

IADC Celebrates New Core - Genetics, Biomarker & Bioinformatics Core



Tatiana Foroud, PhD

The National Institutes of Health (NIH)/ National Institute on Aging (NIA) have announced additional funding for the Indiana Alzheimer Disease Center (IADC). This new funding supports the creation of a new core at the IADC, called the Genetics, Biomarker and Bioinformatics Core (GBB Core). The

GBB Core will support new studies focused in the areas of genetics and biomarker discovery. In addition, the core will support research focused on the analysis of large amounts of complex data generated from genetic and biomarker studies. The new core will be led by Dr. Tatiana Foroud, the P. Michael Conneally Professor of Medical and Molecular Genetics and the Director of the National Cell Repository for Alzheimer's Disease.

These new areas of research will extend the focus of the IADC to allow the center to perform new studies designed to identify genes important in the risk for Alzheimer's disease (AD). In addition, the new biomarker studies will help identify markers in the blood that may be able to predict who will develop AD. Long term, this research holds promise for the development of new medications for AD. In addition, we hope that this new research will help physicians determine the best treatment for patients experiencing cognitive decline and/or those who already have AD.

The IADC, led by Dr. Andrew Saykin, the Raymond C. Beeler Professor of Radiology and Imaging Sciences at Indiana University School of Medicine is very excited about the new funding for the GBB Core and looks forward to this new opportunity to advance research in AD.

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IADC Director, Dr. Andrew Saykin, Named One of Three Leaders of the New IU Network Science Institute

Indiana University (IU) has announced the establishment of the [Indiana University Network Science Institute, or IUNI](#). The \$7 million initiative will bring together many of the university's leading researchers to explore and embrace the challenge of understanding complex networks that underlie large-scale systems, including the environment, economics, technology and human health. Three faculty members named as founding co-directors helped lead the effort to create the institute: the IADC's own **Dr. Andrew Saykin**, the Raymond C. Beeler Professor of Radiology and Imaging Sciences, and Director of the Indiana Alzheimer Disease Center at the IU School of Medicine; Distinguished Professor Bernice Pescosolido, Department of Sociology; and Distinguished Professor Olaf Sporns, Department of Psychological and Brain Sciences. Co-directors of the IUNI, Olaf Sporns and Bernice Pescosolido from IU Bloomington, are also IADC investigators.

"Today, more than ever before, exploring the connections and relationships among our most complex networks -- from the biological to the economic, political and social -- is paramount to solving humankind's most critical and challenging questions," IU Vice President for Research, Jorge José said. "Through the formation of this new interdisciplinary, university-wide institute, which will reflect all of the major sectors of scientific research and will be supported by the university's robust technological infrastructure, IU has positioned itself to become the leading global center for understanding the complicated structure and evolving dynamics of the systems that drive our society."

Complex networks are at the core of an increasingly interconnected social, economic and technological world, and their connectivity and

dynamics underpin nearly all aspects of how such systems function. Networks can be associated with topics as diverse as the brain, cancer, schizophrenia, the spreading of rumors, innovations or social unrest.

Echoing the late IU Nobel Laureate Elinor Ostrom, who said, "When the world we are trying to explain and improve ... is not well-described by a simple model, we must continue to improve our frameworks and theories so as to be able to understand complexity and not simply reject it," José said that focusing on the interactions between

huge numbers of system components -- be it in the brain or the global economy -- places IU at the forefront of shaping new paths for research and innovation.

The IUNI will be unique in a number of ways: Affiliated researchers will represent multiple IU campuses and will come from medicine, the natural sciences, the social sciences and the humanities; in

addition to being focused on networks, every project supported by the institute is required to be a collaboration, a reflection of the institute itself. Four research hubs currently form the core of IUNI -- Health and Health Care, Network Neuroscience, Science of Science and Social Network Science -- each with the capacity to engage and share data and other resources with one another. Outreach activities, workshops, conferences and online network science education will add to the scope of IUNI activities.

The three-year initiative -- with an opportunity to renew for another three years -- is supported by IU President Michael A. McRobbie's office, the offices of Provost and Executive Vice President Lauren Robel and Vice President for Research José, the

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IADC Director, Dr. Andrew Saykin, Named One of Three Leaders of the New IU Network Science Institute

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College of Arts and Sciences, the School of Informatics and Computing, and the IU School of Medicine.

"This new institute recognizes that we are all part of networks, and that these networks, always evolving and changing, are inherently complex systems that present challenges to scientists across all fields," Robel said. "With a contingent of over 100 scientists spanning all disciplines, the ties among network science researchers that already exist in the IU system are ripe for encouragement, with many new ones inevitable through support of IUNI."

To date, affiliated faculty from 26 different schools, departments and centers have either participated in the development of IUNI or expressed an interest in participating in collaborative research through the institute. Faculty participating in IUNI represent one of the broadest and deepest cadres of researchers studying networks, including the College of Arts and Sciences departments of physics, psychological and brain sciences, statistics, sociology and geography; the School of Informatics and Computing at IU Bloomington; the IU School of Medicine; the School of Public Health-Bloomington; the Fairbanks School of Public Health at IUPUI; and centers already focused on different aspects of complex

*"Understanding networks
paramount to solving
humankind's most
challenging questions"*

networks, such as the Indiana Center for Systems Biology and Personalized Medicine at IUPUI and the Digital Science Center at IU Bloomington.

The three co-directors applauded the announcement.

"IUNI will provide novel concepts, tools and training to address tomorrow's challenges," Dr. Saykin said. "We appreciate the university's vision in supporting team science to elucidate the complex networks that comprise the human genome, brain interconnectivity, health care systems and society -- creating a truly exciting and unprecedented opportunity."

"IUNI is expected to act as an engine powering existing and new interdisciplinary and translational research agendas."

Dr. Pescosolido described the nature of the institute as a reflection of the very work that will be conducted there, an exercise in synergy. "We live in a world where society and the problems we face

represent a web of interconnections," Pescosolido said. "When we think we have fixed one part of it, unforeseen complications arise elsewhere as unintended consequences. These are complex, connected interactions that demand a transdisciplinary approach that brings the expertise across the landscape of science to the table."

Sporns added that IUNI recognizes the natural strengths already present at IU. "By design, when it comes to our expertise in complex systems, the whole is greater than the sum of the parts," he said. "With the new synergies that will be created through IUNI, we have the unique opportunity to break the mold and approach the many challenges we face in science and society from a fresh and broad perspective."

Adapted from IU Bloomington press release 10/23/14.

IADC and IUSM Faculty Funded by NIH to Study Improving Seniors' Mental Function Through Exercise

Indiana Alzheimer Disease Center (IADC) and Indiana University School of Medicine (IUSM) researchers have been awarded a \$2.5 million NIH grant to evaluate the advantages of physical exercise, cognitive exercise or a combination of both on the aging brain. The initial phase of the five-year project will be to develop a clinical study looking at ways to enhance cognitive abilities in older adults with mild memory loss. The project, *Cognitive and Aerobic Resilience for the Brain (CARB)*, will build on the research experience of co-principal investigators [Frederick Unverzagt](#), Ph.D., and [Daniel O. Clark](#), Ph.D., and other researchers in the [Indiana Alzheimer Disease Center](#), IU Center for Aging Research, Regenstrief Institute and [IU School of Medicine](#).



[Frederick Unverzagt, PhD](#)

If this phase of the research is successful, the clinical study will be expanded to a multi-center study for people with mild cognitive impairment, which is estimated to affect about 5.4 million people in the United States, or about 22 percent of seniors over 71.

About 12 percent of people with mild cognitive impairment each year go on to develop dementia.

"Can we change the time it takes to develop dementia through training? That would be huge," Dr. Unverzagt said. "In randomized trials, there is good evidence that physical exercise improves cognition and brain structure," Dr. Unverzagt said. "Brain scans show improvements in gray matter density in frontal and temporal lobes of the brain in response to exercise. In our earlier studies at IUSM, we showed that cognitive training improves cognition quite durably -- even up to 10 years -- following the initial training."

"It has been known for years that aerobic and strengthening exercise can improve physical function in older adults," Dr. Clark said. "It is just over the past few years that it has become apparent that exercise also improves cognitive function. Whether the effect of exercise on cognitive function is additive to the effects of cognitive training is the key question of our study."

The IU researchers will explore the potential advantages of physical and cognitive training and will evaluate participants immediately after training and again at a three-month follow-up. The behavioral study being developed will enroll 160 older adults with mild memory problems and have four arms: exercise only; cognitive training only; combined exercise and cognitive training; and general instruction on healthy aging. Participants will be exposed to the training in 36 sessions over the course of three months, with enrollment beginning in January. The main outcome will be to determine whether the training improved cognitive abilities. If the study outcome is positive, the protocol will support a larger study to determine whether the trainings can delay the onset of dementia.



[Daniel O. Clark, PhD](#)

Blood samples at baseline, post-training and three month follow-up will provide data for secondary analyses of change in growth factors and chronic inflammation. Exercise has been shown to have positive effects on chronic inflammation, reducing some proinflammatory markers and increasing some anti-inflammatory markers. Similarly, exercise is known to stimulate the production of growth

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IADC and IUSM Faculty Funded by NIH to Study Improving Seniors' Mental Function Through Exercise

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factors critical in cell growth and proliferation, which may maximize the effects of cognitive training.

Dr. Unverzagt is a professor in the Department of Psychiatry, Director of Clinical Neuropsychology Residency, and associate Leader of the IADC Clinical Core. His research is focused on epidemiology and clinical assessment of cognitive aging and Alzheimer's disease and other dementias. He is nationally recognized for his research focus on non-pharmacologic interventions to improve cognition. Co-investigator Dr. Clark, associate professor in the Department of Medicine and a research scientist with the IU Center for Aging Research and the Regenstrief Institute, has spent his career developing and evaluating preventive health interventions for elderly populations, with special interest on identification and modification of risk factors for chronic disease and physical impairment.

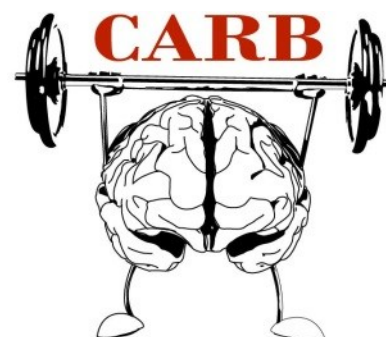
In an earlier landmark behavioral study, Dr. Unverzagt and his team exposed people with normal cognitive ability, age 65 years or older, to exercises designed to stimulate their memory, reasoning, visual attention/processing or no cognitive exercises at all. "We wanted to know if the cognitive exercises would make them do better on cognitive and memory tests and whether the cognitive training would transfer positively to daily living skills. If so, how long would the training

advantage last? The training required the participants to work with a facilitator for 90 minutes a session for 10 sessions over the course of 10 weeks," Dr. Unverzagt said.

"Immediately after training, there was a large benefit of cognitive training on the specific skill trained," Dr. Unverzagt said. "At the five-year mark post training, trained participants still had improved cognitive abilities, and they also reported having less difficulty doing normal living tasks, such as driving, shopping, taking medications. At the 10-year follow-up, gains from that simple early exposure were still detectable."

Dr. Unverzagt and Dr. Clark are optimistic that the gain from combining cognitive and physical exercise will produce better and longer-lasting results, which could be significant as the nearly 76 million baby boomers transition to senior citizens.

If you would like more information about the CARB study or are interested in participating, please call 317-963-7301 or email carb@iupui.edu.



Adapted from IU Newsroom report 11-12-14

Indiana Alzheimer Disease Center
355 West 16th Street
Indianapolis, Indiana 46202
317-963-5500
iadc@iupui.edu

For up-to-date news and events....

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and Twitter

 twitter.com/INAlzDiseaseCtr

IADC Current Studies on AD and Related Disorders Research Enrolling Participants

<u>Who is needed?</u>	<u>For which study?</u>	<u>Length of study?</u>	<u>Please contact...</u>
<p>To participate, volunteers must have a diagnosis of one of the following:</p> <ul style="list-style-type: none"> • Probable Alzheimer's disease • Mixed Dementia • Mild Cognitive Impairment • Vascular Dementia • Lewy Body Disease • Parkinson Dementia • Frontotemporal Dementia 	<p>Research Registry/ database used to capture data for self-referred volunteers and established clinic patients interested in participating in clinical research and drug studies, now and in the future.</p>	<ul style="list-style-type: none"> • Information regarding research projects will be disclosed prior to enrollment in specific research studies. • Length varies by individual study. 	<p>Christina Brown 317-963-7426 chbrown@iupui.edu</p>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Be a member of family with 3 or more living siblings diagnosed with probable AD. 	<p>The Genetics of Late Onset Alzheimer's Disease (LOAD) Study</p>	<ul style="list-style-type: none"> • Longitudinal; over a lifetime or as long as person is willing. • Visits include: neurological exam, cognitive evaluation, informant interview and a blood sample for DNA at first visit. 	<p>National Cell Repository for AD 1-800-526-2839 alzstudy@iupui.edu</p>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Be part of a family with two or more living members with AD or symptoms of serious memory loss; • Be eager to involve new families from all locations. 	<p>The National Cell Repository for Alzheimer's Disease (NCRAD)</p>	<ul style="list-style-type: none"> • Longitudinal; over a lifetime or as long as person is willing. • Visits are done by telephone or mail. 	<p>National Cell Repository for AD 1-800-526-2839 alzstudy@iupui.edu</p>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Be aged 60 years of age +; • Have a diagnosis of mild cognitive impairment; • Have support by an adult family member or friend; • Both be able to read and speak English; • Both participate in the study. 	<p>Daily Enhancement of Meaningful Activity (DEMA). Skill-building and health promotion program</p>	<ul style="list-style-type: none"> • 3-month; • 6 biweekly nurse sessions; • First 2 are face-to-face sessions at the Neuroscience Center; last 4 are telephone sessions; • Sessions are 30-40 minutes for 3 months; • telephone interviews before, after, and 3 months after nurse sessions approximately 1.5 hours each. <p>Compensation:</p> <ul style="list-style-type: none"> • Up to \$60 in gift cards • Parking passes provided for face-to-face sessions. 	<p>Christine Richards, DEMA program manager; 317-274-7739 richarch@iu.edu</p>

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IADC Current Studies on AD and Related Disorders Research Enrolling Participants

<u>Who is needed?</u>	<u>For which study?</u>	<u>Length of study?</u>	<u>Please contact...</u>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Have a first degree relative with Alzheimer's disease caused by a known mutation; • Be at least 18 years of age; • Speak and read English; • Have someone who knows them well and is willing to answer questions about their memory and thinking. 	<p>Dominantly Inherited Alzheimer Network (DIAN)</p>	<ul style="list-style-type: none"> • Longitudinal, visits every 1 to 3 years, as long as the person is willing; • Visits include: neurological exam, cognitive evaluation, PET and MRI imaging, informant interview, blood draw and spinal tap. <p>Compensation:</p> <ul style="list-style-type: none"> • Travel, meals, completion of some procedures, and accommodations. 	<p>Melissa Wesson 317-278-9545 mkwesson@iu.edu</p> <p>or</p> <p>Christina Brown 317-963-7426 chbrown@iupui.edu</p>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Be 70 years of age or younger; • Have an MMSE score of 20+. 	<p>Tau RX A double-blind, placebo-controlled, randomized, parallel-group, 12 month Safety and Efficacy trial of Leurgeneivir (LGN-4018) in subjects with Behavior variant Frontotemporal Dementia (bvFTD).</p>	<ul style="list-style-type: none"> • Approximately 62 weeks • Volunteers and their caregivers will need to complete 10 study visits at the IU Neuroscience Center • Average study visit 3 to 6 hours. <p>Compensation:</p> <ul style="list-style-type: none"> • \$100 for 5 certain visits; • \$50 for each other visit. 	<p>Christina Brown 317-963-7426 chbrown@iupui.edu</p>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Have mild to moderate memory problems; • Be 60 years of age +; • Be right-handed; • Have completed at least 8th grade. • Be in good general health; • Have someone who knows them well and can answer questions about their memory. 	<p>Indiana Memory and Aging Study (IMAS) Study includes brain scans, blood draw, eye exam and cognitive testing</p>	<ul style="list-style-type: none"> • Longitudinal; over a lifetime or as long as person is willing; • Assessments are 18 months apart; • Each visit is 10.5 hours and will be scheduled over 2 days; <p>Compensation:</p> <ul style="list-style-type: none"> • \$175 for each visit. • \$50 for optional lumbar puncture. • Parking is validated. 	<p>Eileen Tallman 317-278-3121 etallman@iupui.edu</p>
<p>Participants need to:</p> <ul style="list-style-type: none"> • Be 55-90 years of age; • Have Mild Alzheimer's Disease; • Have an MMSE score of 20-26; • Have amyloid pathology present at screening; • Be stable 12 weeks prior to screen if using AChEIs. 	<p>Lilly: H8A-MC-LZAX A research study to assess the effects of passive immunization on the progression of mild AD; Solanezumab (LY2062430) versus Placebo.</p>	<ul style="list-style-type: none"> • Approx. 18 months; • Approx. 25 visits to center with caregiver; • Visits are 3-6 hours long; • You will receive monthly IV infusion if eligible for study. <p>Compensation:</p> <ul style="list-style-type: none"> • \$75 for 5 visits • \$50 for all other visits 	<p>Lyla Christner, LPN 317-963-7411 lychrist@iupui.edu</p>

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IADC Current Studies on AD and Related Disorders Research Enrolling Participants

<u>Who is needed?</u>	<u>For which study?</u>	<u>Length of study?</u>	<u>Please contact...</u>
Participants need to: <ul style="list-style-type: none"> • Be 50-90 years of age; • AChEIs and/or memantine allowed if stable dose for at least 12 weeks prior to baseline; • Have a BMI < 35 at screening; • Have a MMSE 22+. 	Eisai — A placebo-controlled, double-blind, parallel-group, dose regimen-finding study to evaluate safety, tolerability, and efficacy of BAN2401 in subjects with early AD, defined as mild cognitive impairment due to AD.	<ul style="list-style-type: none"> • Up to 41 months • Average visit 3-6 hours Compensation: <ul style="list-style-type: none"> • varies from \$50 to \$100 visit; up to \$2600 maximum. 	Lyla Christner 317-963-7411 lychrist@iupui.edu or Christina Brown 317-963-7426 chbrown@iupui.edu
Participants need to: <ul style="list-style-type: none"> • Be 50-90 yrs old; • Have mild AD, MMSE 20-26; • Have a study partner to accompany you. 	Roche WN28745 Study , A research study to assess the effect of Gantenerumab injections Receive monthly injections of study drug or placebo.	<ul style="list-style-type: none"> • Visits are 3-6 hrs long, Compensation: <ul style="list-style-type: none"> • \$50 per visit 	Nancy McClaskey, RN, CCRP 317-963-7429 nmcclask@iupui.edu
Participants need to: <ul style="list-style-type: none"> • Be 50-90yrs of age; • Have MMSE of 24-30 or 20-26; • Have Amyloid pathology present at screening; • Have a study partner to accompany you. 	Biogen 221AD103 Study , A research study to assess the effect of BIIB037 versus Placebo in Subjects with Prodromal or Mild AD.	<ul style="list-style-type: none"> • Receive monthly IV infusion if eligible for study; • Visits are 3-6 hrs long; • Approx. 27 visits to center with a caregiver; • possibility of a long term extension to the study if qualified. Compensation: <ul style="list-style-type: none"> • \$82 per visit. 	Nancy McClaskey, RN, CCRP 317-963-7429 nmcclask@iupui.edu
Participants need to: <ul style="list-style-type: none"> • Be 65-85 years of age; • Have an MMSE score of 27-30 if more than high school education; • Have an MMSE score of 25-30 if only high school education; • Amyloid pathology present at screening • Be living independently; • Have a study partner accompany you. 	A4 LZAZ ADC -040 Study . An Anti-Amyloid Treatment in Asymptomatic Alzheimer's disease research study to assess the effects of Solanezumab(LY2062430) versus Placebo in slowing cognitive decline in preclinical AD.	<ul style="list-style-type: none"> • Receive monthly IV infusion of Solanezumab or placebo; • Visits are 3-6 hrs; • Approx. 164 weeks; • Clinic visit every 4 weeks. Compensation: <ul style="list-style-type: none"> • \$50 for each completed clinic visit; • \$75 for optional lumbar puncture at visit #5; • \$125 for final visit of optional lumbar puncture; • Complimentary parking. 	Nancy McClaskey, RN, CCRP 317-963-7429; nmcclask@iupui.edu or Christina Brown 317-963-7426 chbrown@iupui.edu

ROAR (Recruiting Older Adults into Research) seeks to raise awareness of and engagement in research among older adults, connect them with opportunities to participate in research, and ultimately, expand the pool of older adults willing to participate in clinical studies and trials for AD and other health conditions.

IADC Current Studies on AD and Related Disorders Research Enrolling Participants

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<u>Who is needed?</u>	<u>For which study?</u>	<u>Length of study?</u>	<u>Please contact...</u>
Participants need to: <ul style="list-style-type: none"> • Be 66-85 years of age; or • Be up to 90 years of age with approval from medical monitor; • Have a MMSE 14-26 (mild to moderate AD); • Be stable 12 weeks prior to screen, if using AChEIs or Namenda. 	Nourish Placebo-controlled study of effects of daily administration of AC-1204 in participants with mild to moderate AD.	<ul style="list-style-type: none"> • 26 weeks double blind and optional 26 weeks open label extension; Compensation: <ul style="list-style-type: none"> • \$75 each for 5 Clinic visits; • \$25 each for phone interviews. 	Scott Herring 317-963-7418; sherring@iupui.edu or Christina Brown 317-963-7426 chbrown@iupui.edu
Participants need to: <ul style="list-style-type: none"> • Be 55-85 years of age; • Have an MMSE score of 20+. 	SNIFF Study of Nasal Insulin to Fight Forgetfulness A multi-center, double blind, placebo-controlled phase II/III study to evaluate impact of nasal inhaled insulin in participants with mild memory impairment and early AD.	<ul style="list-style-type: none"> • Blind study for 12 months; • Followed by 6 months open label (all participants receive insulin). Compensation: <ul style="list-style-type: none"> • \$75 for each completed lumbar puncture; ; • Complimentary parking. 	Scott Herring, RN 317-963-7418 sherring@iupui.edu
Participants need to: <ul style="list-style-type: none"> • Be 50-79 yrs of age; • Have been diagnosed with moderate Alzheimer disease with MMSE SCORE 10-20 • Be taking ONLY donepezil/ Aricept 10mg/day for 3 months • Not be taking Namenda • Have reliable caregiver who can come to study visits. 	Chase Study , to assess effects of higher doses of donepezil/Aricept with combined with Vesicare/solifenacin	<ul style="list-style-type: none"> • Study length could be as long as 190 days pending tolerability 	Scott Herring, RN 317-963-7418 sherring@iupui.edu
Participants need to: <ul style="list-style-type: none"> • Be at least 50 years of age • Have diagnosed with probable Alzheimers disease with MMSE 12 -22 • Have reliable caregiver who can come to study visits • Taking ONLY donepezil/Aricept 10mg/day for 4 months • Not be taking Namenda 	Lundbeck study , to assess benefits of adding Lundbeck study medication to patients already taking donepezil/ Aricept	<ul style="list-style-type: none"> • 28 weeks with option of open label extension (where know you're getting study drug) of another 28-32 weeks 	Scott Herring, RN 317-963-7418 sherring@iupui.edu

The IADC team is collaborating with existing resources and registries such as [ResearchMatch](#), a free, national recruitment registry funded in part by the National Institutes of Health (NIH); the [Alzheimer's Prevention Registry](#), part of the NIH-supported Alzheimer's Prevention Initiative; and the Alzheimer's Association's [TrialMatch](#) service.

IADC is Out and About Again.

Faculty and staff from the IADC Outreach, Recruitment and Education Core (OREC) and other Cores attend many community programs, health fairs and conferences in central Indiana. Among recent outreach programs have been:



6th Annual Minority Health Fair at University of Indiana.
"What You Don't Know Can Kill".



IADC staff attends Senate Field Hearing on Empowering Seniors to Identify Scams and Fraud hosted by Senator Joe Donnelly and attended by guest Congressman Andre Carson.



Clinical Core and more! ↑

Elaine Bedel and her invited guest speakers, Jack Broyles, and Dr. Mary Austrom at the October Bedel Financial Forum.



Dr. Austrom speaks at the "Too Sweet For Your Own Good" Managing Diabetes 2014 Conference ↓



- ☑ Baby Boomer/Senior Expo (D Wert/OREC)
- ☑ Senate Field Hearing (C Brown/Clinical Core)
- ☑ Ft. Harrison YMCA Senior Health Fair (D Wert/OREC and C Brown/Clinical Core)
- ☑ 6th Annual Minority Health Conference (D Wert/OREC and C Brown/Clinical Core)
- ☑ Semi-annual IN State Ombudsman Training (Dr. Mary/OREC)
- ☑ UAW in Kokomo (R. Crosbie/Clinical Core)
- ☑ AADEPT, Preserve Coalition, Oregon (F. Epperson/Neuropathology Core)
- ☑ Walk to END Alzheimer's (representatives from the IU Alzheimer's Research Team)
- ☑ Bedel Financial Forum Program (Dr. Mary/OREC)
- ☑ "Too Sweet For Your Own Good" (Dr. Mary and DWert /OREC)



Francine Epperson, IADC Autopsy Coordinator with Elisa Torres, School of Nursing, University of Wisconsin, Madison. Ms. Torres was keynote presenter at the AADEPT conference on Aging & Memory in the African American Community in Oregon. Conference was titled "The Heart Brain Connection".



Congratulations to Dr. Shannon Risacher...Recipient of a New Investigator Research Grant from the Alzheimer's Association



Shannon L.
Risacher, PhD

Shannon Risacher, PhD, Assistant Research Professor of Radiology and Imaging Sciences, is the recipient of a New Investigator Research Grant (NIRG) from the Alzheimer's Association.

The grant is entitled "Visual dysfunction and amyloid in preclinical and prodromal AD". Basically, the goal of the project is to look at measures of visual function and thinning of the retina as biomarkers for Alzheimer's disease (AD) in early stages of disease (even before significant clinical symptoms are present). We will compare the visual tests to neuroimaging measures of AD pathology (i.e., amyloid deposition, neurodegeneration) to determine their sensitivity to detecting the earliest pathological changes in preclinical (cognitively normal older adults with cognitive complaints; cognitively normal older adults at genetic risk (APOE4)) and prodromal (mild cognitive impairment) AD. The long-term goal of this work is to develop/confirm a visual test or exam that would detect AD pathology (especially amyloid) in non-symptomatic older adults.

NIRG funds the next generation of promising scientists who have earned their doctoral degrees within the last 10 years. NIRGs help to fund new investigators from diverse backgrounds with an intent to support early career development that will lay the groundwork for future research grants. The IADC congratulates Dr. Risacher!

Congratulations!

Neuroscience Strategic Research Initiative (NSRI) Grants awarded recently:



Shannon L.
Risacher, PhD

Shannon L. Risacher, PhD received a two-year pilot grant through the IU Neuroscience Strategic Research Initiative for her project entitled "Visual biomarkers in preclinical and prodromal stages of Alzheimer's disease." The goal of this project is to evaluate measures of visual function and retinal morphology as biomarkers for AD in conjunction with known neuroimaging biomarkers of AD pathophysiology (i.e., advanced MRI and PET imaging) in a population of older adults at risk for cognitive decline.



Kwangsik Nho,
PhD

Kwangsik Nho, PhD, Assistant Professor of Radiology & Imaging Sciences was awarded a grant for a pilot project, where he "will perform whole genome sequencing on well-characterized participants from an extensively studied local cohort, the Indiana Memory and Aging Study, which already has RNA-Seq and Proteomics data, and will integrate cutting-edge 'omics' data sets to better understand the molecular characteristics of Alzheimer's disease."

Welcome to New Faculty

Joaquín Goñi Cortes, PhD joins Radiology and the IADC



Joaquín Goñi, PhD

Joaquín Goñi, PhD is an Associate Research Scientist at Indiana University and Adjunct Assistant Research Professor of Radiology and Imaging Sciences at the Indiana University School of Medicine, Indianapolis. In addition, he is an investigator for the Center for Neuroimaging and the Indiana Alzheimer Disease Center. Dr. Goñi earned a PhD from the University of Navarra School of Sciences (Spain) in 2008 and completed a post-doctoral fellowship in the Functional Neuroimaging Laboratory in Center for Applied Medical Research (Spain). From 2011 to 2014, he was a Research Associate in Dr. Olaf Sporns' laboratory in the Department of Psychological and Brain Sciences at Indiana University, Bloomington.

As a computational neuroscientist with expertise in complex systems, his current research is focused on the application of frameworks such as graph theory, information theory or fractal theory in neuroscience with a specific focus in neuroimaging. Currently, Dr. Goñi's research is focused on the human connectome, including network analyses of structural and functional connectivity during different tasks under various disease conditions, with an emphasis on neurodegenerative diseases. He will be an affiliated researcher with the new Indiana University Network Institute as well. Welcome Dr. Goñi.

Jared R. Brosch, MD, MSc joins the Department of Neurology and the IADC



**Jared Brosch, MD,
MSc**

Help the IADC welcome a new clinician. Jared Brosch, MD, MSc is a ABPN Neurologist who joined the Indiana Alzheimer Disease Center in July 2014. Dr. Brosch is originally from Hometown, Indiana. He received his undergraduate degree from Purdue University in Electrical Engineering, and a Master's of Science degree in Biomedical Engineering also from Purdue University. Dr. Brosch published research on functional MRI imaging while at Purdue University. He went on to work for an Indianapolis-based company, Piezotech LLC, where he was the Manager of

Engineering and new product development. The company made ultrasound medical devices among other products. Dr. Brosch holds 3 U.S. patents from his work there. After 5 years he returned to medical school where he graduated with honors, completed an internship in Internal Medicine at St. Vincent Hospital in Indianapolis, and a Neurology residency at Indiana University. During residency Dr. Brosch worked closely with other physicians at the IADC and chose to dedicate his career to helping patients and families with Alzheimer's disease, as well as advancing research in an effort to find a cure. Dr. Brosch has authored several journal articles and book chapters, and enjoys helping advance knowledge in Alzheimer's disease diagnosis and care. We are pleased to have Dr. Brosch at the IADC.

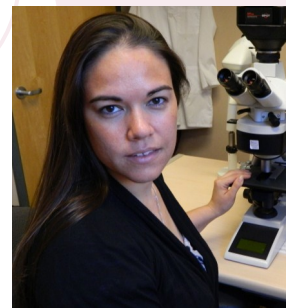
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Welcome to New Faculty

... continued from page 14

Holly Garringer, PhD continues career with Pathology Lab

Holly Garringer, PhD, Assistant Research Professor in the Department of Pathology and Laboratory Medicine, joined the faculty of Indiana University School of Medicine in 2013. After completing her undergraduate degree in Biology at Ball State University, she was accepted into the doctoral program in the Department of Medical and Molecular Genetics at Indiana University School of Medicine. During her doctoral training, Dr. Garringer's research focused on the genetics and molecular mechanisms that lead to the autosomal recessive disorder, familial tumoral calcinosis. Following her dissertation, Dr. Garringer began working as a postdoctoral fellow in Dr. Ruben Vidal's laboratories in the Department of Pathology and Laboratory Medicine. Her postdoctoral research focused on the molecular genetics of neurodegenerative diseases including; familial British and Danish dementia, Alzheimer's disease, and hereditary neuroferritinopathy. Dr. Garringer is currently working to identify the molecular mechanisms that trigger and lead to tauopathy in neurodegenerative disease. This work has the potential to identify targets for therapeutic intervention in patients with tauopathies.



**Holly Garringer,
PhD**

SAVE THE DATES



Friday, March 06, 2015

IADC 2015 Scientific Symposium on Alzheimer's Disease

Network Science & Alzheimer's Disease

Symposium designed especially for Researchers and Physicians.

Keynote presentations by:

Olaf Sporns, PhD, Provost Professor, Robert H Shaffer Chair, IU Bloomington

Brain networks: The human connectome.

Bernice Pescosolido, PhD, Distinguished Professor of Sociology, IU

The final agenda and registration will be available soon on the [IADC website Current Events](#). Please check the website often.

June 5, 12, 19, and 26, 2015

Memory University 2015

IU Health Neuroscience Center

Goodman Hall Auditorium

Each Friday afternoon from 1:30 to 3:00 will have a different topic of interest for all those interested in Alzheimer's disease and other neurodegenerative disorders. More details to come.



Get Connected



Link to our Calendar:

iadc.iupui.edu/current-events/151/

**WE HAVE
MOVED!**

FTD Caregiver Support Group NEW LOCATION!

Has a loved one been diagnosed with frontotemporal dementia (FTD)?

Do you have questions about the disease and how to manage it?

You are not alone.



The IADC FTD Caregiver Support Group meets the **2nd Tuesday of each month from 6:30–8:30 pm.** at **Joy's House Adult Day Services, 2028 E. Broadripple Avenue, Indianapolis, IN. (West of Keystone at 62nd St.).**

Joy's House Adult Day Service provides a caregiver for patients with FTD and related disorders, so if necessary, families can bring the patient to the meeting.

THANK YOU to our hosts and providers for a comfortable and confidential meeting place.

Indianapolis First Friends hosted the FTD Caregiver Support Group over the past two years.

NOTE: Due to the Thanksgiving and Christmas holidays, the Fountain Square Caregiver Support Group met the 3rd Friday of the month during November and will not meet during December.

Caregiver Support Group Available Please note the new location!



Are you caring for a family member or friend with AD, dementia or related disorder? Do you have questions or concerns about providing care, about AD or another dementia? Our support group meeting may be your answer. The IADC together with the Healthy Aging Brain Center and the Alzheimer's Association, facilitates a monthly support for caregivers. All family members are welcome.

The meeting is normally held on the **4th Friday of each month from 1:00—3:00 pm.** The group **moved locations in** September and now meets at University of Indianapolis Center for Aging. The new location is in the Fountain Square Community Building, **901 S. Shelby Street, Room 306.** Feel free to join us for education and social support.

Thank you to the Cottage Corners for sharing their conference room with us over the past several years.

Martin Family AD Symposium



Panel: G. Jean Kitley, J.D.,
Kimberly Quaid, PhD and
Denise Saxman, MSW, LCSW

The 8th Annual Martin Family Alzheimer's Disease Caregiver Symposium, *Caregiving and Dementia: Decisions and Transitions* was a huge success with over 150 individuals who care for people with dementia and related neurodegenerative disorders attending. The focus of the symposium was how to make the tough decisions when caring for people with these disorders throughout the disease.

The program included an update on our research and programs at the IADC by Andrew Saykin, PsyD, Director of the IADC. The keynote address this year was titled —*Tough Decisions: How and When to Make Them* and was delivered by Drs. Mary Guerriero Austrom and Brandy R. Matthews, co-leaders of the IADC, Outreach, Recruitment and Education Core. Participants then had a choice of attending one of three breakout sessions:

1. *Intimacy and Dementia* (For spouses or partners of persons with dementia); presented by Denise Saxman, MSW, LCSW of the Alzheimer's Association;
2. *Genetic Testing and Dementia: To Test or Not to Test* presented by Kimberly Quaid, PhD;
3. *Legal and Financial Planning and Dementia*, presented by G. Jean Kitley, J.D.

Thank you to our Title Sponsor, CICOA Aging and In-Home Solutions and to our Exhibitors for their support. Without their support we could not present this event free of charge.

Please visit our website to download copies of the presentation and handouts: iadc.iupui.edu/current-events/

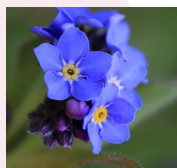


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EXHIBITORS





In Memory

The Indiana University Alzheimer Disease Research Fund gratefully thanks and acknowledges the following individuals for their generous contributions from September, 2013 to October 31, 2014.

In memory of Elizabeth L Baughman

John J. Baughman

In memory of Robert J Braunlin, MD

Joseph H. & Joan G. Richardson

In memory of Irving S. Calderon

Betty Calderon

In memory of Warren E. Calvin

James R. & Nancy E. Carpenter

In memory of Francis E. Eagan

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Michael L. & Adiene M. Wright

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Martin J. & Diane Pieters
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Wendell & Kathryn A. Parks
John F. & Rolene W. Popp
Gail C. Price
Louise Reimschisel

In memory of Dean B. Needham

Jane W. Needham

In memory of Marilyn Rhodes

Bible Study Friends:
R. Robert & Patricia K. Brafford
Robert F. & Patricia H. Tyburski

In memory of Max A. Rogers

M Tim Dunfee, MD &
Mary Ann Dunfee

In memory of Joyce C. Rossi

Samantha Roper

In memory of Mary "CeCe" Smith

Gil Charney
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In memory of James J. Sullivan, MD

Mary L. Schoomer

In honor of James J. Pellerite

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Other gifts:

Gregory F. & Cynthia Fraize (CPA)
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For more information on making a bequest or planned giving to the Indiana Alzheimer Disease Center you may also call 317-963-7599 or email bsglazie@iupui.edu

To use a credit card to make a gift, please go to our secure website at iadc.iupui.edu/give-now/

**Please make checks payable to:
Indiana Alzheimer Disease Center**

Mail to: Brad Glazier, Administrator
Indiana Alzheimer Disease Center
Indiana University School of Medicine
IU Health Neuroscience Center, Suite 4100
355 West 16th Street
Indianapolis, IN 46202

Give Now!

See just how important your contribution is to supporting research and eventually finding the cure for Alzheimer's disease. Please view this short video by clicking the link below and see why Dianne Trauring and Nancy Carpenter chose to be donors.

www.youtube.com/watch?v=cQSB1pYVxsl&feature=youtu.be

Each year, the Indiana Alzheimer Disease Center is the grateful beneficiary of many memorial gifts to fund our Alzheimer Disease and Related Disorders research.

Visit the [IADC](#) webpage to find out more and then click the  icon.

Visit the [National Institute on Aging's YouTube channel](#) for videos on:

- Exercises and success stories from their **Go4Life** physical activity campaign
- Alzheimer's disease research and volunteering for clinical trials
- Highlights from NIA programs like the Alzheimer's Disease Summit
- Healthy aging tips

Please visit the IADC webpage often for this and many other [resources](#):
Alzheimer's Association: www.alz.co.uk/research/WorldAlzheimerReport2014.pdf

Reflections is published by the Indiana Alzheimer Disease Center

Administrative Core Leader:

Andrew Saykin, PsyD

Clinical Core Leader:

Martin R. Farlow, MD

Neuropathology Core Leader:

Bernardino Ghetti, MD

Data Management Core Leader:

Sujuan Gao, PhD

Outreach, Recruitment & Education Core Leader:

Mary Guerriero Austrom, PhD

Neuroimaging Core Leader:

Andrew Saykin, PsyD

Genetics, Biomarker & Bioinformatics Core Leader:

Tatiana Foroud, PhD

EDITOR

Mary Guerriero Austrom, PhD

CO-EDITORS

Brandy R. Matthews, MD

Jill R. Murrell, PhD

Andrew Saykin, PsyD

Brad Glazier

EDITORIAL ASSISTANT

Donna Wert

Contributors in this issue:

Mary Guerriero Austrom, PhD

Daniel O'Clark, PhD

Brandy R. Matthews, MD

Tatiana Foroud, PhD

Frederick W. Unverzagt, PhD

The editor welcomes your comments and letters
maustrom@iupui.edu
dwert@iupui.edu

iADC
Indiana Alzheimer Disease Center
INDIANA UNIVERSITY
SCHOOL OF MEDICINE
355 W. 16th Street, Suite 2800
Indianapolis, IN 46202-7176

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