



Andrei Irimia, PhD

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Research interests

My research involves the use of multimodal neuroimaging (MRI, MRA, PET, CT, EEG, MEG) to understand how brain aging in health and disease. Specific interests include (1) traumatic brain injury (TBI) in older adults; (2) aging-related dynamics of the human connectome; (3) the relationship between TBI and both Alzheimer's and Parkinson's diseases; (4) consequences of aging and TBI upon neural function, cognition and affect; (5) cardiovascular disease effects upon brain aging in atypical populations (such as the Tsimané people of Bolivia).

Employment

2017-present assistant professor, Andrus Gerontology Center, USC Leonard Davis School of Gerontology
2013-2017 assistant professor of research, Department of Neurology, Keck School of Medicine of USC

Education & training

2010-2013	postdoctoral scholar	multimodal neuroimaging	UC Los Angeles
2008-2010	postdoctoral scholar	brain mapping & neurophysiology	UC San Diego
2007	MS, PhD	biophysics	Vanderbilt University
2004	MS	computer science	Vanderbilt University
2002	BA, <i>summa cum laude</i>	computer science & mathematics	Lipscomb University

Selected teaching experience

2015-2016	NIIN 530	Neuroimaging data acquisition using MRI	USC	3 units
2016	MEDS 490	Directed research in biomedical science	USC	1 unit

Selected professional service

2015-2016	Admissions committee, neuroimaging graduate program	USC
2014	Faculty & organizer, Brain Imaging & Visualization Workshop	USC
2013	Faculty judge, Sigma Xi Annual Research Competition	USC

Research output summary

80+ peer-reviewed publications, 200+ abstracts, 40+ invited lectures; 80+ academic honors and awards

Selected honors

2017	Data science rotation for advancing discovery (RoAD trip), NIH BD2K Training Center
2016	Delegate, NIH/NSF mobile health innovation laboratory & workshop, Lake Arrowhead, CA
2016	Invited speaker, SPIE Conference on Medical Imaging (SPIE 2017), San Diego, CA
2016	Invited speaker, Society for Neuroscience Brain Imaging Workshop, San Diego, CA
2016	Invited speaker, International Neurotrauma Society Conference, Cape Town, South Africa
2015	Invited session chair, Meeting of the Organization for Human Brain Mapping, Honolulu, HI
2014	Certificate of recognition from the European Neuroradiology Society, Zürich, Switzerland
2014	Best research article award at the IEEE Symposium on Bioengineering, Beijing, P.R. China
2014	Finalist, MQ Foundation for Mental Health Research Competition, London, United Kingdom
2013	Best research article award, IEEE Workshop on Brain Image Analysis, Nagoya, Japan
2014	Selected to the top 20 best journal referees, Institute of Physics, London, United Kingdom
2013	Young investigator, American Society for Clinical Psychopharmacology (ASCP), Miami, FL
2013	Scholarship, UCLA Institute for Pure & Applied Mathematics (IPAM), Los Angeles, CA
2013	Scholarship, Alzheimer's Association International Conference (AAIC), Copenhagen, Denmark
2013	Scholarship, SIAM International Conference on Physical and Geometric Modeling, Denver, CO
2013	Scholarship, Multimodal Neuroimaging Workshop, University of California, Los Angeles, CA
2013	Scholarship, Dynamics Days Annual Conference on Nonlinear Dynamics, Denver, CO
2012	Traumatic brain injury research featured as main article in Discovery Magazine (US edition)
2012	Best connectome representation, Brain Art Competition, Neuro Bureau, Beijing, P.R. China
2012	Connectogram featured at the Ars Electronica International Conference, Linz, Austria
2012	Young investigator, American College of Neuropsychopharmacology (ACNP), Miami, FL
2012	John C. Mazziotta Prize for excellence in postdoctoral neurological research, Los Angeles, CA
2012	Fellowship, UCSB Summer Institute for Cognitive Neuroscience (SICN), Santa Barbara, CA
2012	Brain injury research competition finalist, National Neurotrauma Society, Phoenix, AZ
2012	Fellowship, Keystone Symposium on Chronic Traumatic Encephalopathies, Keystone, CO
2012	Fellowship, Dynamics Days Conference on Chaos and Nonlinear Dynamics, Baltimore, MD
2011	Brain visualization featured by the Radiological Society of North America, Chicago, IL
2010	First prize, research contest, National Alliance for Medical Image Computing, Cambridge, MA
2010	Fine science research award, Ahmanson-Lovelace Brain Research Institute, Los Angeles, CA
2010	Fellowship, Neuroimaging Training Program (NITP), University of California, Los Angeles, CA
2009	Fellowship, Meeting of the American Psychological Association (APA), New York, NY
2009	Feature in the Kaleidoscope section of the Physical Review on Nonlinear & Soft Matter Physics
2008	Scholarship, Conference on Chaos & Nonlinear Systems, Oak Ridge National Laboratory
2006	Scholarship, New England Complex Systems Institute (NECSI), Cambridge, MA
2006	Certificate of distinction, American Gastroenterological Association, San Diego, CA
2005	Scholarship, Graduate School of Arts & Sciences, Vanderbilt University, Nashville, TN
2004	Chancellor's List, Graduate School of Arts & Sciences, Vanderbilt University, Nashville, TN
2002	BA summa cum laude with honors and class salutatorian, Lipscomb University, Nashville, TN
2002	Research contest prize, Association for Computing Machinery (ACM), Cincinnati, OH
2002	Academic scholarship, Department of Computing, Lipscomb University, Nashville, TN
2002	Dean's fellowship for scientific modeling and simulation, Lipscomb University, Nashville, TN
2001	Certificate of distinction, Alpha Chi National Honors Scholarship Society, Macon, GA
2001	Top 5%, International Mathematical Modeling Contest of the UMAP, Nashville, TN
1999-2002	Dean's scholar, 50% tuition, College of Arts and Sciences, Lipscomb University, Nashville, TN
1999-2002	Johnston-Foster scholar, 50% tuition, Board of Trustees, Lipscomb University, Nashville, TN
1999	Awarded a presidential award for educational excellence from US President William J. Clinton
1998-1999	Full academic scholarship to attend a prestigious private high school in the United States
1998-1999	Academic scholarship, Soros Foundation for an Open Society (top 5 of over 800 applicants)
1997	First Prize, National Olympiad of English Language & Literature, Piatra Neamț, Romania