

Nick Tustison

Curriculum Vitae

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Education

- 2004 **D.Sc. Biomedical Engineering**, Washington University in St. Louis, St. Louis, MO.
Thesis: *Biventricular Myocardial Strains With Anatomical NURBS Models From Tagged MRI*
- 2000 **M.S. Biomedical Engineering**, University of Virginia, Charlottesville, VA.
Thesis: *Quantification Methods for Assessing Asthma in Hyperpolarized ^3He Lung MRI Studies*
- 1998 **B.S. Applied Physics: Computer Science**, Brigham Young University, Provo, UT.

Professional Appointments

- 2017– **Associate Professor**, Department of Radiology and Medical Imaging, University of Virginia, Charlottesville, VA.
- 2018– **Visiting Associate Researcher**, Department of Neurobiology and Behavior, University of California, Irvine, Irvine, CA.
- 2010–2017 **Assistant Professor**, Department of Radiology and Medical Imaging, University of Virginia, Charlottesville, VA.
- 2016–2018 **Visiting Assistant Researcher**, Department of Neurobiology and Behavior, University of California, Irvine, Irvine, CA.
- 2005–2010 **Senior Research Investigator**, Department of Radiology, University of Pennsylvania, Philadelphia, PA.
- 2004–2005 **Research Fellow**, Department of Radiology, University of Pennsylvania, Philadelphia, PA.

Academic Service

Program committees

- 2012–present **SPIE Medical Imaging**.

Editorships

- 2012–present **Frontiers Review Editorial Board**.
- May 2013– **Frontiers in Neuroinformatics: Guest Editor**, *Neuroinformatics with the Insight ToolKit*.

Reviewer Duties

Academic Radiology
American Journal of Neuroradiology
Annals of Biomedical Engineering
Artificial Intelligence in Medicine
Biomedical Signal Processing and Control
Computer Vision and Image Understanding
Computers in Biology and Medicine
Computerized Medical Imaging and Graphics
Focused Ultrasound Foundation ad hoc grant reviewer
Human Brain Mapping
Image and Vision Computing
International Journal of Pattern Recognition and Artificial Intelligence
IEEE Transactions on Cybernetics
IEEE Transactions on Medical Imaging
IEEE Transactions on Pattern Analysis and Machine Intelligence
IEEE Transactions on Biomedical Engineering
Insight Journal
International Conf. on Medical Image Computing and Computer Assisted Intervention
International Journal of Biomedical Imaging
International Journal of Computer Vision
International Workshop on Medical Imaging and Augmented Reality
IEEE International Symposium on Biomedical Imaging: From Nano to Macro
Journal of Computed Tomography
Journal of Electronic Imaging
Journal of Magnetic Resonance Imaging
Journal of Neurotrauma
Journal of the Optical Society of America A
Magnetic Resonance in Medicine
Medical Physics
Medical Image Analysis
Neurobiology of Aging
NeuroImage
NeuroImage: Clinical
Neuroradiology
Neuroscience and Biobehavioral Reviews
PLOS ONE
Psychiatric Research: Neuroimaging
Respirology
SIAM Journal on Imaging Sciences

Invited Talks/Participation

- Feb 2012 **SPIE conference**, *Open source tools for medical image analysis.*
- Sept 2012 **MICCAI**, *provided canonical registrations for Grand Challenge and Workshop on Multi-Atlas Labeling.*
- Sept 2013 **MICCAI**, *provided canonical registrations for SATA challenge workshop.*
- May 2015 **CREATE-MIA**, *ANTs Workshop.*
- Oct 2015 **MICCAI**, *SimpleITK tutorial.*

- May 2019 **ICERM**, *Brown University*, Introduction to the ANTs Ecosystem.
- June 2019 **SMI**, *UC Irvine*, Longitudinal mapping of cortical thickness measurements: an ADNI-based evaluation study.

Computer Skills

- Languages C++, perl, bash, \LaTeX , R, python
- Tools and Libraries Advanced Normalization Tools (ANTs), Insight Toolkit (ITK), Visualization Toolkit (VTK), Paraview, git, Matlab, PBS/SGE qsub

Awards

- 2010 **1st place**, *EMPIRE10 lung registration competition*, MICCAI Conference 2010.
- 2013 **1st place**, *BRATS2013 multimodal brain tumor segmentation competition*, MICCAI Conference 2013.
- 2014 **Best paper award**, *STACOM2014 cardiac motion estimation challenge*, MICCAI Conference 2014.
- 2017 **NVIDIA academic GPU grant**, (*Titan Xp*).

Publications

Articles

Kevin Donovan, Nicholas J Tustison, Kristin A Linn, Russell T Shinohara, and Alzheimer's Disease Neuroimaging Initiative. Multivariate residualization in medical imaging analysis. *bioRxiv*, Feb 2023.

Batool Rizvi, Mithra Sathishkumar, Soyun Kim, Freddie Márquez, Steven J Granger, Myra S Larson, Blake A Miranda, Martina K Hollearn, Liv McMillan, Bin Nan, Nicholas J Tustison, Patrick J Lao, Adam M Brickman, Dana Greenia, Maria M Corrada, Claudia H Kawas, and Michael A Yassa. Posterior white matter hyperintensities are associated with reduced medial temporal lobe subregional integrity and long-term memory in older adults. *Neuroimage Clin*, 37:103308, Dec 2022.

Danni Tu, Manu S Goyal, Jordan D Dworkin, Samuel Kampondeni, Lorena Vidal, Eric Biondo-Savin, Sandeep Juvvadi, Prashant Raghavan, Jennifer Nicholas, Karen Chetcuti, Kelly Clark, Timothy Robert-Fitzgerald, Theodore D Satterthwaite, Paul Yushkevich, Christos Davatzikos, Guray Erus, Nicholas J Tustison, Douglas G Postels, Terrie E Taylor, Dylan S Small, and Russell T Shinohara. Automated analysis of low-field brain mri in cerebral malaria. *Biometrics*, Jun 2022.

Andrew A Chen, Joanne C Beer, Nicholas J Tustison, Philip A Cook, Russell T Shinohara, Haochang Shou, and Alzheimer's Disease Neuroimaging Initiative. Mitigating site effects in covariance for machine learning in neuroimaging data. *Hum Brain Mapp*, 43(4):1179–1195, Mar 2022.

Dana L McMakin, Adam Kimbler, Nicholas J Tustison, Jeremy W Pettit, and Aaron T Mattfeld. Negative overgeneralization is associated with anxiety and mechanisms of pattern completion in peripubertal youth. *Soc Cogn Affect Neurosci*, 17(2):231–240, Feb 2022.

Zhuang Song, Anithapriya Krishnan, Laura Gaetano, Nicholas J Tustison, David Clayton, Alex de Crespigny, Thomas Bengtsson, Xiaoming Jia, and Richard A D Carano.

Deformation-based morphometry identifies deep brain structures protected by ocrelizumab. *Neuroimage Clin*, 34:102959, 2022.

Nicholas J Tustison, Talissa A Altes, Kun Qing, Mu He, G Wilson Miller, Brian B Avants, Yun M Shim, James C Gee, John P Mugler, 3rd, and Jaime F Mata. Image- versus histogram-based considerations in semantic segmentation of pulmonary hyperpolarized gas images. *Magn Reson Med*, 86(5):2822–2836, Nov 2021.

W Gerald Teague, Jaime Mata, Kun Qing, Nicholas J Tustison, John P Mugler, Craig H Meyer, Eduard E de Lange, Yun M Shim, Kristin Wavell, and Talissa A Altes. Measures of ventilation heterogeneity mapped with hyperpolarized helium-3 mri demonstrate a t2-high phenotype in asthma. *Pediatr Pulmonol*, 56(6):1440–1448, Jun 2021.

Nicholas J Tustison, Philip A Cook, Andrew J Holbrook, Hans J Johnson, John Muschelli, Gabriel A Devenyi, Jeffrey T Duda, Sandhitsu R Das, Nicholas C Cullen, Daniel L Gillen, Michael A Yassa, James R Stone, James C Gee, and Brian B Avants. The antsx ecosystem for quantitative biological and medical imaging. *Sci Rep*, 11(1):9068, Apr 2021.

Brian B Avants, Nicholas J Tustison, and James R Stone. Similarity-driven multi-view embeddings from high-dimensional biomedical data. *Nat Comput Sci*, 1(2):143–152, Feb 2021.

Mu He, Kun Qing, Nicholas J Tustison, Zach Beaulac, Tabitha W King, Thomas B Huff, Mikell Paige, Kranthikiran Earasi, Roselove Nunoo-Asare, Sarah Struchen, Marie Burdick, Zhimin Zhang, Alan Ropp, Grady W Miller, James T Patrie, Jaime F Mata, John P Mugler, and Yun Michael Shim. Characterizing gas exchange physiology in healthy young electronic-cigarette users with hyperpolarized 129xe mri: A pilot study. *Int J Chron Obstruct Pulmon Dis*, 16:3183–3187, 2021.

James R Stone, Brian B Avants, Nicholas J Tustison, Eric M Wassermann, Jessica Gill, Elena Polejaeva, Kristine C Dell, Walter Carr, Angela M Yarnell, Matthew L LoPresti, Peter Walker, Meghan O'Brien, Natalie Domeisen, Alycia Quick, Claire M Modica, John D Hughes, Francis J Haran, Carl Goforth, and Stephen T Ahlers. Functional and structural neuroimaging correlates of repetitive low-level blast exposure in career breachers. *J Neurotrauma*, 37(23):2468–2481, Dec 2020.

Eric Aliotta, Sunil W Dutta, Xue Feng, Nicholas J Tustison, Prem P Batchala, David Schiff, M Beatriz Lopes, Rajan Jain, T Jason Druzgal, Sugoto Mukherjee, and Sohil H Patel. Automated apparent diffusion coefficient analysis for genotype prediction in lower grade glioma: association with the t2-flair mismatch sign. *J Neurooncol*, 149(2):325–335, Sep 2020.

Cuneyt Yilmaz, D Merrill Dane, Nicholas J Tustison, Gang Song, James C Gee, and Connie C W Hsia. In vivo imaging of canine lung deformation: effects of posture, pneumonectomy, and inhaled erythropoietin. *J Appl Physiol (1985)*, 128(5):1093–1105, May 2020.

Xue Feng, Nicholas J Tustison, Sohil H Patel, and Craig H Meyer. Brain tumor segmentation using an ensemble of 3d u-nets and overall survival prediction using radiomic features. *Front Comput Neurosci*, 14:25, 2020.

Nicholas J Tustison, Brian B Avants, and James C Gee. Learning image-based spatial transformations via convolutional neural networks: a review. *Magn Reson Imaging*, Jun 2019.

Xue Feng, Kun Qing, Nicholas J Tustison, Craig H Meyer, and Quan Chen. Deep convolutional neural network for segmentation of thoracic organs-at-risk using cropped 3d images. *Med Phys*, 46(5):2169–2180, May 2019.

Kun Qing, Nicholas J Tustison, John P Mugler, 3rd, Jaime F Mata, Zixuan Lin, Li Zhao, Da Wang, Xue Feng, Ji Young Shin, Sean J Callahan, Michael P Bergman, Kai Ruppert, Talissa A Altes, Joanne M Cassani, and Y Michael Shim. Probing changes in lung physiology in copd using ct, perfusion mri, and hyperpolarized xenon-129 mri. *Acad Radiol*, 26(3):326–334, Mar 2019.

Nicholas J Tustison, Brian B Avants, Zixuan Lin, Xue Feng, Nicholas Cullen, Jaime F Mata, Lucia Flors, James C Gee, Talissa A Altes, John P Mugler Iii, and Kun Qing. Convolutional neural networks with template-based data augmentation for functional lung image quantification. *Acad Radiol*, 26(3):412–423, Mar 2019.

G Allan Johnson, Nian Wang, Robert J Anderson, Min Chen, Gary P Cofer, James C Gee, Forrest Pratson, Nicholas Tustison, and Leonard E White. Whole mouse brain connectomics. *J Comp Neurol*, 527(13):2146–2157, 09 2019.

Erin D Bigler, Tracy J Abildskov, Barry Eggleston, Brian A Taylor, David F Tate, Jo Ann Petrie, Mary R Newsome, Randall S Scheibel, Harvey Levin, William C Walker, Naomi Goodrich-Hunsaker, Nicholas J Tustison, James R Stone, Andrew R Mayer, Timothy D Duncan, Gerry E York, and Elisabeth A Wilde. Structural neuroimaging in mild traumatic brain injury: A chronic effects of neurotrauma consortium study. *Int J Methods Psychiatr Res*, 28(3):e1781, 09 2019.

E Sherwood Brown, Alexandra Kulikova, Erin Van Enkevort, Alyson Nakamura, Elena I Ivleva, Nicholas J Tustison, Jared Roberts, Michael A Yassa, Changho Choi, Alan Frol, David A Khan, Miguel Vazquez, Traci Holmes, and Kendra Malone. A randomized trial of an nmda receptor antagonist for reversing corticosteroid effects on the human hippocampus. *Neuropsychopharmacology*, 44(13):2263–2267, 12 2019.

E Sherwood Brown, Nasreen Sayed, Changho Choi, Nicholas Tustison, Jared Roberts, Michael A Yassa, Erin Van Enkevort, Alyson Nakamura, Elena I Ivleva, Prabha Sunderajan, David A Khan, Miguel Vazquez, Bruce McEwen, Alexandra Kulikova, Alan B Frol, and Traci Holmes. A randomized, double-blind, placebo-controlled trial of lamotrigine for prescription corticosteroid effects on the human hippocampus. *Eur Neuropsychopharmacol*, 29(3):376–383, 03 2019.

Neda Jahanshad, Joshua Faskowitz, Gennady Roshchupkin, Derrek P Hibar, Boris A Gutman, Nicholas J Tustison, Hieab H H Adams, Wiro J Niessen, Meike W Vernooij, M Arfan Ikram, Marcel P Zwiers, Alejandro Arias Vasquez, Barbara Franke, Jennifer L Kroll, Benson Mwangi, Jair C Soares, Alex Ing, Sylvane Desrivieres, Gunter Schumann, Narelle K Hansell, Greig I de Zubicaray, Katie L McMahon, Nicholas G Martin, Margaret J Wright, and Paul M Thompson. Multi-site meta-analysis of morphometry. *IEEE/ACM Trans Comput Biol Bioinform*, 16(5):1508–1514, 2019.

Duc M Nguyen, Michael A Yassa, Nicholas J Tustison, Jared M Roberts, Alexandra Kulikova, Alyson Nakamura, Elena I Ivleva, Erin Van Enkevort, and E Sherwood Brown. The relationship between cumulative exogenous corticosteroid exposure and volumes of hippocampal subfields and surrounding structures. *J Clin Psychopharmacol*, 39(6):653–657, 2019.

Kun Qing, Nicholas J Tustison, John P Mugler, 3rd, Jaime F Mata, Zixuan Lin, Li Zhao, Da Wang, Xue Feng, Ji Young Shin, Sean J Callahan, Michael P Bergman, Kai Ruppert, Talissa A Altes, Joanne M Cassani, and Y Michael Shim. Probing changes in lung physiology in copd using ct, perfusion mri, and hyperpolarized xenon-129 mri. *Acad Radiol*, 26(3):326–334, 03 2019.

Neha Sinha, Zachariah M Reagh, Nicholas J Tustison, Chelsie N Berg, Ashlee Shaw, Catherine E Myers, Diane Hill, Michael A Yassa, and Mark A Gluck. Abca7 risk variant in healthy older african americans is associated with a functionally isolated entorhinal cortex mediating deficient generalization of prior discrimination training. *Hippocampus*, 29(6):527–538, 06 2019.

Nicholas J Tustison, Brian B Avants, and James C Gee. Learning image-based spatial transformations via convolutional neural networks: A review. *Magn Reson Imaging*, 64:142–153, 12 2019.

Nicholas J Tustison, Brian B Avants, Zixuan Lin, Xue Feng, Nicholas Cullen, Jaime F Mata, Lucia Flors, James C Gee, Talissa A Altes, John P Mugler Iii, and Kun Qing. Convolutional neural networks with template-based data augmentation for functional lung image quantification. *Acad Radiol*, 26(3):412–423, 03 2019.

Nicholas J Tustison, Andrew J Holbrook, Brian B Avants, Jared M Roberts, Philip A Cook, Zachariah M Reagh, Jeffrey T Duda, James R Stone, Daniel L Gillen, Michael A Yassa, and Alzheimer’s Disease Neuroimaging Initiative. Longitudinal mapping of cortical thickness measurements: An alzheimer’s disease neuroimaging initiative-based evaluation study. *J Alzheimers Dis*, 71(1):165–183, 2019.

Erin D Bigler, Marc Skiles, Benjamin S C Wade, Tracy J Abildskov, Nick J Tustison, Randall S Scheibel, Mary R Newsome, Andrew R Mayer, James R Stone, Brian A Taylor, David F Tate, William C Walker, Harvey S Levin, and Elisabeth A Wilde. Freesurfer 5.3 versus 6.0: are volumes comparable? a chronic effects of neurotrauma consortium study. *Brain Imaging Behav*, Dec 2018.

Yi Xin, Maurizio Cereda, Hooman Hamedani, Mehrdad Pourfathi, Sarmad Siddiqui, Natalie Meeder, Stephen Kadlec, Ian Duncan, Harrilla Profka, Jennia Rajaei, Nicholas J Tustison, James C Gee, Brian P Kavanagh, and Rahim R Rizi. Unstable inflation causing injury. insight from prone position and paired computed tomography scans. *Am J Respir Crit Care Med*, 198(2):197–207, Jul 2018.

Eduardo J Mortani Barbosa, Jr, Haochang Shou, Scott Simpsom, James Gee, Nicholas Tustison, and James C Lee. Quantitative computed tomography metrics from the transplanted lung can predict forced expiratory volume in the first second after lung transplantation. *J Thorac Imaging*, 33(2):112–123, Mar 2018.

Zachariah M Reagh, Jessica A Noche, Nicholas J Tustison, Derek Delisle, Elizabeth A Murray, and Michael A Yassa. Functional imbalance of anterolateral entorhinal cortex and hippocampal dentate/ca3 underlies age-related object pattern separation deficits. *Neuron*, 97(5):1187–1198.e4, Mar 2018.

Sandhitsu R Das, Long Xie, Laura E M Wisse, Ranjit Ittyerah, Nicholas J Tustison, Bradford C Dickerson, Paul A Yushkevich, David A Wolk, and Alzheimer’s Disease Neuroimaging Initiative. Longitudinal and cross-sectional structural magnetic resonance imaging correlates of av-1451 uptake. *Neurobiol Aging*, 66:49–58, 06 2018.

Katherine T Flynn Bolte, Rajesh Prabhu Balaraman, Kexin Jiao, Michael Tustison, Kiah S Kirkwood, Chuanhong Zhou, and Punit Kohli. Probing liquid-solid and vapor-liquid-solid interfaces of hierarchical surfaces using high-resolution microscopy. *Langmuir*, 34(12):3720–3730, 03 2018.

Andrew T Grainger, Nicholas J Tustison, Kun Qing, Rene Roy, Stuart S Berr, and Weibin Shi. Deep learning-based quantification of abdominal fat on magnetic resonance images. *PLoS One*, 13(9):e0204071, 2018.

Zachariah M Reagh, Jessica A Noche, Nicholas J Tustison, Derek Delisle, Elizabeth A Murray, and Michael A Yassa. Functional imbalance of anterolateral entorhinal cortex and hippocampal dentate/ca3 underlies age-related object pattern separation deficits. *Neuron*, 97(5):1187–1198.e4, 03 2018.

Neha Sinha, Chelsie N Berg, Nicholas J Tustison, Ashlee Shaw, Diane Hill, Michael A Yassa, and Mark A Gluck. Apoe *varepsilon*4 status in healthy older african americans is associated with deficits in pattern separation and hippocampal hyperactivation. *Neurobiol Aging*, 69:221–229, 09 2018.

A Murat Maga, Nicholas J Tustison, and Brian B Avants. A population level atlas of mus musculus craniofacial skeleton and automated image-based shape analysis. *J Anat*, 231(3):433–443, Sep 2017.

Talissa A Altes, Mac Johnson, Meredith Fidler, Martyn Botfield, Nicholas J Tustison, Carlos Leiva-Salinas, Eduard E de Lange, Deborah Froh, and John P Mugler, 3rd. Use of hyperpolarized helium-3 mri to assess response to ivacaftor treatment in patients with cystic fibrosis. *J Cyst Fibros*, 16(2):267–274, Mar 2017.

E Mortani Barbosa, Jr, S Simpson, J C Lee, N Tustison, J Gee, and H Shou. Multivariate modeling using quantitative ct metrics may improve accuracy of diagnosis of bronchiolitis obliterans syndrome after lung transplantation. *Comput Biol Med*, 89:275–281, 10 2017.

Maurizio Cereda, Yi Xin, Hooman Hamedani, Giacomo Bellani, Stephen Kadlecsek, Justin Clapp, Luca Guerra, Natalie Meeder, Jennia Rajaei, Nicholas J Tustison, James C Gee, Brian P Kavanagh, and Rahim R Rizi. Tidal changes on ct and progression of ards. *Thorax*, 72(11):981–989, 11 2017.

Shengwen Guo, Chunren Lai, Congling Wu, Guiyin Cen, and Alzheimer’s Disease Neuroimaging Initiative. Conversion discriminative analysis on mild cognitive impairment using multiple cortical features from mr images. *Front Aging Neurosci*, 9:146, 2017.

Amy C Ladd, David G Brohawn, Ravindar R Thomas, Paula M Keeney, Stuart S Berr, Shaharyar M Khan, Francisco R Portell, Meiram Zh Shakenov, Patrick F Antkowiak, Bijoy Kundu, Nicholas Tustison, and James P Bennett. Rna-seq analyses reveal that cervical spinal cords and anterior motor neurons from amyotrophic lateral sclerosis subjects show reduced expression of mitochondrial dna-encoded respiratory genes, and rhtfam may correct this respiratory deficiency. *Brain Res*, 1667:74–83, 07 2017.

Beau Pontre, Brett R Cowan, Edward DiBella, Sancgeetha Kulaseharan, Devavrat Likhite, Nils Noorman, Lennart Tautz, Nicholas Tustison, Gert Wollny, Alistair A Young, and Avan Suinesiaputra. An open benchmark challenge for motion correction of myocardial perfusion mri. *IEEE J Biomed Health Inform*, 21(5):1315–1326, 09 2017.

Lucia Flors, John P Mugler, 3rd, Eduard E de Lange, Grady W Miller, Jaime F Mata, Nick Tustison, Iulian C Ruset, F William Hersman, and Talissa A Altes. Hyperpolarized gas magnetic resonance lung imaging in children and young adults. *J Thorac Imaging*, 31(5):285–95, Sep 2016.

Dorian Pustina, H Branch Coslett, Peter E Turkeltaub, Nicholas Tustison, Myrna F Schwartz, and Brian Avants. Automated segmentation of chronic stroke lesions using linda: Lesion identification with neighborhood data analysis. *Hum Brain Mapp*, 37(4):1405–21, Apr 2016.

Talissa A Altes, John P Mugler, 3rd, Kai Ruppert, Nicholas J Tustison, Joanne Gersbach, Sylvia Szentpetery, Craig H Meyer, Eduard E de Lange, and W Gerald Teague. Clinical correlates of lung ventilation defects in asthmatic children. *J Allergy Clin Immunol*, 137(3):789–96.e7, Mar 2016.

Genevera I Allen, Nicola Amoroso, Catalina Anghel, Venkat Balagurusamy, Christopher J Bare, Derek Beaton, Roberto Bellotti, David A Bennett, Kevin L Boehme, Paul C Boutros, Laura Caberlotto, Cristian Caloian, Frederick Campbell, Elias Chaibub Neto, Yu-Chuan Chang, Beibei Chen, Chien-Yu Chen, Ting-Ying Chien, Tim Clark, Sudeshna Das, Christos Davatzikos, Jieyao Deng, Donna Dillenberger, Richard J B Dobson, Qilin Dong, Jimit Doshi, Denise Duma, Rosangela Errico, Guray Erus, Evan Everett, David W Fardo, Stephen H Friend, Holger Fröhlich, Jessica Gan, Peter St George-Hyslop, Satrajit S Ghosh, Enrico Glaab, Robert C Green, Yuanfang Guan, Ming-Yi Hong, Chao Huang, Jinseub Hwang, Joseph Ibrahim, Paolo Inglese, Anandhi Iyappan, Qijia Jiang, Yuriko Katsumata, John S K Kauwe, Arno Klein, Dehan Kong, Roland Krause, Emilie Lalonde, Mario Lauria, Eunjee Lee, Xihui Lin, Zhandong Liu, Julie Livingstone, Benjamin A Logsdon, Simon Lovestone, Tsung-Wei Ma, Ashutosh Malhotra, Lara M Mangravite, Taylor J Maxwell, Emily Merrill, John Nagorski, Aishwarya Namasivayam, Manjari Narayan, Mufassra Naz, Stephen J Newhouse, Thea C Norman, Ramil N Nurtdinov, Yen-Jen Oyang, Yudi Pawitan, Shengwen Peng, Mette A Peters, Stephen R Piccolo, Paurush Praveen, Corrado Priami, Veronica Y Sabelnykova, Philipp Senger, Xia Shen, Andrew Simmons, Aristeidis Sotiras, Gustavo Stolovitzky, Sabina Tangaro, Andrea Tateo, Yi-An Tung, Nicholas J Tustison, Erdem Varol, George Vradenburg, Michael W Weiner, Guanghua Xiao, Lei Xie, Yang Xie, Jia Xu, Hojin Yang, Xiaowei Zhan, Yunyun Zhou, Fan Zhu, Hongtu Zhu, Shanfeng Zhu, and Alzheimer’s Disease Neuroimaging Initiative. Crowdsourced estimation of cognitive decline and resilience in alzheimer’s disease. *Alzheimers Dement*, 12(6):645–53, 06 2016.

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James R Stone, Elisabeth A Wilde, Brian A Taylor, David F Tate, Harvey Levin, Erin D Bigler, Randall S Scheibel, Mary R Newsome, Andrew R Mayer, Tracy Abildskov, Garrett M Black, Michael J Lennon, Gerald E York, Rajan Agarwal, Jorge DeVillasante, John L Ritter, Peter B Walker, Stephen T Ahlers, and Nicholas J Tustison. Supervised learning technique for the automated identification of white matter hyperintensities in traumatic brain injury. *Brain Inj*, 30(12):1458–1468, 2016.

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