Richard Cameron Craddock

cameron.craddock@gmail.com

831 Monroe Street #513

Hoboken, NJ 07030

(404) 625-4973

Prepared October 25, 2014

Education

PhD in Electrical and Computer Engineering   05/2003 – 12/2009

Georgia Institute of Technology, Atlanta, GA

Dissertation: Support Vector Classification Analysis of Resting State Functional Connectivity fMRI

Specializations: MR Physics, Bioengineering, and Digital Signal Processing

Minor: Mathematics

Advisors: Xiaoping Hu, PhD and Helen Mayberg, MD

MS in Electrical and Computer Engineering   01/2001 – 05/2003

Georgia Institute of Technology, Atlanta, GA

Specializations: Bioengineering and Digital Signal Processing

Minor: Mathematics

Advisor: Linda Wills, PhD

Bachelor of Computer Engineering   06/1995 – 08/1999

Georgia Institute of Technology, Atlanta, GA

Specializations: Telecommunications and Digital Signal Processing

Experience

Director, Computational Neuroimaging Lab   08/2014 – present

Center for Biomedical Imaging and Neuromodulation,

Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY

Director of Imaging   07/2012 – present

Center for the Developing Brain, Child Mind Institute, New York, NY

Research Scientist VI   07/2012 – present

Research Foundation for Mental Health, Inc.,

Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY

Postdoctoral Associate   10/2010 – 06/2012

Virginia Tech Carilion Research Institute, Roanoke, VA

Supervisor: Stephen M. LaConte, PhD

Research Associate   10/2009 – 10/2010
Computational Psychiatry Unit, Department of Neuroscience, Baylor College of Medicine, Houston, TX
Supervisor: Stephen M. LaConte, PhD

Supervising Research Specialist   01/2007 – 10/2009
Department of Psychiatry and Behavioral Sciences, Emory University School of Medicine, Atlanta, GA
Supervisors: Helen Mayberg, MD and Paul Holtzheimer, MD

Guest Researcher   06/2004 – 01/2007
Centers for Disease Control and Prevention, Atlanta, GA
Supervisors: Brian Gurbaxani, PhD and Suzanne Vernon, PhD

Research Assistant   11/2001 – 05/2004
School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA
Supervisor: Linda Wills, PhD

Engineer   01/2000 – 09/2001
Opuswave Networks Inc., Colorado Springs, CO

Junior Systems Engineer   08/1998 – 12/1998
Lucent Techologies Product Realization Center, Atlanta, GA

Stokes Undergraduate Scholar   08/1995 – 12/1999
Central Intelligence Agency, Washington DC

Active Grant Support

1R01MH101555: Real-time fMRI Neurofeedback Based Stratification of Default Network Regulation
Principle Investigator: R. Cameron Craddock, PhD
Funding Source: National Institute of Mental Health BRAINS Award
Support Period: 08/2013 – 08/2017
Funding Amount: $400,000 USD per year

Previous Grant Support

Neuro-Feedback for Default Mode Network Regulation in Major Depressive Disorder
Principle Investigator: R. Cameron Craddock, PhD
Mentors: Stephen LaConte, PhD and Helen Mayberg, MD
Funding Source: The Brain and Behavior Research Fund NARSAD Young Investigator Award
Support Period: 01/2011 – 01/2013
Funding Amount: $60,000 USD

Patents

European Patent 11188849.1 – 1560   11/11/11
Inventors: R. Cameron Craddock, Yating Lv, Daniel Margulies, Arno Villringer
Title: Method and apparatus for visualization of tissue perfusion by means of assessing BOLD signal fluctuations

Open Science

[Open Source] Configurable Pipeline for the Analysis of Connectomes
A python-based open source software package for performing connectivity analyses using functional MRI data on high-performance computing architectures.
Address: http://fcp-indi.github.io
Role: Project Director, Co-Principal Investigator

[Open Source] pyClusterROI
An open source python library for parcellating functional MRI data using spatially constrained normalized-cut spectral clustering.
Address: http://ccraddock.github.io/cluster_roi
Role: Primary Developer
Impact: 2,329 downloads from nitrc.org, 7 github forks

[Open Source] The Preprocessed Connectomes Project Quality Assessement Protocol
An open source python library for estimating several different quality measures from functional and structural MRI data.
Address: http://preprocessed-connectomes-project.github.io/quality-assessment-protocol/
Role: Project Director, Developer

[Data Sharing] Intrinsic Brain Activity Test-Retest Dataset
This dataset consists of two ten-minute resting state fMRI scans and two multi source interference task fMRI scans acquired during the same scanning session for thirty-six adults (20-48 years old). 14 of the participants returned for a second scanning session using the same scanning procedures.
Address: http://fcon_1000.projects.nitrc.org/indi/CoRR/html/ibatrt.html
Role: Donor

[Data Sharing] ADHD-200 Preprocessed Data
Preprocessed functional and structural data for 374 children and adolescents who suffer from ADHD and 598 typically developing controls from the ADHD-200 sample. Data was processed using three different software pipelines.
Address: http://neurobureau.projects.nitrc.org/ADHD200/Introduction.html
Role: Co-founder, Contributor
Impact: 8,730 downloads from nitrc.org, used in 26 peer reviewed publications and 2 dissertations

[Data Sharing] ABIDE Preprocessed Data
Preprocessed functional and structural data for 539 individuals suffering from autism and 573 typical controls from the ABIDE dataset. Data was processed using four different functional processing pipelines and three different structural processing pipelines.
Address: http://preprocessed-connectomes-project.github.io/abide/
Role: Co-founder, Contributor

Journal Publications

[1] Gonzalo M Rojas, Marcelo Gálvez, Natan Vega Potler, **R. Cameron Craddock**, Daniel S Margulies, F Xavier Castellanos, and Michael P Milham. Stereoscopic three-dimensional visualization applied to multimodal brain images: Clinical applications and a functional connectivity atlas. *Frontiers in Neuroscience*, 8(328), Oct 2014. [DOI:10.3389/fnins.2014.00328] [Open Access].

[2] A. Di Martino, D. A. Fair, C. Kelly, T. D. Satterthwaite, F. X. Castellanos, M. E. Thomason, **R. C. Craddock**, B. Luna, B. L. Leventhal, X. N. Zuo, and M. P. Milham. Unraveling the Miswired Connectome: A Developmental Perspective. *Neuron*, 83(6):1335--1353, Sep 2014. [DOI:10.1016/j.neuron.2014.08.050] [PMID:25233316] [Open Access].

[3] Z. Shehzad, C. Kelly, P. T. Reiss, **R. Cameron Craddock**, J. W. Emerson, K. McMahon, D. A. Copland, F. X. Castellanos, and M. P. Milham. A multivariate distance-based analytic framework for connectome-wide association studies. *NeuroImage*, 93 Pt 1:74--94, Jun 2014. [DOI:10.1016/j.neuroimage.2014.02.024] [PMID:24583255] [Open Access] [Open Source].

[4] Z. Yang, **R. C. Craddock**, D. S. Margulies, C. G. Yan, and M. P. Milham. Common intrinsic connectivity states among posteromedial cortex subdivisions: Insights from analysis of temporal dynamics. *NeuroImage*, 93 Pt 1:124--137, Jun 2014. [DOI:10.1016/j.neuroimage.2014.02.014] [PMID:24560717] [Open Access].

[5] C. Eierud, **R. C. Craddock**, S. Fletcher, M. Aulakh, B. King-Casas, D. Kuehl, and S. M. LaConte. Neuroimaging after mild traumatic brain injury: Review and meta-analysis. *NeuroImage: Clinical*, 4:283--294, 2014. [DOI:10.1016/j.nicl.2013.12.009] [PMID:25061565] [Open Access].

[6] K. J. Gorgolewski, D. Lurie, S. Urchs, J. A. Kipping, **R. C. Craddock**, M. P. Milham, D. S. Margulies, and J. Smallwood. A correspondence between individual differences in the brain's intrinsic functional architecture and the content and form of self-generated thoughts. *PLoS ONE*, 9(5):e97176, 2014. [DOI:10.1371/journal.pone.0097176] [PMID:24824880] [Open Access].

[7] L. E. Stoeckel, K. A. Garrison, S. Ghosh, P. Wighton, C. A. Hanlon, J. M. Gilman, S. Greer, N. B. Turk-Browne, M. T. deBettencourt, D. Scheinost, **R. C. Craddock**, T. Thompson, V. Calderon, C. C. Bauer, M. George, H. C. Breiter, S. Whitfield-Gabrieli, J. D. Gabrieli, S. M. LaConte, L. Hirshberg, J. A. Brewer, M. Hampson, A. Van Der Kouwe, S. Mackey, and A. E. Evins. Optimizing real time fMRI neurofeedback for therapeutic discovery and development. *NeuroImage: Clinical*, 5:245--255, 2014. [DOI:10.1016/j.nicl.2014.07.002] [PMID:25161891] [Open Access].

[8] **R. Cameron Craddock**, Michael P. Milham, and Stephen M. LaConte. Predicting intrinsic brain activity. *NeuroImage*, 82:127--136, Nov 2013. [DOI:10.1016/j.neuroimage.2013.05.072] [PMID:23707580].

[9] F. Xavier Castellanos, Adriana Di Martino, **R. Cameron Craddock**, Ashesh D. Mehta, and Michael P. Milham. Clinical applications of the functional connectome. *NeuroImage*, 80:527--540, Oct 2013. [DOI:10.1016/j.neuroimage.2013.04.083] [PMID:23631991] [Open Access].

[10] Gaël Varoquaux and **R. Cameron Craddock**. Learning and comparing functional connectomes across subjects. *NeuroImage*, 80:405--415, Oct 2013. [DOI:10.1016/j.neuroimage.2013.04.007] [PMID:23583357] [Open Access].

[11] Chao-Gan Yan, **R. Cameron Craddock**, Xi-Nian Zuo, Yue-Feng Zang, and Michael P. Milham. Standardizing the intrinsic brain: towards robust measurement of inter-individual variation in 1000 functional connectomes. *NeuroImage*, 80:246--262, Oct 2013. [DOI:10.1016/j.neuroimage.2013.04.081] [PMID:23631983] [Open Access].

[12] Callie L. McGrath, Mary E. Kelley, Paul E. Holtzheimer III, Boadie W. Dunlop, W. Edward Craighead, Alexandre R. Franco, **R. Cameron Craddock**, and Helen S. Mayberg. Toward a neuroimaging treatment selection biomarker for major depressive disorder. *JAMA Psychiatry*, 70(8):821--829, Aug 2013. [DOI:10.1001/jamapsychiatry.2013.143] [PMID:23760393] [Open Access].

[13] C. G. Yan, B. Cheung, C. Kelly, S. Colcombe, **R. C. Craddock**, A. Di Martino, Q. Li, X. N. Zuo, F. X. Castellanos, and M. P. Milham. A comprehensive assessment of regional variation in the impact of head micromovements on functional connectomics. *NeuroImage*, 76:183--201, Aug 2013. [DOI:10.1016/j.neuroimage.2013.03.004] [PMID:23499792] [Open Access].

[14] **R. Cameron Craddock**, Saad Jbabdi, Chao-Gan Yan, Joshua Vogelstein, F. Xavier Castellanos, Adriana Di Martino, Clare Kelly, Keith Heberlein, Stan Colcombe, and Michael P. Milham. Imaging human connectomes at the macroscale. *Nature Methods*, 10(6):524--539, Jun 2013. [DOI:10.1038/nmeth.2482] [PMID:23722212] [Open Access].

[15] C. J. Keller, S. Bickel, C. J. Honey, D. M. Groppe, L. Entz, **R. C. Craddock**, F. A. Lado, C. Kelly, M. Milham, and A. D. Mehta. Neurophysiological investigation of spontaneous correlated and anticorrelated fluctuations of the BOLD signal. *Journal of Neuroscience*, 33(15):6333--6342, Apr 2013. [DOI:10.1523/JNEUROSCI.4837-12.2013] [PMID:23575832] [Open Access].

[16] Yating Lv, Daniel S. Margulies, **R. Cameron Craddock**, Xiangyu Long, Benjamin Winter, Daniel Gierhake, Matthias Endres, Kersten Villringer, Jochen Fiebach, and Arno Villringer. Identifying the perfusion deficit in acute stroke with resting-state functional magnetic resonance imaging. *Annals of Neurology*, 73(1):136--140, Jan 2013. [DOI:10.1002/ana.23763] [PMID:23378326].

[17] Christiane S. Rohr, Hadas Okon-Singer, **R. Cameron Craddock**, Arno Villringer, and Daniel S. Margulies. Affect and the brain's functional organization: a resting-state connectivity approach. *PLoS ONE*, 8(7):e68015, 2013. [DOI:10.1371/journal.pone.0068015] [PMID:23935850] [Open Access].

[18] Chao-Gan Yan, **R. Cameron Craddock**, Yong He, and Michael P. Milham. Addressing head motion dependencies for small-world topologies in functional connectomics. *Frontiers in Human Neurosci*, 7:910, 2013. [DOI:10.3389/fnhum.2013.00910] [PMID:24421764] [Open Access].

[19] **R. Cameron Craddock**, G. Andrew James, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. A whole brain fMRI atlas generated via spatially constrained spectral clustering. *Human Brain Mapping*, 33(8):1914--1928, Aug 2012. [DOI:10.1002/hbm.21333] [PMID:21769991] [Open Access] [Open Source].

[20] C. Kelly, B. B. Biswal, **R. C. Craddock**, F. X. Castellanos, and M. P. Milham. Characterizing variation in the functional connectome: promise and pitfalls. *Trends in Cognitive Science (Regular Edition)*, 16(3):181--188, Mar 2012. [DOI:10.1016/j.tics.2012.02.001] [PubMed:PMID:22341211] [Open Access].

[21] S. Lavoie-Courchesne, P. Rioux, F. Chouinard-Decorte, T. Sherif, M.-E. Rousseau, S. Das, R. Adalat, J. Doyon, **R. C. Craddock**, D. Margulies, O. Lyttelton C. Chu, A. C. Evans, and P. Bellec. Integration of a neuroimaging processing pipeline into a pan-canadian computing grid. *Journal of Physics: Conference Series*, 341(1), 2012. [doi:10.1088/1742-6596/341/1/012032] [Open Access].

[22] Kate Brody Nooner, Stanley J. Colcombe, Russell H. Tobe, Maarten Mennes, Melissa M. Benedict, Alexis L. Moreno, Laura J. Panek, Shaquanna Brown, Stephen T. Zavitz, Qingyang Li, Sharad Sikka, David Gutman, Saroja Bangaru, Rochelle Tziona Schlachter, Stephanie M. Kamiel, Ayesha R. Anwar, Caitlin M. Hinz, Michelle S. Kaplan, Anna B. Rachlin, Samantha Adelsberg, Brian Cheung, Ranjit Khanuja, Chaogan Yan, **R. Cameron Craddock**, Vincent Calhoun, William

Courtney, Margaret King, Dylan Wood, Christine L. Cox, A. M. Clare Kelly, Dawn Thomsen, Bharat Biswal, Barbara Coffey, Matthew J. Hoptman, Daniel C. Javitt, Nunzio Pomara, John J. Sidtis, Harold S. Koplewicz, Francisco Xavier Castellanos, Bennet L. Leventhal, and Michael P. Milham. The NKI-Rockland Sample: A Model for Accelerating the Pace of Discovery Science in Psychiatry. *Frontiers in Neuroscience*, 6:152, 2012. [DOI:10.3389/fnins.2012.00152] [PMID:23087608] [Open Access].

[23] Christopher B. Glielmi, Qin Xu, **R. Cameron Craddock**, and Xioaping P. Hu. Simultaneous acquisition of gradient echo/spin echo BOLD and perfusion with a separate labeling coil. *Magnetic Resonance in Medicine*, 64(6):1827--1831, Dec 2010. [DOI:10.1002/mrm.22554] [PMID:20648682] [Open Access].

[24] **R. Cameron Craddock**, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. Disease state prediction from resting state functional connectivity. *Magnetic Resonance in Medicine*, 62(6):1619--1628, Dec 2009. [DOI:10.1002/mrm.22159] [PMID:19859933] [Open Access].

[25] G. Andrew James, Mary E Kelley, **R. Cameron Craddock**, Paul E Holtzheimer, Boadie W Dunlop, Charles B Nemeroff, Helen S Mayberg, and Xiaoping P Hu. Exploratory structural equation modeling of resting-state fMRI: applicability of group models to individual subjects. *NeuroImage*, 45(3):778--787, Apr 2009. [DOI:10.1016/j.neuroimage.2008.12.049] [PMID:19162206] [Open Access].

[26] Andres M. Lozano, Helen S. Mayberg, Peter Giacobbe, Clement Hamani, **R. Cameron Craddock**, and Sydney H Kennedy. Subcallosal cingulate gyrus deep brain stimulation for treatment-resistant depression. *Biological Psychiatry*, 64(6):461--467, Sep 2008. [DOI:10.1016/j.biopsych.2008.05.034] [PMID:18639234] [Open Access].

[27] Lucile Capuron, Leonie Welberg, Christine Heim, Dieter Wagner, Laura Solomon, Dimitris A. Papanicolaou, **R. Cameron Craddock**, Andrew H Miller, and William C. Reeves. Cognitive dysfunction relates to subjective report of mental fatigue in patients with chronic fatigue syndrome. *Neuropsychopharmacology*, 31(8):1777--1784, Aug 2006. [DOI:10.1038/sj.npp.1301005] [PMID:16395303] [Open Access].

[28] Gordon Broderick, **R. Cameron Craddock**, Toni Whistler, Renee Taylor, Nancy Klimas, and Elizabeth R Unger. Identifying illness parameters in fatiguing syndromes using classical projection methods. *Pharmacogenomics*, 7(3):407--419, Apr 2006. [DOI:10.2217/14622416.7.3.407] [PMID:16610951].

[29] **R. Cameron Craddock**, Renee Taylor, Gordon Broderick, Toni Whistler, Nancy Klimas, and Elizabeth R Unger. Exploration of statistical dependence between illness parameters using the entropy correlation coefficient. *Pharmacogenomics*, 7(3):421--428, Apr 2006. [DOI:10.2217/14622416.7.3.421] [PMID:16610952].

[30] Toni Whistler, Renee Taylor, **R. Cameron Craddock**, Gordon Broderick, Nancy Klimas, and Elizabeth R. Unger. Gene expression correlates of unexplained fatigue. *Pharmacogenomics*, 7(3):395--405, Apr 2006. [DOI:10.2217/14622416.7.3.395] [PMID:16610950].

Invited Talks

[1] **R. Cameron Craddock**. Using real-time fmri based neurofeedback to probe default network regulation. In *Pioneering Frontiers in Functional Brain Imaging for Psychiatry Symposium, Society of Biomedical Psychiatry 69th Annual Meeting, New York, NY*, New York, NY, 2014.

[2] **R. Cameron Craddock**. Using realtime fmri based neurofeedback to probe default network regulation. In *Yale University Magnetic Resonance Research Center fMRI Speaker Series*, New Haven, Connecticut, 2014.

[3] **R. Cameron Craddock**. The configurable pipeline for the analysis of connectomes. In *Neuroimaging ``Big Data'' Challenges and Computational Workflow Solutions Educational Workshop, Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[4] **R. Cameron Craddock**. The current state of resting state literature. In *The systematic and automated analysis of the large functional brain databases of papers*, Paris, France, 2012.

[5] **R. Cameron Craddock**. Tracking resting state networks in real time. In *Educational Workshop, Proceedings Organization of Human Brain Mapping 18th Annual Meeting, Beijing*, Beijing, 2012.

[6] **R. Cameron Craddock**, Jonathan M. Lisinski, Pearl Chiu, Helen S. Mayberg, and Stephen M. LaConte. Real-time tracking and biofeedback of the default mode network. In *Proceedings Organization of Human Brain Mapping 18th Annual Meeting, Beijing*, Beijing, 2012.

[7] **R. Cameron Craddock**, Jonathan M. Lisinski, and Stephen LaConte. Online denoising strategies for real-time tracking default mode network activity. In *Proceedings Third Biennial International Conference on Resting-State Functional Connectivity*, Magdeburg, Germany, 2012.

[8] **R. Cameron Craddock**. Applications of mvpa to the analysis of resting state fmri data: Disease state prediction, brain state prediction, and real-time fmri. In *Max Planck Institute, Leipzig, Germany*, 2010.

[9] **R. Cameron Craddock**. Applications of mvpa to the analysis of resting state fmri data: Disease state prediction, brain state prediction, and real-time fmri. In *Otto von Guericke University, Magdeburg, Germany*, 2010.

[10] **R. Cameron Craddock**. Applications of mvpa to the analysis of resting state fmri data: Disease state prediction, brain state prediction, and real-time fmri. In *University of Modena and Reggio Emilia, Modena, Italy*, 2010.

[11] **R. Cameron Craddock**. Applications of mvpa to the analysis of resting state fmri data: Disease state prediction, brain state prediction, and real-time fmri. In *Brain Imaging Series Lecture, Center for Advanced Brain Imaging, Atlanta, GA*, 2010.

[12] **R. Cameron Craddock**. Applying mvpa to fmri. In *New York University Child Study Center, New York, NY*, 2010.

[13] **R. Cameron Craddock** and Daniel S. Margulies. What is the neuro bureau? In *Proceedings Second Biennial International Conference on Resting State Connectivity, Milwaukee, MI*, 2010.

[14] **R. Cameron Craddock**, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. Disease state prediction from resting state fmri. In *Proceedings OHBM 15th Annual Meeting, San Francisco.*, 2009.

[15] **R. Cameron Craddock**. Computing for public health. In *Intel Opportunities Scholars Program, Georgia Institute of Technology*, Atlanta, GA, 2006.

[16] **R. Cameron Craddock**, Brian M. Gurbaxani, and Suzanne D. Vernon. Evaluation of single channel oligonucleotide preprocessing pipelines using predictability and reproducibility. In *BioInfoSummer*, Canberra, AU, 2006.

[17] **R. Cameron Craddock**, Renee Taylor, Gordon Broderick, Toni Whistler, Nancy Klimas, and Elizabeth R. Unger. Exploration of statistical dependence between illness parameters using the

entropy correlation coefficient. In *CFS Computation Challenge, Banbury Conference Center, Cold Springs Harbor Lab*, Cold Spring Harbor, NY, 2006.

[18] **R. Cameron Craddock**. Computing in biology. In *Intel Opportunity Scholars Program, Georgia Institute of Technology*, Atlanta, GA, 2005.

Conference Abstracts

[1] David Keator, Satrajit Ghosh, Camille Maumet, Guillaume Flandin, Nolan Nichols, Thomas Nichols, Gully Burns, Rüdiger Brüehl, **R. Cameron Craddock**, Blaise Frederick, Krzysztof Gorgolewski, Daniel Marcus, Michael Hanke, Christian Haselgrove, Karl Helmer, Arno Klein, Michael Milham, Russell Poldrack, Franck Michel, Jason Steffener, Yannick Schwartz, Rich Stoner, Jessica Turner, David Kennedy, and Jean-Baptiste Poline. Developing and using the neuroimaging and data sharing data model: the nidash working group. In *Proceedings Organization of Human Brain Mapping 20th Annual Meeting, Hamburg, Germany*, Hamburg, Germany, 2014.

[2] Adriana Di Martino, Krishna Somandepalli, **R. Cameron Craddock**, and Michael P. Milham. An emerging paradigm for examination of autism in early brain development. In *Pioneering Frontiers in Functional Brain Imaging for Psychiatry Symposium, Society of Biomedical Psychiatry 69th Annual Meeting, New York, NY*, New York, NY, 2014.

[3] Chao-Gan YAN, **R. Cameron Craddock**, Yong He, and Michael Milham. Addressing head motion dependencies for small-world topologies in functional connectomics. In *Proceedings Organization of Human Brain Mapping 20th Annual Meeting, Hamburg, Germany*, Hamburg, Germany, 2014.

[4] Zhen Yang, **R. Cameron Craddock**, Chao-Gan YAN, and Michael Milham. Reproducibility, reliability, and relevance of dynamic intrinsic functional connectivity. In *Proceedings Organization of Human Brain Mapping 20th Annual Meeting, Hamburg, Germany*, Hamburg, Germany, 2014.

[5] Zhen Yang, Nathan A. Fox, Carl W. Lejuez, Zarrar Shehzad, Bennett Leventhal, Francisco X. Castellanos, **R. Cameron Craddock**, and Michael P. Milham. Intrinsic brain indices of distress tolerance identified in life span sample using static and dynamic analyses. In *Society of Biomedical Psychiatry 69th Annual Meeting, New York, NY*, New York, NY, 2014.

[6] Zhen Yang, Daniel Lurie, David O'Connor, **R. Cameron Craddock**, and Michael Milham. Impact of hematocrit on measurement of the intrinsic brain. In *Proceedings Organization of Human Brain Mapping 20th Annual Meeting, Hamburg, Germany*, Hamburg, Germany, 2014.

[7] Zhi Yang, Xi-Nian Zuo, Katie McMahon, **R. Cameron Craddock**, Clare Kelly, Greig de Zubicaray, Ian Hickie, Peter Bandettini, F. Xavier Castellanos, Michael Milham, and Margaret Wright. Heritability of intrinsic connectivity network profiles in the human brain. In *Proceedings Organization of Human Brain Mapping 20th Annual Meeting, Hamburg, Germany*, Hamburg, Germany, 2014.

[8] Kaat Alaerts, Kritika Nayar, Jessica Raithe, **R. Cameron Craddock**, Michael P. Milham, F. Xavier Castellanos, and Adriana Di Martino. Relationship between social impairment and neural measures of functional connectivity in autism. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[9] **R. Cameron Craddock**, Yassine Benhajali, Carlton Chiu, Francois Chouinard, András Jakab, Qingyang Li, Alan Evans, Budhachandra Khundrakpam, John Lewis, Michael Milham, Chao-Gan YAN, and Pierre Bellec. The Neuro Bureau Preprocessing Initiative: open sharing of preprocessed neuroimaging data and derivatives. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[10] **R. Cameron Craddock**, Yassine Benhajali, Carlton Chiu, Francois Chouinard, András Jakab, Qingyang Li, Alan Evans, Budhachandra Khundrakpam, John Lewis, Michael Milham, Chao-Gan YAN, and Pierre Bellec. The Neuro Bureau Preprocessing Initiative: open sharing of preprocessed neuroimaging data and derivatives. In *Neuroinformatics 2013, Stockholm, Sweden*, Stockholm, Sweden, 2013.

[11] **R. Cameron Craddock**, Sharad Sikka, Brian Cheung, Ranjit Khanuja, Satra Ghosh, Chao-Gan YAN, Qingyang Li, Daniel Lurie, Joshua Vogelstein, Randal Burns, Stan Colcombe, Maarten Mennes, Clare Kelly Adriana Di Martino, F. Xavier Castellanos, and Michael Milham. Towards automated analysis of connectomes: The Configurable Pipeline for the Analysis of Connectomes. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[12] **R. Cameron Craddock**, Sharad Sikka, Brian Cheung, Ranjit Khanuja, Satra Ghosh, Chao-Gan YAN, Qingyang Li, Daniel Lurie, Joshua Vogelstein, Randal Burns, Stan Colcombe, Maarten Mennes, Clare Kelly Adriana Di Martino, F. Xavier Castellanos, and Michael Milham. Towards automated analysis of connectomes: The Configurable Pipeline for the Analysis of Connectomes. In *Neuroinformatics 2013, Stockholm, Sweden*, Stockholm, Sweden, 2013.

[13] Cyrus Eierud, **R. Cameron Craddock**, Manek Aulakh, Sean Fletcher, Brooks King-Casas, Damon Kuehl, and Stephen LaConte. Spatially and temporally resolving the changes in white matter in mild traumatic brain injury. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[14] Anders Eklund, **R. Cameron Craddock**, Cyrus Eierud, Lisinski Jonathan, Brittany Hamilton, Damon Kuehl, and Stephen LaConte. Recovering the balance between dmn and task networks after mild traumatic brain injury. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[15] Chao-Gan YAN, Brian Cheung, Clare Kelly, Stan Colcombe, **R. Cameron Craddock**, Adriana Di Martino, Qingyang Li, Xi-Nian Zuo, F. Xavier Castellanos, and Michael Milham. Rethinking the origins, impact and handling of head motion effects for functional connectomics. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[16] Chao-Gan YAN, **R. Cameron Craddock**, Xi-Nian Zuo, Zang Yufeng, and Michael Milham. Standardizing the intrinsic brain: Towards nuisance robust measurement of inter-individual variation. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[17] Zhen Yang, **R. Cameron Craddock**, Chao-Gan YAN, Sebastian Urchs, and Michael Milham. Characterizing intrinsic connectivity microstates within the posteromedial cortex. In *Proceedings Organization of Human Brain Mapping 19th Annual Meeting, Seattle, WA*, Seattle, 2013.

[18] **R. Cameron Craddock**, Jonathan M. Lisinski, Pearl Chiu, Helen S. Mayberg, and Stephen M. LaConte. Real-time tracking and biofeedback of the default mode network. In *Proceedings Organization of Human Brain Mapping 18th Annual Meeting, Beijing*, pages 648, MT, Beijing, 2012.

[19] **R. Cameron Craddock**, Jonathan M. Lisinski, and Stephen LaConte. Online denoising strategies for real-time tracking default mode network activity. In *Proceedings Third Biennial International Conference on Resting-State Functional Connectivity*, Magdeburg, Germany, 2012.

[20] **R. Cameron Craddock** and Stephen M. LaConte. Estimation of resting state network activity using multivariate prediction analysis regression (MVPA-R). In *Proceedings 19th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Montreal*, 2011. *1st Place Functional Imaging Poster Award*.

[21] **R. Cameron Craddock**, Stephen M. LaConte, F. Xavier Castellanos, Xi-Nian Zuo, Paul Thompson, Greig de Zubicaray, Katie McMahon, Ian Hickie, Nicholas Martin, Margaret Wright, and Michael Milham. Genetics influence inter-subject brain state prediction. In *Proceedings Organization of Human Brain Mapping 17th Annual Meeting, Quebec City*, pages 462, F--PM, Quebec City, 2011.

[22] Alexandre Franco, Jaemin Shin, Ki Sueng Choi, **Richard Craddock**, Helen Mayberg, and Xiaoping Hu. Increased intra-slice functional correlation: Problem and solution. In *Proceedings Organization of Human Brain Mapping 17th Annual Meeting, Quebec City*, pages 640, M, 2011.

[23] Y. Lv, D. Margulies, **R. Cameron Craddock**, X. Long, C. Rohr, B. Winter, M. Enders, K. Villringer, J. Fiebach, and A. Villringer. Diagnosis of stroke with non-invasive resting-state fmri. In *Proceedings 41st annual meeting of the Society for Neuroscience, Washington DC*, 2011.

[24] Michael Milham, Maarten Mennes, David Gutman, Randy Buckner, **Cameron Craddock**, Daniel Margulies, Yufeng Zang, Bharat Biswal, J.K. Buitelaar, Vince Calhoun, Stan Colcombe, Eliza Congdon, Daniel Dickstein, Damien Fair, Matthew Hoptman, Maria de la Iglesia Vaya, George Andrew James, Rex Jung, Clare Kelly, David Kennedy, Kent Kiehl, Clint Kilts, Art Kramer, Stephen LaConte, Bennet Leventhal, Beatriz Luna, Larry Maayan, David Madden, Luis Martí-Bonmatí, Andrew Mayer, Stewart Mostofsky, Joel Nigg, Kate Nooner, James Pekar, Russell Poldrack, Erika Proal, Julie Schweitzer, Katerina Velanova, Arno Villringer, Xi-Nian Zuo, and F. Xavier Castellanos. The International Neuroimaging Data-sharing Initiative (INDI) and the Functional Connectomes Project. In *Proceedings Organization of Human Brain Mapping 17th Annual Meeting, Quebec City*, pages 343, Th, 2011.

[25] Y. Shah, **R. C. Craddock**, S. M. LaConte, and S. J. Peltier. Functional connectivity: biophysical underpinnings and ramifications. In *Proceedings 19th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Montreal*, 2011.

[26] **R. Cameron Craddock**, G. Andrew James, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. ROI atlas generation from whole brain parcellation of resting state fMRI data. In *Proceedings 18th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Stockholm*, 2010.

[27] **R. Cameron Craddock**, G. Andrew James, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. A whole brain fMRI atlas generated via spatially constrained spectral clustering: Part I, method. In *Proceedings Organization for Human Brain Mapping 16th Annual Meeting*, pages 1006, MT--PM, Barcelona, 2010.

[28] **R. Cameron Craddock**, G. Andrew James, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. A whole brain fMRI atlas generated via spatially constrained spectral clustering. In *Proceedings Second Biennial International Conference on Resting-State Functional Connectivity*, Milwaukee, MI, 2010.

[29] **R. Cameron Craddock** and Stephen M. LaConte. Estimation of resting state network activity using support vector regression. In *Proceedings Organization for Human Brain Mapping 16th Annual Meeting*, pages 1280, WTh--PM, Barcelona, 2010.

[30] **R. Cameron Craddock** and Stephen M. LaConte. Estimation of resting state network activity using support vector regression. In *Proceedings Second Biennial International Conference on Resting-State Functional Connectivity*, Milwaukee, MI, 2010.

[31] G. Andrew James, **R. Cameron Craddock**, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. A whole brain fMRI atlas generated via spatially constrained spectral clustering: Part II, validity. In *Proceedings Organization for Human Brain Mapping 16th Annual Meeting*, pages 1063, MT--PM, Barcelona, 2010.

[32] **R. Cameron Craddock**, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. Disease state prediction from resting state fMRI. In *Proceedings Organization of Human Brain Mapping 15th Annual Meeting*, pages 462, F--PM, San Francisco, 2009.

[33] **R. Cameron Craddock**, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. Disease state prediction from resting state functional connectivity. In *Proceedings 17th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Honolulu*, page 1645, 2009.

[34] Gopi Deshpande, G. Andrew James, **R. Cameron Craddock**, Helen S. Mayberg, and Xiaoping P. Hu. Predicting treatment in patients with major depression using granger-based connectivity and support vector machines. In *Proceedings 17th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Honolulu*, page 3362, 2009.

[35] Christopher B. Glielmi, Qin Xu, **R. Cameron Craddock**, and Xiaoping P. Hu. Simultaneous acquisition of gradient echo / spin echo BOLD and perfusion with a separate labeling coil. In *Proceedings 17th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Honolulu*, page 4540, 2009.

[36] G. Andrew James, **R. Cameron Craddock**, Mary E. Kelley, Paul E. Holtzheimer, Boadie Dunlop, Charles Nemeroff, Helen S. Mayberg, and Xiaoping P. Hu. Assessing fit of individuals to group-derived structural equation models of resting-state fMRI data. In *Proceedings 17th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Honolulu*, page 3364, 2009.

[37] G. Andrew James, **R. Cameron Craddock**, Mary E. Kelley, Paul E. Holtzheimer, Boadie Dunlop, Charles B. Nemeroff, Xiaoping P. Hu, and Helen S. Mayberg. Assessing intersubject commonalities and differences with group-derived structural equation models of resting-state fMRI data. In *Proceedings OHBM 15th Annual Meeting*, pages 462, F--PM; O--SU--6, San Francisco, 2009.

[38] Jaemin Shin, **R. Cameron Craddock**, Helen S. Mayberg, and Xiaoping P. Hu. Spatial and subject variability of long-term respiration effects in fMRI. In *Proceedings 17th Scientific Meeting, International Society for Magnetic Resonance in Medicine, Honolulu*, page 1654, 2009.

[39] KiSueng Choi, **R. Cameron Craddock**, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. White matter disruption in early- and late-onset depression: a tract-based spatial statistical analysis. In *Proceedings 16th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 3553, Toronto, 2008. Poster Award: 2nd Place.

[40] KiSueng. Choi, **R. Cameron Craddock**, Paul E. Holtzheimer, Zhi. Yang, Xiaoping P. Hu, and Helen S. Mayberg. A combined functional-structural connectivity analysis of major depression using joint independent components analysis. In *Proceedings 16th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 3555, Toronto, 2008.

[41] **R. Cameron Craddock**, Christopher B. Glielmi, Paul E. Holtzheimer, Xiaoping P. Hu, and Helen S. Mayberg. Discrepencies between functional connectivity measured with BOLD and CBF in major depressive disorder. In *Proceedings 16th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 3599, Toronto, 2008.

[42] G. Andrew James, Mary E. Kelley, **R. Cameron Craddock**, Paul E. Holtzheimer, and Helen S. Mayberg. Abnormal subgenual anterior cingulate connectivity in major depressive disorder. In *63rd Annual Scientific Conference of the Society of Biological Psychiatry*, Washington DC, 2008.

[43] G. Andy James, Scott J. Peltier, **R. Cameron Craddock**, Stephen M. La Conte, Helen S. Mayberg, and Xiaoping P. Hu. Reliable modeling of resting-state emotional networks in major depressive disorder: Applicability of exploratory structural equation modeling to small sample sizes. In *Proceedings 16th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 95, Toronto, 2008.

[44] Helen S. Mayberg, **R. Cameron Craddock**, Paul E. Holtzheimer, David A. Gutman, Dylan Wint, and Robert Gross. Functional connectivity models of major depression and antidepressant

response explored using deep brain stimulation. In *63rd Annual Scientific Conference of the Society of Biological Psychiatry*, Washington DC, 2008.

[45] Jaemin Shin, **R. Cameron Craddock**, and Xiaoping P. Hu. Retrospective estimation and correction of long-term physiological effects in fMRI. In *Proceedings 16th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 2466, Toronto, 2008.

[46] **R. Cameron Craddock**, Scott J. Pelter, Holtzheimer Paul E., Xiaoping P. Hu, and Helen S. Mayberg. The Cg25 resting state network. In *Proceedings Organization for Human Brain Mapping 13th Annual Meeting*, pages 260, M--PM, Chicago, 2007.

[47] Paul E. Holtzheimer, KiSueng Choi, David A. Gutman, **R. Cameron Craddock**, and Helen S. Mayberg. Investigating neural network abnormalities in late-life depression. In *Seeking Biomarkers of Aging and Diseases of Aging, An American Federation of Aging Research Conference*, New York, 2007.

[48] G. Andy James, Stephen M. La Conte, **R. Cameron Craddock**, Helen S. Mayberg, and Xiaoping P. Hu. Structural equation modeling of resting-state temporal lobe functional connectivity. In *Proceedings 15th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 2208, Berlin, 2007.

[49] Mary E. Kelly, **R. Cameron Craddock**, Paul E. Holtzheimer, Sidney H. Kennedy, and Helen S. Mayberg. Resting state brain connectivity as predictors of treatment response in depression. In *62nd Annual Scientific Convention and Program of the Society of Biological Psychiatry*, San Deigo, 2007.

[50] **R. Cameron Craddock**, Svetlana Masalovich, Scott J. Pelter, Xiaoping P. Hu, and Helen S. Mayberg. Multivariate analysis of resting state fMRI in major depression using SeedPLS. In *Proceedings 14th Scientific Meeting, International Society for Magnetic Resonance in Medicine*, page 2850, Seattle, 2006.

[51] Toni Whistler, Renee Taylor, **R. Cameron Craddock**, Gordon Broderick, Nancy Klimas, and Elizabeth R. Unger. Gene expression correlates of unexplained fatigue. In *Experimental Biology*, San Francisco, 2006.

[52] **R. Cameron Craddock**, Eric Aslakson, and Suzanne D. Vernon. Development of a gene expression microarray database for flexible data processing, analysis, and archiving. In *CDC Genomics Day*, Atlanta, 2005.

[53] Matthew Tiller, Eric Aslakson, **R. Cameron Craddock**, and Suzanne D. Vernon. Development of a text mining tool that provides gene informatino in specific disease and biological context. In *13th Annual International Conference on Intelligent Systems for Molecular Biology*, Detriot, 2005.

Service

Advisor, 2011 - Current, Child Mind Institute Endeavor Scientist Program

Video Advisor, 2010 - 2011, NeuroImage YouTube Channel

Co-founder, The Neuro Bureau

Journal Reviewer, NeuroImage, Human Brain Mapping, Journal of Neuroscience Methods, Frontiers in Systems Neuroscience, IEEE Transactions in Medical Imaging, Magnetic Resonance Imaging, Biological Psychiatry, Frontiers in Neuroanatomy, Neuroinformatics, JAMA Psychiatry

Conference Organizer, 2012 BrainHack and UnConference, Brainhack 2013

Conference Reviewer, 17th Meeting of the Organization for Human Brain Mapping (2011), 16th Meeting of the Organization for Human Brain Mapping (2010), 13th International Conference on Medical Image Computing and Computer Assisted Intervention (2010)

Judge, 2005 Georgia State Science and Engineering Fair, Athens, GA

Mentor, 2002-2003, Georgia Tech Intel Opportunity Scholars, Atlanta, GA

Honors and Awards

2013, Biobehavioral Research Awards for Innovative New Scientists (BRAINS), NIH/NIMH
2011, Poster Award, 1st Place Functional Imaging, 19th Scientific Meeting of the International
   Society for Magnetic Resonance in Medicine, Montreal
2010, Philips Travel Stipend Award, Second Biennial International Conference on Resting-State
   Functional Brain Connectivity
2009, Organization of Human Brain Mapping Trainee Abstract Award
2008, CCB/IPAM MBI Summer Fellow
2008, ISMRM Educational Stipend
2007, ISMRM Educational Stipend
2006, BioInfoSummer 2006 Travel Scholarship
2006, ISMRM Educational Stipend
2003, Georgia Tech Office of Minority Education Tower Award
2000-2001, Opuswave Networks INC.: numerous individual/team awards
1998, CIA Meritorious Unit Citation
1998, Lucent Technologies Achievement Award
1995-1999, Stokes Undergraduate Scholarship
1995-1999, Georgia Tech Dean's List seven times
1995-1999, Georgia Tech Faculty Honors twice

Professional Memberships

International Society for Magnetic Resonance in Medicine
Organization for Human Brain Mapping

Other Education/Certifications

2010, Siemens ICE and SDE programming courses

For More Information:

Google Scholar Citations: http://tinyurl.com/CameronCraddockCitations
Impact Story: https://impactstory.org/CameronCraddock
Github: https://github.com/ccraddock
ResearchGate: https://www.researchgate.net/profile/Cameron_Craddock