an outgrowth of his career goals. He's always been fascinated with memory, and older age is the time when it can begin to fail, especially in Alzheimer's disease. He feels fortunate that all four grandparents are alive. "They are in their 90s and still have their minds, have good brain function," he said. "My dad's dad moves and walks so well. He doesn't look a day over 70, and he just turned 90."

Guests at Art of Aging Successfully spoke highly of Ray, finding him helpful, polite and attentive. A few of them knew him from participating in the Connect Lab research study. "Participation requires brain scans and other tests," he said. "The volunteers have been really upbeat. No fear of the MRI at all. They crack jokes about it." He worked as lab manager for two years and feels lucky

to have Lab Director Dr. Damoiseaux as his mentor. "She's great. She really spends time mentoring. I have nothing but positives to say."

Ray has more than filled his trainee volunteer requirement, but he will pitch in again if his schedule allows. "Older adults don't

hold back or mince their words. I like when people speak bluntly," he said. Of the Art of Aging guests? "They were vigorous, with strong personalities. They definitely seem to be aging successfully."

Is Ray on the road to successful aging? Read his "Day in the Life" to decide.

## A Day in the Life: IOG TRAINEE RAY VIVIANO

*Wonder what it's like to be young, smart, working on your Master's degree, and researching early memory problems? Step into the shoes of Ray Viviano, a second year IOG trainee mentored by cognitive neuroscience faculty Dr. Jessica Damoiseaux. "Ray is quite an asset. He's worked in the lab since I got here (2013) and was lab manager for two years," Dr. Damoiseaux said. "I couldn't do this work without students like Ray."*

time IOG volunteer **June Clark's** talk, "How Did I Ever Have Time for a Job?" Attendance nears 150. Tickets cost \$10.

## 2004 Energize Body & Mind

Creative entries are expanded from writing to include painting, sculpture, jewelry, dance, embroidery, music and other crafts. Eighty-four senior artists submit. Essays and poems are reviewed but no longer judged and all are published in the Creative Expressions Booklet. Attendance tops 200.



## 2005 Discover the Gold

Art of Aging Successfully moves to Greater Grace Conference Center in Detroit. Nearly 250 people attend, with 56 creative displays from artists and 20 creative writing submissions. The conference now offers a choice of two out of four workshops, including Hustle dancing and Tiger's baseball history. Tickets cost \$15.

## 2017 Going Strong

After 10 years at Greater Grace, Art of Aging Successfully is now at Fellowship Hall, with delicious food, ample space and easy access to workshop rooms. Dr. Lichtenberg starts the morning with a "Share Your Wisdom" audience participation forum. 430 older adults attend, choosing from 9 workshops on spiffy devices, line-dancing, right-sizing your home, Hudson's Department Store and

more. About 40 artists display art and 17 submit memoirs or poems. Tickets include breakfast and a hot, sit-down lunch and – 17 years after the first Art of Aging Successfully conference – are only \$20.

The EAR still organizes the conference, *by* seniors and *for* seniors. Members with more than a decade of service include **Gloria Sniderman, Janet and Doug Whitaker, Amy Jackson, and Gene Pisha.**

 **7:30 am**

Ray awakes but not on the first alarm. His girlfriend, an emergency veterinarian technician, worked the 5 pm to 2 am shift, so he stayed up late to spend time with her. "It messes with my sleep schedule, but it's worth it." He packs breakfast (two fruits, oatmeal and yogurt) and lunch (previous dinner's leftovers) to eat at the office. "I'm not hungry when I wake up."

 **9:00 am**

He arrives at the office to start writing. "If I don't write in the morning, it doesn't get done." He reads manuscripts and completes final edits on his master's proposal. The proposal goes to his committee in a few weeks for final approval.

 **11:30 am**

Lunch of leftovers, with a double-check of the afternoon schedule.

 **12:30 pm**

Ray heads to Harper Hospital to meet a participant for a session of Magnetic Resonance Imaging (MRI). Prep before scanning takes about an hour. Ray builds rapport with the subject, answers questions and gets all paperwork and forms signed, then ushers her into the machine. The MRI takes an hour to perform 10-13 different brain scans, some of her resting and some completing tasks. Follow-up questions after MRI take another half hour. "Because of the time required, I can only process one participant in an afternoon." On a different day, Ray



will have the participant complete four hours' worth of paper-and-pencil cognitive testing in the lab offices.



**4:30 pm**

Back to the office for data analysis, entry and programming.



**5:30 pm**

Drive home to Ferndale. "I used to live closer and ride my bike. Now I drive home and ride an exercise bike." Ray played water polo as an undergrad at the University of Michigan. "I miss swimming, but it's hard to find open pool time." The rest of the evening is dinner, playing music, and reading. "I'm not much of a TV watcher."



**Midnight**

Tonight he's not waiting up for his girlfriend, so this is bedtime. In fall and winter, this schedule flexes to absorb classes and teaching. "I've had semesters where Tuesdays and Thursdays are 12-hour days. You do what you gotta do."



**Weekends?**

"Memorial Day weekend was great. I grew up around here and really like Detroit's electronic dance music scene. There's a huge EDM Festival in Hart Plaza, and my dad and I are going. Yes, my dad. He likes EDM, too. It's a good time."

30  
years



Issues in Aging happily welcomed about 20 students from WSU's occupational therapy program. IOG Deputy Director and OT Professor Dr. Cathy Lysack incorporated attendance into her class.

## Professional Training at Its Best

Issues in Aging celebrated its 30th birthday by educating more professionals than ever before. A whopping 261 nurses, social workers, therapists, geriatric care specialists, physicians and students attended day one; and 241 attended day two. "It is rewarding to be at the forefront in educating Michigan's dedicated professionals who care for older adults," IOG Director Peter Lichtenberg said.

For 30 years, Issues in Aging has brought in the country's finest experts in Alzheimer's, dementia, frailty, and evidence-based interventions to provide continuing education. Evaluations consistently rank in the "Excellent" category. A nurse wrote, "I find here evidence-based knowledge, research and interventions I can transfer to my workplace." An LLP wrote that she attends because of our "reputation for quality." A social worker wrote, "I always learn something practical and new." And a care manager with more than 20 years of experience wrote, "I attend because it prepares me to better serve my clients."

The range of timely topics is also a plus. The director of one of the country's few Senior Emergency Rooms (at St. Mary Mercy Hospital in Livonia) recounted the pros and cons of its creation. Nurse and Ph.D. Lori Martin, from Ryerson University in Toronto, discussed sexual expression in dementia patients, fielding many questions about risks versus human rights. Other speakers demonstrated how Montessori preschool concepts can be tailored to stimulate and engage dementia patients; and practical accommodations to help older adults stay in their homes. Dr. Lichtenberg closed with a moving description of the complex grief he endured in losing his first wife in his mid-20s, and again losing his wife three years ago. As he ended with hopefulness, the audience rose in a standing ovation.

Students benefitted deeply. "Students learned about innovative programs and the latest science," Dr. Lysack said. "These help to address the real concerns of older adults and their families, and to support health care professionals dedicated to providing older adults with quality services. It is wonderful to have students exposed to these experts."



*The impact of this conference ripples through lives in positive ways we can't even imagine."*

– Dr. Lichtenberg

## MEMORY from page 1

gan Alzheimer's Disease Core Center (MADCC) to add 20 more persons to her study who have been diagnosed with mild cognitive impairment (MCI). MADCC is a \$9M collaborative grant project of the University Research Corridor (Wayne State, U-M and MSU) to study Alzheimer's and related dementias. As an MADCC Research Education Component Core trainee, Dr. Damoiseaux qualifies for enhanced support and mentoring.

She recently submitted a National Institutes of Health R01 grant to recruit 150 older adults with and without subjective memory complaints and include a second follow-up visit at an additional 18 months out. Multiple time points would show trajectories of change, not just linear alterations. "The first signs of pathology could be an increase in brain function and then a decrease," she said. "We want to be able to spot that pattern."

## The Student Connection

Any support Dr. Damoiseaux receives is "paid forward" to the student assistants in her Connect Lab. The team of 7-10 includes a post-doc, grad students and undergrad volunteers, all trained on neuropsychological testing, data collection, recruitment, writing, and the MRI scanner. She encourages every student to develop a research project. Two abstracts of current papers in process include the names of five students. "This lab can't run without these students," she said. "I simply couldn't do it."

She also credits two colleagues for formidable help with her research: fellow cognitive neuroscientists Drs. Noa Ofen and Naftali Raz. "Dr. Ofen is a specialist in the development of memory formation and is helping us interpret the memory encoding data," Dr. Damoiseaux said. Dr. Raz (with 23 years of funding for a longitudinal study of healthy aging) has deep analytical knowledge of longitudinal data. He is also an expert in estimating the volume of the brain's hippocampus and subfields. Both names also appear on the abstracts.

"I am lucky to be doing what I care about and have so much support," she said. "It is hard work, but it's worth it."



## Brain Imaging Study

Would you like to help? 313-664-2670  
or [www.connectlab.wayne.edu](http://www.connectlab.wayne.edu)



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Promoting Successful Aging in Detroit and Beyond

## PARTNERSHIP CORNER

### \$210,000 Raised to Support Senior Independence and IOG Research

The generosity of southeast Michigan overflowed on May 18 at the annual fundraiser for the American House Foundation (AHF). AHF sponsors several fundraisers each year, from chili cook-offs to holiday gift bags, but the May Celebration of Dignity and Hope is the largest. This year beat all records with \$210,000 raised through ticket sales, a silent auction, and direct donations. About 300 people attended.

American House Foundation was started by the founders of the American House Senior Living residences, now with 43 facilities in three states. But AHF funds are not directed to American House residents. Instead, 70% of AHF income helps low-income older adults with home repair and adaptations, health and dental needs, clothing, appliances, utilities, and other essentials. AHF works with select non-profits in the Detroit area to identify these seniors. The remaining 30% raised is donated to research projects at the IOG.

“That investment often helps our faculty members strengthen their research proposals to qualify for major grants,” IOG Director Dr. Lichtenberg said. “Thus about \$300,000 from the AHF is parlayed into more than \$1M in grants.” AHF monies have supported research into health disparities, financial exploitation, Alzheimer’s, depression, and cognitive neuroscience. “We are grateful to the American House Foundation,” he said. “It helps seniors right now and supports our research to improve aging in the future.”



Rob Gillette, AHF Founder and Board President, with Foundation Executive Director Holly Ellis.

