Wake Forest School of Medicine
Curriculum Vitae

NAME: Paul J. Laurienti, M.D., Ph.D.

CURRENT ACADEMIC TITLE: Professor, Department of Radiology

ADDRESS:
Department of Radiology
Division of Radiologic Sciences
Wake Forest University School of Medicine
Medical Center Boulevard
Winston-Salem, North Carolina 27157-3972

Telephone: (336) 716-3261
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EDUCATION:

College:	University of Colorado at Denver	1986-1987
	University of Houston Houston, Texas B.S. (Psychology)	1987-1991
Graduate School:	Neuroscience Graduate Program University of Texas Medical Branch Galveston, Texas Ph.D.	1991-1995
Dissertation Title:	Physiologic Properties and Serotonergic Modulation of the Parapodial Neuromuscular Junction in Aplysia Brasiliana Dr. James E. Blankenship, Ph.D. - Adviser	
Predoctoral:	Predoctoral Fellow NINDS Training Grant Neuroscience Graduate Program Marine Biomedical Institute University of Texas Medical Branch Galveston, Texas	1994-1995
Honors and Awards:	National Student Research Forum's Anatomy and Neuroscience Poster Award	1995
	George Sealy Research Award in Neurology	1995
	Galveston Chapter Poster Award Society of Neuroscience	1995
	James E. Beall II Memorial Award in Anatomy and Neurosciences	1996
Medical School:	University of Texas Medical Branch Galveston, Texas M.D.	1995-1999

Honors and Awards:	Dean's List	1996, 1997, 1998, 1999
	Honors Graduate	1999
	Alpha Omega Alpha	1998
	Phi Kappa Phi	1998

POSTDOCTORAL TRAINING:

Residency:	Department of Radiology Wake Forest School of Medicine Winston-Salem, North Carolina	1999
Fellowship:	Postdoctoral Fellow National Institute of Health Training Grant Department of Neurobiology and Anatomy Wake Forest School of Medicine Winston-Salem, North Carolina Mentor: Dr. Barry Stein	1999-2000

PROFESSIONAL LICENSURE:

United States Medical License Passed USMLE Parts I, II	1997, 1999

ACADEMIC APPOINTMENTS:

Assistant Instructor School of Allied Health Sciences Division of Human and Basic Science University of Texas Medical Branch Galveston, Texas	1994
Consulting Scientist to Jin Mo Chung, Ph.D. Marine Biomedical Institute University of Texas Medical Branch Galveston, Texas	1997
Research Associate Department of Radiology Wake Forest School of Medicine	2000-2002
Assistant Professor Department of Radiology Wake Forest School of Medicine	2002-2006
Associate Department of Biomedical Engineering Division of Radiologic Sciences Wake Forest School of Medicine	2003-present
Associate Professor Department of Radiology Wake Forest School of Medicine	2006-2011
Professor Department of Radiology Wake Forest School of Medicine	2011-present

PROFESSIONAL APPOINTMENTS AND ACTIVITIES:

National:

NIH Study Sections

MEDI Study Section Ad hoc Charter Member	 2004-2006 2006-2010
NCCAM Study Section Grant Reviewer	2004
Neuroscience Blueprint Center NINDS Study Section	2006
Neuroscience Blueprint Software Design NINDS Study Section	2007
Psychosocial Risk and Disease Prevention (PRDP) Study Section	Sept 2010
Clinical/Translational Study Section Grant Reviewer	June 2011
Outstanding New Environmental Scientist Award NIEHS Special Emphasis Panel	June 2018
Neural Control of Mobility in Aging NIA Special Emphasis Panel	July 2018
Next Generation Clinical Researchers AD/ADRD NIA Study Section	Oct 2018
Superfund Research Program NIEHS Special Emphasis Panel	June 2019

NSF Study Sections

Major Instrumentation Grant Review Study Section Member	April 2013
Cognitive Neuroscience Study Section Grant Reviewer	March 2017
CRCNS Study Section Grant Reviewer	March 2022

VA Study Sections

Neurodegenerative Diseases Rehabilitation Research Study Section Grant Reviewer	March 2017
Neurodegenerative Diseases Rehabilitation (SPiREs) Review Group	April 2017
Small Projects in Rehabilitation Research (SPiREs) Review Group	Oct 2017

NIH Advisory Committees

ACCORD-MIND Clinical Trial Planning Committee Bethesda, Maryland Member	2002
NIH/NIDA Institutional Review Board Member	2005

Other National Committees

Claude Pepper OAIC University of Pittsburgh Grant Reviewer	2010-2011
Complenet Workshop on Complex Networks Program Committee	2012 2015 2016
Carolinas Medical Center University of North Carolina Charlotte Brain Behavior and Neurosciences Focus Group	2013
Cal-BRAIN Seed Grant Program Grant Reviewer	2015
UT-BRAIN Seed Grant Program Grant Reviewer	2015
16th Annual NIEHS Science Day Abstract Reviewer and Judge	2018
Complex Networks Program Committee	2020 2021 2022

International:

Ireland Health Research Board Grant Reviewer	2009
Experimental and Translational Medicine Scottish Government Grant Reviewer	2010
External Member Dissertation Committee Concordia University, Dept. Psychology Montreal, Canada External Member Dissertation Committee	2010
Leading Causes of Life Initiative Winston Salem, NC / Cape Town, South Africa http://www.leading-causes.com Fellow	2013-present
European Science Foundation Grant Reviewer	2014
Ireland Health Research Board Grant Reviewer	2016

Deutsche Forschungsgemeinschaft 2016
Grant Reviewer

Deutsche Forschungsgemeinschaft 2020
Grant Reviewer

Israel Science Foundation 2022
Grant Reviewer

Industry:

Clostra (CLOSTRA.com) 2020
Scientific Advisor

Editorial work:

Associate Editor of Brain Imaging Methods Section 2023-present

Frontiers in Neuroscience
Frontiers in Neurology
Frontiers in Neuroimaging

Editorial board

Brain Sciences (ISSN 2076-3425) 2021-present

Ad hoc reviewer

Brain Research
Brain Tomography
Cerebral Cortex
Cognitive Neurodynamics
Cognitive Processing
Computational and Mathematical Methods in Medicine
Drug and Alcohol Dependence
European Journal of Neuroscience
Engineering
Experimental Aging
Experimental Brain Research
Frontiers in Integrative Neuroscience
Frontiers in Physics
Human Brain Mapping
IEEE Transactions on Neural Systems & Rehabilitation
Journal of the American Geriatrics Society
Journal of Cognitive Neuroscience
Journal of Experimental Psychology: Human Perception and Performance
Journal of Neurophysiology
Journal of Neuroscience
Network Neuroscience
Neurobiology of Aging
NeuroImage
Neuropsychologia
NeuroReport
Neuroscience
Neurotoxicology
Nuclear Medicine and Molecular Imaging

PLoS One
PLoS Computational Biology
Perception and Psychophysics
Psychosomatic Medicine
Scientific Reports
Statistical Analysis and Data Mining

INSTITUTIONAL SERVICE:

Faculty Appointments:

J. Paul Sticht Center on Aging and Rehabilitation 2008-present
Wake Forest School of Medicine

Diabetes Research Center 2009-present
Wake Forest School of Medicine

Translational Science Center 2009-present
Wake Forest University - Reynolda Campus

Translational Science Institute 2010-present
Wake Forest School of Medicine

Center for Bimolecular Imaging 2012-present
Wake Forest School of Medicine

Center for Integrative Medicine 2012-present
Wake Forest School of Medicine

Directorships/Chairmanships:

Director 2001-2003
Functional Magnetic Resonance Imaging Lecture Series
Wake Forest School of Medicine

Associate Director 2005-2006
Medical Student Research Training Program
Wake Forest School of Medicine

Associate Director 2006-2008
ANSIR Laboratory
Wake Forest School of Medicine

Assistant Vice Chairman 2006-2009
Radiology Research, Department of Radiology
Wake Forest School of Medicine

Co-Director 2009-2011
MMS/PhD Program
Wake Forest School of Medicine

Director 2006-2012
MD/PhD Program
Wake Forest School of Medicine

Director 2009-2012
Medical Student Research Training Program
(T35DK007400)
Wake Forest School of Medicine

Chair 2012
Research Awards Day Committee
Wake Forest School of Medicine

Director 2009- present
Laboratory for Complex Brain Networks (LCBN)
Wake Forest School of Medicine

Director 2010-present
Research Core for Translational Science Center
Wake Forest University Reynolda Campus

Dean Appointed Committee:

General Clinical Research Center Advisory Committee 2005-2011
Wake Forest School of Medicine

Institutional Review Board 2006-2007
Wake Forest School of Medicine

Graduate School of Biomedical Science 2006-2011
Wake Forest School of Medicine

Wake Forest University Independent Data Safety and Monitoring Board 2008-2012
Wake Forest School of Medicine

Intramural Research Support Committee 2008-2010
Wake Forest School of Medicine

Wake Forest University Independent Data Safety and Monitoring Board *ad hoc* 2012-2015
Wake Forest School of Medicine

Research Advisory Council 2012-2015
Wake Forest School of Medicine

Centers and Cores Advisory Committee 2016-2017
Wake Forest School of Medicine

Committee on Women in Science and Medicine 2016-2017
Wake Forest School of Medicine

Other Committees and Service:

Member 2001-2004
Center for Investigative Neuroscience
Wake Forest School of Medicine
Winston-Salem, North Carolina

Interviewer 2001-2005
Medical School Admissions
Wake Forest School of Medicine

Member 2001-present
Neuroscience Graduate Program Faculty
Wake Forest School of Medicine

Member 2002-2003
Kulynych Intramural Grant Review Committee
Wake Forest School of Medicine

Member 2002-2005
Neuroscience Graduate Program Admissions Committee
Wake Forest School of Medicine

Member 2002-present
Graduate School Faculty
Wake Forest School of Medicine

Advisory Board Member 2002-2009
Kulynych Center for Memory and Cognition Research
Wake Forest School of Medicine

Counselor 2003-2004
Western North Carolina Society for Neuroscience
Wake Forest School of Medicine

Faculty Advisor 2003-2005
MD/PhD Program
Wake Forest School of Medicine

Member 2006-2008
Translational Science Institute Committee
Novel and Clinical Translational Methodologies
Wake Forest School of Medicine

Member 2006-present
Pepper OAIC Data Safety and Monitoring Board
Wake Forest School of Medicine

Member 2007-present
J. Paul Sticht Center on Aging
Wake Forest School of Medicine

Member 2008-2010
Translational Science Institute Committee
Research Education, Training and Career Development
Wake Forest School of Medicine

Member 2009-present
Center for Diabetes Research
Wake Forest School of Medicine

Reviewer 2009
Internal Mini-Study Section
Office of Research
Wake Forest School of Medicine

Ad hoc Member 2010-2012
Committee on Admissions
Wake Forest School of Medicine

Graduate School Reorganization Task Force 2010
Wake Forest School of Medicine

Member 2010-present
Neurosciences Graduate Executive Committee

Member 2012-present
Center Integrative Medicine
Wake Forest School of Medicine

Search Committee Member 2013-2014
McCreary Endowed Chair

Department of Psychiatry and Behavioral Medicine
Wake Forest School of Medicine

Member 2014-2018
Pepper OAIC Advisory Committee
Wake Forest School of Medicine

Member 2016-2017
Centers and Cores Advisory Committee
Wake Forest School of Medicine

Member 2016-2017
Women in Medicine and Science
Wake Forest School of Medicine

Member 2016-present
Center for Research on Substance Use & Addiction
Wake Forest School of Medicine

Member 2019
Research Day Awards Committee
Wake Forest School of Medicine

Member 2020
Research Day Awards Committee
Wake Forest School of Medicine

Institutional Development:

Brain Training 101 02/2011
Half Century Club Founders' Day Program
Wake Forest University, Winston Salem, NC

Is Brain Fitness the Fountain of Youth 02/2011
Dean's Forum, Bridger Field House
Wake Forest University, Winston Salem, NC

Breaking Brains 10/2013
Planned Gift Advisory Council
Wake Forest Baptist Medical Center
Winston Salem, NC

Aging Brain 12/2013
Translational Science Center's Speakers Bureau
Archdale Senior Center, Archdale, NC

Memory: It's About Your Brain and Your Body 03/2014
Dean's Forum, Bridger Field House
Wake Forest University, Winston Salem, NC

Memory: It's About Your Brain and Your Body 05/2014
Lexington Medical Center Foundation
Lexington Medical Center, Lexington, NC

Rethinking the Brain 09/2014
Homecoming and Reunion Weekend
Wake Forest University, Winston Salem, NC

Engage Magazine Cover Story Wake Forest Baptist Medical Center Devel. Office Video Interview: https://vimeo.com/111744750	12/2014
Memory: It's About Your Brain and Your Body Dean's Forum, Bridger Field House Wake Forest University, Winston Salem, NC	03/2014
Memory: It's About Your Brain and Your Body Lexington Medical Center Foundation Lexington Medical Center, Lexington, NC	05/2014
Connected Systems WFBMC Comprehensive Campaign Launch Celebration, Winston Salem, NC https://vimeo.com/141178258	10/2015
Spreading Complexity: Bringing Network Neuroimaging to Interdepartmental Collaborations at Wake Forest Dean's Research Symposia Series – Radiology Wake Forest University, Winston Salem, NC	11/2020

PROFESSIONAL MEMBERSHIPS AND SERVICE:

Texas Society for Biomedical Research UTMB Student Chapter	1993-1995
Society for Neuroscience, Galveston Chapter	1993-1996
Sigma Xi National Research Honor Society	1993-present
Society for Neuroscience	1993-2010
American Medical Association	1995-1999
Texas Medical Association	1995-1999
Organization for Human Brain Mapping	2000-2015
International Multisensory Research Forum	2002-2015
Western North Carolina Society for Neuroscience	2003-present
Research Society on Alcoholism	2020-present

HONORS AND AWARDS:

The National Institutes of Health LRP Scholar	2003-2009
Wake Forest University "New Investigator in Clinical Sciences Award"	2005
Wake Forest University "Outstanding Mid-Career Faculty Research Award"	2011
Linda and Phillip Lader Renaissance Weekend Fellow	2012
Wake Forest University "Team Science Award"	2014
Academy of Radiology Research Distinguished Investigator Award	2016

Wake Forest University "Team Science Award" 2017

Neuroscience Graduate Program 2022-2023 Teaching Award 2023

SELECTED MEDIA COVERAGE:

Caffeine 01/2005
National Geographic Cover Story

A Brain on Caffeine 03/2006
Current TV Segment
https://www.youtube.com/watch?v=2QkvclQrEBk

Caffeine's Effects on the Human Brain 04/2012
ABC News reported by Lisa Stark
http://abcnews.go.com/WNT/video/caffeines-effects-human-brain-interacts-blood-flow-lisa-stark-health-16141081

Emergency Room Cases Involving Energy Drinks Increase 01/ 2013
ABC News reported by Lisa Stark
http://abcnews.go.com/WNT/video/emergency-room-cases-involving-energy-drinks-increase-18233110

Untangling the Human Connectome 11/2014
Genetic Engineering & Biotechnology News
Interview for Special Report
http://gen.epubxp.com/i/400822-nov1-2014/49?m4=

Brain Volume Predicts Successful Weight Loss in the Elderly – Science Daily 11/2016
https://www.sciencedaily.com/releases/2016/11/161102130440.htm

WFU study highlights the power of beets 05/2017
Winston-Salem Journal Article
https://www.journalnow.com/home_food/columnists/michael_hastings/wfu-study-highlights-the-power-of-beets/article_34c918a5-0ca2-5316-87d4-ed88f194b7c7.html

Solution: 'The Slippery Math of Causation' 06/2018
Quanta Magazine Article by Pradeep Mutalik
https://www.quantamagazine.org/the-math-of-causation-puzzle-solution-20180629/

Coverage of Edited Special Issue of Brain Connectivity 03/2019
https://phys.org/wire-news/313493560/new-research-on-the-role-of-connectomics-in-brain-development.html
and
https://www.eurekalert.org/pub_releases/2019-03/mali-uct032619.php

NIEHS 2019 Grantee Highlight Paul Laurienti 06/2019
'Paul Laurienti, M.D., Ph.D. - Addressing Health Disparities of Farmworkers and their Families'
https://www.niehs.nih.gov/research/supported/translational/peph/grantee-highlights/2019/index.cfm

PROFESSIONAL INTERESTS:

Dr. Laurienti is the Director of the Laboratory for Complex Brain Networks (LCBN). In 2006, Drs. Paul Laurienti, Jonathan Burdette and Satoru Hayasaka began to discuss how chaos theory might help explain emergence and complexity in the human brain. Through their discussions, they began looking for ways and methods that could capture these non-linear processes. Where traditional neuroscience could use functional magnetic resonance imaging (fMRI) to take snapshots of the brain, it was not sufficient for capturing and studying the brain's dynamic complexity. However, an emerging area of research called Network Science was offering methods and means to quantify and analyze dynamic systems. Believing that no single cognitive process could be isolated without affecting the rest of the brain's system, they moved forward in 2009 to create the Laboratory for Complex Brain Networks. Utilizing state-of-the-art technology, the LCBN collaborates with other national and international scientists to envision and develop new and innovative methods for studying and analyzing emergence in brain networks as well as other complex systems. Ongoing studies use whole-brain connectivity to identify critical network nodes, network neighborhoods, and dynamic changes that occur under various cognitive states. Network science is proving to be a powerful tool for assessing brain structure and function and the LCBN is currently evaluating how dynamic changes in network connectivity may be critical for aging, substance abuse, and the toxic effects of pesticides.

GRANTS - CURRENT:

PI or Primary Co-Investigator

P50 AA026117 12/10/2017 - 11/30/2027 40% effort
NIAAA $292,131 annual (Project 1)
Dynamic functional brain network phenotypes associated with vulnerability to hazardous alcohol consumption.

This project is a continuation of the human neuroimaging studies examining brain networks associated with drinking behaviors in the Wake Forest Translational Alcohol Research Center (WF-TARC). The overarching hypothesis of this proposal that the vulnerability to develop hazardous drinking is manifest in dynamic network connectivity within and between the default mode network (DMN) salience network (SN) and the sensorimotor network (SMN).
Principal Investigator: Jeffrey Weiner
Project PI: **Paul Laurienti**

R01 AA029926 09/15/2021 - 08/31/2025 25% effort
NIH/NIAAA $249,147 annual
CRCNS: Multiplexed Impervious Functional Network Complements Brain Function for Tensioned Stability of Neural Information Processing

We will put forward a new description of brain function that can explain the agile functionality whereby we can dwell on a task, and also divert to other tasks, nimbly and seemingly abruptly depending on input. The complementary tools of correlation analysis and causation entropy (CSE) based information flow analysis gives a computationally valid paradigm whereby we will analyze these elements in the multilayer brain network using fMRI data from human subjects
Co-Principal Investigator: **Paul Laurienti** / Erik Bollt

R01 AA027705 09/20/2019 - 08/31/2025 10% effort
NIH/NIAAA $642,489 annual
Longitudinal Investigation of TMS As a Tool To Improve Alcohol Treatment Outcomes

The results of this study will be used to determine which of the 2 proposed TMS strategies has a larger effect on drinking behavior (% days abstinent, % heavy drinking

days) as well as alcohol cue-reactivity in a 4 month period. These data will pave the way for TMS to be used as an innovative, new treatment option for individuals with AUD.
Co-Principal Investigators: Merideth Addicott / **Paul Laurienti**

R01 AG076669 04/15/2022 - 03/31/2027 5% effort
NIH/NIA $763,265 annual
Establishing the optimal frequency of dance movement for neurocognitive and physical outcomes in people at risk of Alzheimer's disease.

This proposal seeks to fill key gaps in our basic understanding about the effects of the number of times per week people engage in dance movement on cardiorespiratory fitness and cognition that are essential for planning larger, definitive trials.
Principal Investigator: Christina Hugenschmidt
Role: Co-Investigator

WFU TSC Pilot Grant 07/01/2024 - 06/30/2025 0% effort
Pilot Grant $10,000 total
The effect of high intensity interval resistance training (HIIRT) on functional brain networks associated with cognitive and physical function in older adults.
Principal Investigator: **Paul Laurienti** / Jeff Katula / Anthony Sali

Training Grant Mentor

K25 EB032903 03/01/2023 - 02/28/2027 0% effort
NIH $144,490 annual
Statistical Methods for Whole-Brain Connectivity Analysis

The K25 proposal is focused on developing new methodology to improve whole-brain dynamic connectivity analyses of normal and abnormal brain function, which is vital for understanding various brain disorders and may help identify biomarkers and inform early prevention and treatment.
Principal Investigator: Heather Shappell
Role: Primary Mentor

K25 AG090707 12/01/2024 - 11/30/2029 0% effort
NIH $ 680,733 total
Cerebral Small Vessel Disease and Dementia: Defining Global Resilience and Disruption in Brain Networks

The vascular contributions to cognitive dysfunction and decline are seen as key modifiable risk factors; however, the mechanisms by which they produce brain lesions that affect brain networks are still unclear. This K25 Award can address this gap while preparing the applicant to lead translational studies in this field. Grant scored 10 at NIA.
Principal Investigator: Mohsen Bahrami
Role: Mentor

GRANTS - PENDING:

R01 04/01/2025 - 03/30/2030 25% effort
NIAA/NIH $ 3,624,664 total
Information processing in the brain: alterations of triple network processing capacity in alcohol use disorder

This project will use a novel measure of information processing, called the fractional processing load (FPL), to assess information processing on a brain network. The overarching objective is to use FPL to compare information processing within brain

subnetworks of individuals with alcohol use disorder (AUD) to infrequent drinkers.
Co-Principal Investigator: **Paul Laurienti** / Erik Bollt

NOSI R01 04/01/2025 - 03/30/2029 25% effort
NIA/NIH $ 1,532,400 total
Understanding the role of Alzheimer's disease biomarkers and sex differences on brain network associations with physical and cognitive function: A secondary analysis in the B-NET study.

This study is designed to determine if altered brain network organization is a neural mechanism linking cognitive and physical function. Brain network associations with Alzheimer's disease biomarkers and sex differences will also be examined.
Principal Investigator: **Paul Laurienti**

F31 NIAAA 04/01/2025 - 03/30/2028 0% effort
Ruth L. Kirschstein NRSA $ 317,412 total
The bidirectional relationship between brain network dynamics and adolescent alcohol use

The proposed project will be the first to investigate the bidirectional relationship between dynamic brain networks and adolescent drinking, including (1) using dynamic brain networks to predict future drinking and (2) studying the impact of drinking history on brain network dynamics.
Trainee: Clayton McIntyre
Role: Mentor

PAST GRANT HISTORY:

PI or Primary Co-investigator

Dana Foundation 11/01/2002 - 05/31/2006
Evaluating sensory dysfunction in aging using combined fMRI and MRS image analyses
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $100,000

R21 NS044149 06/01/2004 - 05/31/2006
NINDS
Alteration of cross-modal sensory processing in dyslexia
Principal Investigator: Jonathan Burdette
Total Grant Amount: $403,535

WFUBMC GCRC 10/01/2004 - 03/31/2008
The Effect of Aging on Cross-Modal Sensory Processing
This was a supplement awarded to cover expenses for MRI costs for the grant K08 NS42568
Principal Investigator: **Paul Laurienti**

WFUBMC GCRC 04/15/2006 - 03/31/2008
Training Multisensory Processing in Older Adults (B-FIT) Supplement
Principal Investigator: **Paul Laurienti**

K08 NS42568 04/01/2003 - 03/31/2009
NINDS
The Effect of Aging on Cross-Modal Sensory Processing

Principal Investigator: **Paul Laurienti**
Total Grant Amount: $654,293

R21 AG026353 04/15/2006 - 03/31/2009
NIA
Training Multisensory Processing in Older Adults (B-FIT)
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $431,351

R01 DA020074 04/10/2006 - 12/31/2009
NIDI
Decision Making in Marijuana Users
Principal Investigator: Linda Porrino
Total Grant Amount: $1,504,017

R01 EB03880 04/18/2005 - 01/31/2010
NIBIB
Effect of Caffeine on functional and Perfusion MRI
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $1,250,000

WFUBMC GCRC 04/18/2005 - 01/31/2010
Effect of Caffeine on functional and Perfusion MRI
This was a supplement awarded to assist with participant screening and testing for R01 EB03880.
Principal Investigator: **Paul Laurienti**

R21 NS056272 07/01/2007 - 06/30/2010
NINDS
MR Imaging and Genotype/Phenotype Association in a South African Dyslexia Cohort
Principal Investigator: Jonathan Burdette
Total Grant Amount: $353,356

Subcontract 08/01/2007 - 07/31/2010
NIH/U54RR021813 Toga (PI)
Identifying Age Related Atrophy Using Levelset Registration of Embedded Maps
Subcontract PI: **Paul Laurienti**
Total Grant Amount: $218,921

R21 NS059793 09/20/2008 - 08/31/2010
NINDS
Development of a Power Calculation Tool for Neuroimaging Studies
Principal Investigator: Satoru Hayasaka
Total Grant Amount: $269,360

Translational Science Award 07/01/2010 - 06/30/2011
WFU Translational Science Institute
Examining the Collaboration Network at Wake Forest School of Medicine
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $68,000

R01 NS039426 09/30/2009 - 09/29/2011
NINDS

Supraspinal Processing of Sensory Aspects of Pain
Principal Investigator: Robert Coghill
Total Grant Amount: $168,986

HHSN 268200900040C 09/14/2009 - 10/31/2012
NHLBI
Systolic Blood Pressure Intervention Trial (SPRINT)
Principal Investigator: David Reboussin
Total Grant Amount: $13,711,469

R01 NS058700 04/01/2008 - 03/31/2013
NINDS
Genetic Epidemiology of Cerebrovascular Disease and Cognition in Diabetes
Principal Investigator: Donald Bowden
Total Grant Amount: $3,038,706

Intramural Research 07/01/2011 - 06/30/2013
Support Committee Award
Wake Forest School of Medicine
The Effects of Moderate Alcohol Use on Age Related Cognitive Decline
Principal Investigators: **Paul Laurienti** and Linda Porrino
Total Grant Amount: $19,826

TSC Beetroot Juice Project 04/01/2013 - 06/30/2014
WFU Translational Science Center
Beetroot Juice as a Supplement to Exercise Training in Older Individuals with Hypertension
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $97,604

Industry Contract 09/01/2013 - 08/31/2014
The Hershey Company
Effects of a Cocoa Shot on the Human Brain
Co-Principal Investigators: **Paul Laurienti** / Jonathan Burdette
Total Grant Amount: $132,121

R01 NS070917 05/01/2010 - 01/31/2015
NINDS
Connecting Brain Networks Across Subjects and Across Modalities
Principal Investigator: Satoru Hayasaka
Total Grant Amount: $1,265,855

R01 ES 008739-16S1 03/01/2013 - 02/28/2015
NIEHS
CBPR On Pesticide Exposure & Neurological Outcomes for Latinos: PACE4
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $302,141

Industry Contract 03/01/2014 - 02/28/2015
The Hershey Company
Effects of a Cocoa Shot on the Human Brain II
Co-Principal Investigators: **Paul Laurienti** / Jonathan Burdette
Total Award Amount: $455,995

T35 DK007400 05/01/1980 - 04/30/2015
NIDDK
Short Term Research Training of Medical Student
Principal Investigator: **Paul Laurienti** (2009-2012)
Total Grant Amount: $1,246,714 since 2000

R21 ES019720 09/09/2011 - 08/31/2015
NIEHS
Pesticide Exposure and Age-Related Changes in Cognitive Function
Principal Investigator: Thomas Arcury
Total Grant Amount: $185,000

R01 DK092237 09/15/2011 - 08/31/2016
NIH/NIDDK
Action for Health in Diabetes Brain Magnetic Resonance Imaging Ancillary Study (Look AHEAD)
Principal Investigator: Mark Espeland
Total Grant Amount: $3,637,886

R01 ES008739 03/01/2013 - 02/28/2017
NIEHS
CBPR on Pesticide Exposure & Neurological Outcomes for Latinos: PACE4
Co-Principal Investigator: Thomas Arcury and **Paul Laurienti**
Total Grant Amount: $3,560,508

R01 AG044474 08/15/2014 - 05/31/2017
NIA
Ultra-High-Field Neuroimaging in Elderly After a Two-Year Exercise Intervention
Principal Investigator: Caterina Rosano
Subcontract PI: **Paul Laurienti**
Total Grant Amount: $930,992

WFUBMC Pepper Center 07/01/2016 - 08/31/2017
Pilot Grant
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $25,000

P01 AA021099 09/01/2013 - 08/31/2017
NIAAA
Translational Studies On Early-Life Stress and Vulnerability to Alcohol Addiction
Principal Investigator: Jeffrey Weiner
Project Principal Investigator: **Paul Laurienti**
Total Grant Amount: $2,707,620

Enabling Technology FY13 01/01/2014 - 09/30/2017
DOD – Secretary of Defense
Mitigation of Symptoms for PTSD (post-traumatic stress disorder) with or without mild TBI (traumatic brain injury)
Principal Investigator: Charles Tegeler
Total Grant Amount: $184,878

R01 MH097751 12/01/2012 - 11/30/2017
NIDA

Adolescent Cannabis Use, Complex Brain Network Connectivity & Schizophrenia Risk
Principal Investigator: Beng-Choon Ho
Subcontract PI: **Paul Laurienti**
Total Grant Amount: $ 3,296,218

P30 AG21332 07/15/2013 - 06/30/2018
NIA
Wake Forest School of Medicine Claude D. Pepper Older Americans Independence Center
Principal Investigator: Stephen Kritchevsky
Total Grant Amount: $535,994

LCBN / Sticht Center 07/01/2012 - 6/30/2018
Network Imaging Initiative
Principal Investigator: **Paul Laurienti**
Total Grant Amount: $200,000

R01 AG047422-02S1 09/07/2018 - 05/31/2019
NIH/NIA
Resting Brain Networks and Mobility Function: B-NET Administrative Supplement
Co-Principal Investigators: Stephen Kritchevsky / **Paul Laurienti**
Total Grant Amount: $387,314

R01 AT009444 04/01/2017 - 03/31/2020
NIH/NCCIH
A Randomized Trial of Dance On Mood, Balance and Brain in Alzheimer's Disease
Principal Investigator: Christina Hugenschmidt
Total Grant Amount: $1,382,479

R01 ES008739-22S1 08/01/2019 - 05/31/2021
NIH/NIEHS
The Effect of Pesticide Exposure on Cognitive and Brain Development in Latino Children: PACE5 Administrative Supplement
Co-Principal Investigator: **Paul Laurienti** / Thomas Arcury
Total Grant Amount: $79,069

R01 AG047422-04S1 08/01/2020 - 05/31/2021
NIH/NIA
Combining Assessment of Cognition, Eye Movement, and Gait in Naturalistic Settings to Differentiate Subclinical Alzheimer’s Pathology: B-NET Administrative Supplement
Co-Principal Investigators: Stephen Kritchevsky / **Paul Laurienti**
Total Grant Amount: $392,315

R01 EB024559 06/15/2018 - 02/28/2022
NIH/NIBIB
Analytical Tools for Complex Brain Networks: Fusing Novel Statistical Methods and Network Science to Understand Brain Function
Principal Investigator: Sean Simpson
Total Grant Amount: $1,534,484

P50 AA026117 12/01/2017 - 11/30/2022
NIH/NIAAA

How Mindfulness Modulates Craving and Brain Networks in Moderate-To-Heavy Drinkers
Principal Investigator: Jeffrey Weiner
Project PI: **Paul Laurienti**
Total Grant Amount: $1,799,577 (Project 1)

Industry Contract 08/22/2022 - 1/11/2023
Otsuka Study via IQVIA
Principal Investigator: **Paul Laurienti**
Total Award Amount: $299,879

R01 AG052419-05S1 09/01/2022 - 12/31/2023
NIH/NIA
B-NET Administrative Supplement
Co-Principal Investigators: Stephen Kritchevsky / **Paul Laurienti**
Total Award Amount: $366,519

R01 AG052419 09/30/2017 - 12/31/2023
NIH/NIA
Resting Brain Networks and Mobility Function: B-NET
Co-Principal Investigators: Stephen Kritchevsky / **Paul Laurienti**
Total Award Amount: $3,066,826

R01 DA047149 08/01/2023 - 04/30/2024
NIH/NIDA
Role of cannabis on HIV-related cognitive impairment: a brain connectomics study
Principal Investigator: Christina S. Meade
Award Amount: $400,611

R01 DA045565 08/01/2023 - 01/31/2024
NIH/NIDA
MRI data fusion to investigate effects of drug abuse on HIV neurological complications
Principal Investigator: Christina S. Meade
Award Amount: $280,896

R01 ES008739 09/30/1996 - 05/31/2024
NIH/NIEHS
The Effect of Pesticide Exposure on Cognitive and Brain Development in Latino Children: PACE5
Co-Principal Investigator: **Paul Laurienti** / Thomas Arcury
Total Award Amount: $10,784,193

R01 ES008739-24S1 06/01/2022 - 05/31/2024
NIH/NIEHS
The Effect of Pesticide Exposure on Cognitive and Brain Development in Latino Children: PACE5 Administrative Supplement 2
Co-Principal Investigator: **Paul Laurienti** / Thomas Arcury
Total Award Amount: $220,838

WFUHS CTSI + CFAR 07/01/2023 - 06/30/2024
Multi-omics analysis of brain-body interactions identifying signatures of hazardous alcohol use and craving.

Principal Investigator: **Paul Laurienti** / Drew Kiraly
Total Grant Amount: $40,000

Training Grant Mentor

F31 AG030838 03/01/2008 - 06/23/2009
Ruth L. Kirschstein NRSA, NIA
Evaluating the Neural Effects of an Attention Training Program in Older Adults
Principal Investigator: Jennifer Mozolic

Translational Scholar Award 09/01/2007 - 08/31/2009
WFSM Translational Science Institute
Integrating Genomics and Brain Imaging: Mapping Genetic Links Associated with Normal and Abnormal Brain Structure and Function
Principal Investigator: Satoru Hayasaka

F31 DA024950 03/05/2008 - 09/21/2009
Ruth L. Kirschstein NRSA, NIDA
The Effect of Caffeine and Caffeine Withdrawal on Mood, Cognition and fMRI
Principal Investigator: Merideth Addicott

F32 NS054472 05/01/2007 - 06/30/2010
NINDS
Aging and Unisensory Influence of Multisensory Processing
Principal Investigator: Ann Peiffer

Translational Scholar Award 07/01/2010 - 06/30/2012
WFSM Translational Science Institute
Age-Related Whole-Brain Analyses via Exponential Random Graph Modeling Methods
Principal Investigator: Sean Simpson

T32 AA007565 09/01/2011 - 08/31/2013
Institutional NRSA, NIAAA
Multidisciplinary training in the biology of addiction.
Principal Investigator: Dr. Brian McCool, Trainee: Malaak Moussa

F31 AA019893 04/01/2011 - 12/31/2013
Ruth L. Kirschstein NRSA, NIAAA
Network Theory Analysis of Ethanol Self-Administered Non-Human Primates
Trainee: Qawi Telesford

K23 NS062892 06/01/2009 - 05/31/2014
NINDS
Diagnostic Ultrasound for Focal Neuropathies
Principal Investigator: Michael Cartwright

F31 AA021639 07/01/2013 - 06/30/2015
Ruth L. Kirschstein NRSA, NIAAA
The Effects of moderate Alcohol Use in Age Related Cognitive Decline
Trainee: Malaak Moussa

K25 EB012236 07/01/2012 - 06/30/2017
NIDDK

Statistical Methods for Whole-Brain Connectivity Networks
Principal Investigator: Sean Simpson

F99 NS125832 07/01/2022 - 06/30/2023
F99/K00, NINDS
Relationship of autonomic nervous system function on functional brain networks during normal drinking and abstinence in daily drinkers
Principal Investigator: Hope Peterson

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Chapters in books:

1. Stein BE, **Laurienti PJ**, Wallace MT, Stanford TR. Multisensory Integration. In: V.S. Ramachandran (ed.), *Encyclopedia of the Human Brain*. Vol. 3. Academic Press; 2002:227-241.

2. Stein BE, Rowland B, **Laurienti PJ.**, Stanford TR. Multisensory Convergence and Integration. In: R. Krauzlis (ed.), *Encyclopedia of Neuroscience*. Vol.5. Elsevier; 2009:1119-1124.

3. Mozolic JL, Hugenschmidt CE, Peiffer AM, **Laurienti PJ**. Multisensory Integration and Aging. In: M.T. Wallace and M.M. Murray (eds.), *The Neural Bases of Multisensory Processes.* London: Taylor & Francis; 2011:381-392.

4. **Laurienti PJ**. Functional Studies in Humans: Physiological Bases. In: B.E.Stein (ed), *The New Handbook of Multisensory Processes*. Boston: MIT Press. 2012.

5. Hugenschmidt CE, **Laurienti PJ**, Burdette JH. Physical exercise and the resting brain. In: H. Boecker, C. Hillman, L. Scheef, H.K. Strüder (eds.), *Functional Neuroimaging in Exercise Sciences*. New York: Springer 2012.

6. **Laurienti PJ,** Hugenschmidt CE. Multisensory processes in old-age. In: D. Lewkowicz, C. Spence, and A. Bremner (eds.), *Multisensory Development*. London: Oxford Univ. Press. 2012: 251-272.

7. **Laurienti PJ**. Overcoming obstacles to creativity in geographically fragmented environments: Lessons from small-world networks. In: L. Book, D. Phillips (ed.), *Creativity and Entrepreneurship: Changing Currents in Education and Public Life.* Northampton: Edward Elgar Publishing. 2013:127-140.

8. Bolt TS, Hampton RS, Furr RM, Fleeson WW, **Laurienti PJ**, Dagenbach D. Integrating Personality/Character Neuroscience with Network Analysis. In: J.R. Absher and J. Cloutier (eds), *Neuroimaging Personality, Social Cognition, and Character.* Elsevier Science: Academic Press. 2016: 51-69.

9. Zhu Y, Zhu X, Kim M, Kaufer, D, **Laurienti PJ**, Wu G. Characterizing Dynamic Functional Connectivity Using Data-Driven Approaches and its Application in the Diagnosis of Alzheimer's Disease. In: BC Munsell, G Wu, L Bonilha, and **Laurienti PJ** (eds), *Connectomics: Applications to Neuroimaging.* Elsevier Academic Press. 2018: 181-95.

10. **Laurienti PJ**. Disingenuous narratives, cognitive myopia: a neuroscientist's view. In: J.R. Cochrane, GR Gunerson, T. Cutts (eds) *Handbook on Religion and Health: Pathways for a Turbulent Future*. Northampton: Edward Elgar Publishing. 2024:352-365.

11. Wei Z, Dan T, Ding J, **Laurienti PJ**, Guorong Wu G. Representing Functional Connectivity with Structural Detour: A New Perspective to Decipher Structure-Function Coupling Mechanism. In: *A Wasserstein Recipe for Replicable Machine Learning on Functional Neuroimages*. Springer Nature Switzerland 2024: 3-13.

12. Wei Z, Dan T, Ding J, **Laurienti PJ**, Guorong Wu G. Representing Functional Connectivity with Structural Detour: A New Perspective to Decipher Structure-Function Coupling Mechanism. In: *International Conference on Medical Image Computing and Computer-Assisted Intervention*. Springer Nature Switzerland 2024: 367-377.

Editorial work:

1. Section editor and Commentary: From Neuron to Brain: Relating neurophysiological principles of multisensory integration to the human brain. In B.E.Stein (ed), *The New Handbook of Multisensory Processes*. Boston: MIT Press. 2012.

2. *Connectomics in NeuroImaging*. First International Workshop, CNI 2017, Held in Conjunction with MICCAI 2017, Quebec City, QC, Canada, September 14, 2017, Proceedings. Editors: Wu G, **Laurienti PJ**, Bonilha L, Munsell BC. Springer Int. Pub. 2017.

3. Connectomics: Applications to Neuroimaging. Editors: Munsell BC, Wu G, Bonilha L, **Laurienti PJ**. Elsevier Academic Press. 2018.

4. *Brain Connectivity,* February 2019. Special Issues Part I, "Connectomics." Guest Editors: Munsell BC, Wu G, Bonilha L, **Laurienti PJ**.

5. *Brain Connectivity,* March 2019. Special Issues Part II, "Connectomics." Guest Editors: Munsell BC, Wu G, Bonilha L, **Laurienti PJ**.

Journal Articles:

(Bold number in brackets at the end of reference is the number of times the paper has been cited as of 12/01/2024)

Peer Reviewed

1. Gamkrelidze GN, **Laurienti PJ**, Blankenship JE. Identification and characterization of cerebral-ganglion neurons that induce swimming and modulate swim-related pedal-ganglion neurons in *Aplysia brasiliana*. J Neurophysiol 1995; 74: 1444-1462. **(25)**

2. **Laurienti PJ**, Blankenship JE. Parapodial swim muscle in *Aplysia brasiliana*. I. Voltage-gated membrane currents in isolated muscle fibers. J Neurophysiol 1996; 76: 1517-1530. **(12)**

3. **Laurienti PJ**, Blankenship JE. Parapodial swim muscle in *Aplysia brasiliana*. II. Ca^{2+}-dependent K^{+} currents in isolated muscle fibers and their blockade by chloride substitutes. J Neurophysiol 1996; 76: 1531-1539. **(12)**

4. **Laurienti PJ**, Blankenship JE. Serotonergic modulation of a voltage-gated calcium current in parapodial swim muscle from *Aplysia brasiliana*. J Neurophysiol 1997; 77: 1496-1502. **(8)**

5. **Laurienti PJ**, Blankenship JE. Properties of cholinergic responses in isolated parapodial muscle fibers of Aplysia. J Neurophysiol 1999; 82: 778-786. **(7)**

6. Blankenship, JE, Yu, B, Gamkrelidze, GN, **Laurienti, PJ**. Serotonin increases calcium current in swim motoneurons of Aplysia. Am Zool 1999; 39(5): 109A-109A. **(0)**

7. Yu B, Gamkrelidze GN, **Laurienti PJ**, Blankenship JE. Serotonin directly increases a calcium current in swim motoneurons of Aplysia brasiliana. Am Zool 2001; 41: 1009-1025. **(5)**

8. **Laurienti PJ**, Burdette JH, Wallace MT, Yen Y-F, Field AS, Stein BE. Deactivation of sensory-specific cortex by cross-modal stimuli. J Cogn Neuroscience 2002; 14: 420-429. **(289)**

9. Maldjian JA, Driskill L, **Laurienti PJ**, Burdette JH. Multiple reproducibility indices for evaluation of cognitive functional MR imaging paradigms. AJNR Am J Neuroradiol 2002; 23: 1030-1037. **(31)**

10. **Laurienti PJ**, Field AS, Burdette JH, Maldjian JA, Yen Y-F, Moody DM. Dietary caffeine consumption modulates fMRI measures. NeuroImage 2002; 17: 751-757. **(98)**

11. Field AS, **Laurienti PJ**, Yen Y-F, Burdette JH, Moody DM. Dietary caffeine consumption and withdrawal: confounding variables in quantitative cerebral perfusion studies? Radiology 2003; 227: 129-135. **(84)**

12. **Laurienti PJ**, Wallace MT, Maldjian JA, Susi CA, Stein BE, Burdette JH. Cross-modal sensory processing in the anterior cingulate and medial prefrontal cortices. Human Brain Mapping 2003; 19: 213-223. **(88)**

13. Koyama T, McHaffie JG, **Laurienti PJ**, Coghill RC. The single-epoch fMRI design: validation of a simplified paradigm for the collection of subjective ratings. NeuroImage 2003; 19: 976-987. **(28)**

14. Maldjian JA, **Laurienti PJ**, Kraft RA, Burdette JH. An automated method for neuroanatomic and cytoarchitectonic atlas-based interrogation of fMRI data sets. NeuroImage 2003; 19: 1233-1239. **(5,698)**

15. **Laurienti PJ**, Field AS, Burdette JH, Maldjian JA, Yen Y-F, Moody DM. Relationship between caffeine-induced changes in resting cerebral perfusion and blood oxygenation level-dependent signal. Am J Neuroradiology 2003; 24: 1607-1611. **(59)**

16. Hairston WD, **Laurienti PJ**, Mishra G, Burdette JH, Wallace MT. Multisensory enhancement of localization under conditions of induced myopia. Exp Brain Res 2003; 152: 404-408. **(64)**

17. **Laurienti PJ**, Burdette JH, Maldjian JA. Separating neural processes using mixed event-related and epoch-based fMRI paradigms. J Neuroscience Methods 2003; 131: 41-50. **(20)**

18. Maldjian JA, **Laurienti PJ**, Burdette JH. Precentral gyrus discrepancy in digital versions of the Talairach Atlas. NeuroImage 2004; 21: 450-455. **(755)**

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20. Whitlow CT, Liguori A, Livengood LB, Hart SL, Mussat-Whitlow BJ, Lamborn CM, **Laurienti PJ**, Porrino LJ. Long-term heavy marijuana users make costly decisions on a gambling task. Drug Alcohol Depend 2004; 76: 107-111. **(193)**

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23. Koyama T, McHaffie JG, **Laurienti PJ**, Coghill RC. The subjective experience of pain: Where expectations become reality. PNAS 2005; 102(36): 12950-12955. **(499)**

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30. Hayasaka S, Peiffer AM, Hugenschmidt CE, **Laurienti PJ**. Power and sample size calculation for neuroimaging studies by noncentral random field theory. NeuroImage 2007; 37(3): 721-730. **(73)**

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87. Voss MW, Wong C, Szabo AN, Baniqued P, Burdette JH, McAuley E, **Laurienti PJ**, Kramer AF. The relationship of aerobic fitness to brain network architecture in healthy older adults. Annual Meeting of the Gerontological Society of America, San Diego, CA, USA. November 2012.

88. Paolini B, **Laurienti PJ**, Rejeski WJ. Mindfulness Moderates Brain Networks Following Short-Term Eating Restraint in Older Adults. Neuroscience Research Day, Wake Forest School of Medicine, Winston Salem, NC, USA. December 2012.

89. Wilkins RW, **Laurienti PJ**, Steen M, Burdette JH, Hodges DA. Network Science: A New Method for Investigating the Complexity of Musical Experiences in the Brain. The Improvising Brain, Georgia State University, Atlanta, GA, USA. April 2013.

90. Wilkins RW, Hodges DA, **Laurienti PJ**, Steen M, Burdette JH**.** The Effects of Music on the Brain: Investigating Music Preference Using Network Science Methods. The Improvising Brain. Georgia State University, Atlanta, GA, USA. April 2013.

91. Wilkins RW, Hodges DA, **Laurienti PJ**, Burdette JH. Network Science, Music and the Brain: Community Structure Shows Potential for Music to Affect Learning and Memory. NetSciEd2: Satellite Symposium on Network Science in Education, Copenhagen, Denmark. June 2013.

92. Telesford QK, **Laurienti PJ**. Understanding dynamics of the sand pile model in complex networks. NetSci. Copenhagen, Denmark. June 2013.

93. Paolini B, **Laurienti PJ**, Rejeski WJ. Mindfulness Moderates Brain Networks Following Short-Term Eating Restraint in Older Adults. Mind and Life Summer Research Institute, Garrison Institute, NY, USA. June 2013.

94. Soriano C, Batson G, **Laurienti PJ**, Burdette JH, Migliarese S, Hristov N. Effects of group-delivered improvisational dance on balance in adults with middle stage Parkinson disease: a two-phase pilot with fMRI case study. 3rd World Parkinson Congress, Montréal, Canada. October 2013.

95. Kus N, Rejeski WJ, **Laurienti PJ**. Does beet root juice enhance the benefits of exercise on brain health in aging hypertensives? 7th Annual Undergraduate Research Day Wake Forest University, Winston Salem, NC, USA. October 2013.

96. Klebous C, Marsh A, **Laurienti PJ**, Kim-Shapiro D, Rejeski WJ, Robertson TP, Redman H. Daily Beet Root Juice Supplement and Exercise Training in Older Hypertensive Adults. 7th Annual Undergraduate Research Day Wake Forest University, Winston Salem, NC, USA. October 2013.

97. Winkler A, Paolini B, **Laurienti PJ**, Burdette JH. Your Brain on Caffeine. 29th Annual Medical Student Research Day Wake Forest School of Medicine, Winston Salem, NC, USA. October 2013.

98. Rzucidlo JK, Roseman PL, **Laurienti PJ**, & Dagenbach D. Stability of whole brain and regional network topology within and between resting and cognitive states. Presented at Annual Meeting of the Psychonomic Society, Toronto, Canada. November, 2013.

99. Stanley ML, Dagenbach D, Lyday RG, Burdette JH, **Laurienti PJ**. Global and Regional Shifts in Module Properties with Increasing Working Memory Load. 22nd Annual Cognitive Neuroscience Annual Conference. San Francisco, CA, USA March 2015.

100. Winkler A, Paolini B, **Laurienti PJ**, Burdette JH. Your Brain on Caffeine. 168th Annual Meeting of the American Psychiatric Association. Toronto, Canada. May 2015.

101. Mayhugh RE, Petrie MR, Rejeski WJ, Lyday RG, Burdette JH, **Laurienti PJ**. Stress and Alcohol Abstinence In Daily Social Drinkers: Effects On Default Mode Network Community Structure. Organization for Human Brain Mapping. Honolulu, HI, USA. June 2015.

102. Mokhtari F, Paolini BM, Burdette JH, Marsh AP, Rejeski WJ, **Laurienti PJ**. Predicting Success of a Weight Loss Intervention Using Brain Gray Matter and White Matter Volumes, Wake Forest University Graduate School Research Day, Winston Salem, NC, USA March 2016.

103. Mokhtari F, Burdette JH, Rejeski WJ, **Laurienti PJ**, Predicting Success of a Weight Loss Intervention Using Brain Gray Matter and White Matter Volumes, Virginia Tech-Wake Forest University SBES Symposium, Winston Salem, NC, USA May 2016.

104. Mayhugh, RE, Moussa, M.E., Lyday, R.G., Burdette, J.H., **Laurienti, P.J**. Moderate Alcohol Consumption Lifestyle in Older Adults is Associated with Altered Central Executive Network Community Structure. Research Society on Alcoholism (RSA), New Orleans, LA, USA. June 2016.

105. Mokhtari F, Paolini BM, Burdette JH, Marsh AP, Rejeski WJ**, Laurienti PJ**. Baseline Gray- and White Matter Volume Predict Successful Weight Loss in the Elderly. Obesity Week. New Orleans, LA, USA November 2016.

106. Mokhtari F, Burdette JH, Marsh AP, Rejeski WJ, **Laurienti PJ**. Functional Brain Networks Prospectively Predict Intentional Weight Loss is Older Adults. NC Cognition Conference. Greensboro, NC, USA March 2017.

107. Bahrami M, **Laurienti PJ**, Arcury TA, Simpson SL. The Impacts of Pesticide and Nicotine on Functional Brain Networks in Latino Farmworkers. NC Cognition Conference. Greensboro, NC, USA March 2017.

108. Mokhtari F, Burdette JH, Marsh AP, Rejeski WJ, **Laurienti PJ**. Using fMRI Dynamic Networks in a Hypergraph Learning Model for Predicting the Success of Lifestyle Weight Loss Interventions in Obese Older Adults, SBES Symposium, Blacksburg, VA, USA, May 2017.

109. Mayhugh, RE, Burdette, J.H., Lyday, R.G, **Laurienti, P.J.** The Effect of Alcohol Abstinence on Functional Connectivity in Moderate-Heavy Alcohol Consumers. 2017 Organization for Human Brain Mapping, Vancouver, Canada. June 2017.

110. Mokhtari F, Burdette JH, Marsh AP, Rejeski WJ, **Laurienti PJ**. Using Higher Order Singular Value Decomposition to Reduce the Dimensionality of fMRI Dynamic Connectivity Tensors. Workshop on Brain Dynamics and Neurocontrol Engineering, Washington University, St. Louis, MO, USA. June 2017.

111. Mokhtari F, Zhu Y, Burdette JH, Wu G, Rejeski WJ, **Laurienti PJ**. Graph-Based Semi-Supervised Learning Outperforms Supervised Learning Algorithms in a Small fMRI Dataset, BMES Annual Meeting, Phoenix, AZ, USA October 2017.

112. Bahrami M, **Laurienti PJ**, Arcury TA, Simpson SL. Brain Networks In Latino Farmworkers With Chronic Exposures To Pesticides. BMES Annual Meeting, Phoenix, AZ, USA October 2017.

113. Peterson H, Mayhugh RE, W. Rejeski WJ, Bahrami M, Simpson SL, Heilman K, Porges SW, **Laurienti PJ**. Relationship between cardiac vagal tone and functional brain connectivity in moderate to heavy alcohol consumers. NetSci 2019 Burlington, VT, USA May 2019.

114. Bahrami M, **Laurienti PJ**, Simpson SL. Analyzing Local Subnetworks: Context is Everything. NetSci 2019 Burlington, VT, USA May 2019.

115. Khodaei M, **Laurienti PJ**, Simpson SL. White Matter Decline in Latinx Children from Farmworker Families. Virginia Tech-Wake Forest University SBES Symposium, Winston Salem, NC, USA May 2020.

116. Chen A, Yang D, Yan C, Kim M, **Laurienti PJ**, and Wu G. Reinforcement Learning the Heuristics of Hub Identification over Brain Networks. Organization for Human Brain Mapping (OHBM), Montreal, Canada, June 2020.

117. Lin Y, Yang D, Peng J, Yan C, Gao Y, Kim M, **Laurienti PJ**, Wu G. A General Learning-based Framework to Characterize Intrinsic Connectivity Strength in Brain Networks. Organization for Human Brain Mapping (OHBM), Montreal, Canada, June 2020.

118. Peterson H, Bahrami M, Simpson SL, Rejeski WJ, **Laurienti PJ**. Differential functional brain network topology during periods of normal drinking and abstinence in moderate to heavy alcohol consumers. Research Society on Alcoholism (RSA) (virtual conference), July 2020.

119. Peterson H, **Laurienti PJ**. Abstinence driven chances in functional brain network connectivity when viewing alcohol cue imagery. Society for Neuroscience Global Connectome (virtual conference), January 2021.

120. Peterson H, Simpson SL, **Laurienti PJ**, Rejeski WJ. Heartbeat counting is not associated with subjective interoceptive awareness or autonomic function in daily drinkers. New England Science Symposium (NESS) (virtual conference), May 2021.

121. Khodaei M, **Laurienti PJ**, Dagenbach D, Simpson SL. Assessing Intelligence-Related Transition From Rest to a Working Memory Task in Brain Network Architecture Using a Multi-Task Mixed Modeling Approach. SBES Symposium, Blacksburg, VA, USA, May 2021.

122. Peterson H, **Laurienti PJ**, Rejeski WJ, L Gauvin. Childhood emotional neglect is associated with low affect and high stress. Research Society on Alcoholism (RSA) (virtual conference), May 2021.

123. Khodaei M, **Laurienti PJ**, Simpson SL. Individual Brain Fingerprinting Using the Functional and Structural Network. Virginia Tech-Wake Forest University SBES Symposium, Winston Salem, NC, USA May 2022.

124. Peterson H, Veach L, Simpson SL, Fanning J, **Laurienti PJ**, Gauvin L. Differences in semantic interpretation of desire and craving in healthy alcohol consumers. Research Society on Alcoholism (RSA) (virtual conference), June 2022.

125. Dan T, Cai H, Huang Z, **Laurienti PJ**, Won Hwa Kim W, Wu G. Neuro-RDM: An Explainable Neural Network Landscape of Reaction-Diffusion Model for Cognitive Task Recognition. 25th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Singapore, China, September 2022.

126. Kirse HA, **Laurienti PJ**. Understanding Alterations in Adolescent Brain Function from Alcohol Consumption Through Brain Network Analysis. Wake Forest University – Johns Hopkins University Student Exchange Program. (Invited oral presentation). Baltimore, MD, USA October 2022

127. Peterson H, Lyday RG, Tomlinson C, Rejeski WJ, Simpson SL, Burdette JH, **Laurienti PJ**. Alterations in functional connectivity within the Default Mode, Salience, and Motor networks during alcohol cue viewing following alcohol abstinence. Society for Neuroscience, San Francisco, CA, USA November 2022.

128. Khodaei M, **Laurienti PJ**, Dagenbach D, Simpson SL. Brain Working Memory Network Indices as Landmark of Intelligence. North Carolina Cognition Conference, Winston Salem, NC, USA February 2023.

129. Kirse HA, Lyday RG, Bahrami M, Simpson SL, **Laurienti PJ**. Topological Differences in Addiction-Associated Brain Networks with Heavy Alcohol Consumption in Adolescence. Wake Forest Graduate School Student Research Symposium, Winston Salem, NC, USA April 2023.

130. Kirse HA, **Laurienti PJ**. Heterogeneity in Alcohol Use Disorder and the Potential for Personalized Treatments Using Transcranial Magnetic Stimulation. Wake Forest University – Johns Hopkins University Student Exchange Program. (Invited oral presentation). Baltimore, MD, USA October 2023

131. Shappell HM, **Laurienti PJ**, Lyday RG, Rejeski WJ, Burdette JH. Using Dynamic Networks to Study the Brain: New Methods and an Application to a Weight-Loss Study. Translation and LHS Scholar Showcase, Winston Salem, NC, USA March 2024

132. Kirse HA, Lyday RG, Bahrami M, Peterson-Sockwell H, **Laurienti PJ**. Utilizing Unbiased Data-Driven Modeling to Identify Comprehensive Subcomponents Based on Alcohol Use Heterogeneity. Wake Forest Graduate School Student Research Symposium, Winston Salem, NC, USA April 2024

133. McIntyre CC, Khodaei M, Lyday RG, **Laurienti PJ**, Shappell HM. Sex-specific relationship between brain network dynamics and alcohol consumption in adolescents. Research Society on Alcohol - Sex & Gender & Alcohol Satellite, Minneapolis, MN, USA June 2024.

134. Kirse HA, Lyday RG, Bahrami M, Peterson-Sockwell H, **Laurienti PJ**. Utilizing Unsupervised Data-Driven Modeling to Identify Comprehensive Subcomponents Based on

Alcohol Use Heterogeneity. Research Society on Alcoholism (RSA) Annual Conference, Minneapolis, MN, USA June 2024.

135. McIntyre CC, Khodaei M, Lyday RG, **Laurienti PJ**, Shappell HM. Patterns of dynamic functional brain connectivity related to hazardous drinking risk in adolescents. Research Society on Alcohol, Minneapolis, MN, USA June 2024.

136. Khodaei M, Simpson SL, Shappell HM, **Laurienti PJ**. Redefining Brain Network Comparison with A Novel Multiscale Distance Measure. Biomedical Engineering Society Conference (BMES), Baltimore, MD, USA October 2024

137. Khodaei M, Simpson SL, Shappell HM, **Laurienti PJ**. Redefining Brain Network Comparison with A Novel Multiscale Distance Measure. Society for Neuroscience (SFN), Chicago, Ilm USA October 2024

138. McIntyre CC, Peterson-Sockwell H, Lyday RG, **Laurienti PJ**. Brain network flexibility during alcohol cue-viewing and the desire to drink alcohol. Presented at Wake Forest Neuroscience Graduate Program Research Day, Winston-Salem, NC, USA November 2024.

INVITED PRESENTATIONS:

Academic:

Intramural

09/2001 The Ultimate Emulsion: Mixing Event-Related and Epoch-Base fMRI
ANSIR Seminar Series, Wake Forest University Baptist Medical Center, Winston Salem, NC

02/2002 Evaluating Age-Related Changes in Sensory Processing With fMRI
Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

06/2002 Dietary Caffeine Consumption Modulates fMRI Measures
ANSIR Seminar Series, Wake Forest University Baptist Medical Center, Winston Salem, NC

10/2002 fMRI and Behavioral Measure of Auditory/Visual Sensory Integration
Department of Psychology Colloquia Series, Wake Forest University Baptist Medical Center, Winston Salem, NC

06/2003 Physiology of the BOLD Signal/ Grand Rounds, Wake Forest Baptist Medical Center

06/2003 Physiology of the BOLD Signal
ANSIR Seminar Series, Wake Forest University Baptist Medical Center, Winston Salem, NC

11/2003 Starbucks or Red Bull: Effect of Caffeine on fMRI
Radiology Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

10/2004 Sensory Processing in Older Adults
Kulynych Center for Memory and Cognition Research, Winston Salem, NC

03/2005 The Aging Brain
Geriatric Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

06/2005 The Aging Brain
IEEE Lecture Series, SBES, Winston Salem, NC

09/2005 Sensory Processing in the Aging Brain
Young Investigator Award Presentation, Wake Forest University Baptist Medical Center, Winston Salem, NC

09/2005 Peering Into the Aging Brain: Advanced Physiological MRI
Wake Forest University Vascular Dementia Workshop, Winston Salem, NC

03/2006 This is Your Brain on Caffeine
General Clinical Research Center Lecture Series, Winston Salem, NC

04/2006 Exploring the Final Frontier with Big Magnets: MRI of the Human Brain
Wake Forest Institute of Regenerative Medicine, Winston Salem, NC

08/2006 This is Your Brain on Caffeine
Wake Forest Sleep Disorder Center Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

11/2006 This is Your Brain on Caffeine
Neurology Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

03/2007 Functional Brain Imaging of Caffeine Withdrawal
Psychiatry Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

07/2007 Brain Fitness
Geriatric Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

09/2007 Evaluating Age Related Cognitive Decline and Cognitive Interventions with Physiological Brain Imaging
Graylyn Conference on Women's Cognitive Health, Winston Salem, NC

09/2008 Sensory Attention and The Aging Brain
2nd Annual William Hazzard Symposium, Department of Gerontology, Wake Forest University Baptist Medical Center, Winston Salem, NC

10/2008 Default Mode and the Aging Brain
Women's Health Initiative Annual Conference, Winston Salem, NC

02/2009 Applications of Network Theory to Studies of the Human Brain
Wake Forest University High Performance Computing Conference, Winston Salem, NC

03/2009 Overcoming Creative Obstacles/Lessons from Small World Networks
Worlds in the Making: Creativity National Symposium, Wake Forest University, Winston Salem, NC

04/2009 Network Science in Biomedical Research
Computer Science Colloquium, Wake Forest University Baptist Medical Center, Winston Salem, NC

04/2009 Imaging Complex Brain Networks
Radiology Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

10/2009 Imaging in the Elderly
Graylyn Conference on Women's Cognitive Health, Graylyn International Conference Center of Wake Forest University, Winston-Salem, NC

03/2010 Network Science and Its Application to Collaborative Research
Translational Science Institute Seminar Series, Wake Forest University Baptist Medical Center, Winston Salem, NC

04/2010 Network Science and Its Application to Collaborative Research
Nursing Research Council, Wake Forest University Baptist Medical Center, Winston Salem, NC

06/2010 Team Science
Nursing Strategic Planning Meeting, Wake Forest University Baptist Medical Center, Winston Salem, NC

05/2011 Complexity Theory and Biomedical Science
Mid-Career Investigator Award Presentation, Wake Forest University Baptist Medical Center, Winston Salem, NC

09/2011 Brain-Body Interactions in Older Adults
Neuroscience Seminar Series, Wake Forest Baptist Medical Center, Winston Salem, NC

09/2011 Interactions and Interdependence: Applying New Theories to the Aging Brain Geriatric Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

11/2011 Brain Networks and Obesity in Older Adults
Radiology Grand Rounds, Wake Forest Baptist Medical Center, Winston Salem, NC

03/2012 Networks and Complex Systems
Computer Science Undergraduate Lecture, Wake Forest University, Winston Salem, NC

11/2012 Network Science Applied to Brain Research
Computer Science Undergraduate Lecture, Wake Forest University, Winston Salem, NC

12/2012 Interaction and Independence: Applying New Theories to the Aging Brain
Sticht Center Conference on Aging, Wake Forest School of Medicine, Winston Salem, NC

02/2013 Complexity and the Brain
Health and Exercise Science Undergraduate Student Lecture, Wake Forest University, Winston Salem, NC

04/2013 Career Choices in Science and Medicine
Department of Counselling Undergraduate Lecture, Wake Forest University, Winston Salem, NC

11/2013 Eating, Behavior, and Brain Networks
Nutrition Grand Rounds, Wake Forest School of Medicine, Winston Salem, NC

12/2013 Intro to Complexity
FaithHealthNC, Department of Ministries, Wake Forest School of Medicine, Winston Salem, NC

03/2018 Using Brain Imaging to Predict Weight Loss Success
Pepper Center Investigator Meeting, Wake Forest School of Medicine, Winston Salem, NC

05/2018 How Mindfulness Moderates Craving and Brain Networks in Moderate Alcohol Drinkers
Center For Research on Substance Use and Addiction (CRSUA) Seminar, Wake Forest School of Medicine, Winston Salem, NC

09/2018 Imaging Dynamic Changes in Brain Connectivity
2018 William R. Hazzard Translational Research in Aging Symposium, Arbor Acres Retirement Community, Winston Salem, NC

11/2020 Spreading Complexity
Dean's Research Symposia Series, Wake Forest School of Medicine, Winston Salem, NC

05/2023 Integrating Brain and Body Imaging to Improve Patient Care
Pepper Spring Investigators Meeting, Brain networks and mobility (BNET), Winston Salem, NC

02/2024 Brain Networks Associated with Obesity and Weight Loss
SBES Seminar, Winston Salem, NC

02/2024 Program Presenter, 2024 William R. Hazzard Translational Research in Aging Symposium, Intergenerational Center for Arts and Wellness, Winston Salem, NC

Extramural

11/2001 Imaging Multisensory Processing in the Human Brain with fMRI
Grand Rounds, Virginia Polytechnic Institute and State University, Blacksburg, VA

08/2002 An Introduction to Functional Magnetic Resonance Imaging
Grand Rounds, Virginia Polytechnic Institute and State University, Blacksburg, VA

09/2002 Integration of Visual and Auditory Stimuli in the Human Brain
Grand Rounds, Baylor University, Waco, TX

09/2002 Imaging Multisensory Processing in the Human Brain With fMRI
Grand Rounds, University of Texas Medical Branch, Galveston TX

06/2004 Differential Reactions to Multisensory Stimuli in “Primary” and “Non-primary” Regions of Human Cortex International Multisensory Research Forum, Barcelona, Spain

10/2005 Multisensory Integration in the Human Brain
International Dyslexia Association Annual Conference, Denver, CO

06/2006 This is Your Brain on Caffeine
Salisbury VA Hospital Research Week, Salisbury, NC

10/2007 Modality Specific Selective Attention and Multisensory Integration in Older Adults Aging and Speech Communication Conference, Indiana University, IN

03/2008 Multisensory Integration in the Human Brain: Applications to Dyslexia
Annual Conference of Dyslexia, New York City, NY

06/2008 Modality Specific Selective Attention and Multisensory Integration
Theoretical and Experimental Psychology Conference, University of Waterloo, Waterloo, Ontario, Canada

10/2008 Sensory Attention in the Aging Brain
Department of Psychology Grand Rounds, Indiana University, IN

01/2009 Six Degrees of Cognition: Small World Networks in the Human Brain
University of Texas Health Science Center, San Antonio, TX

04/2009 Distractions in Older Adults
Pepper Center Conference, University of Pittsburgh, Pittsburgh, PA.

06/2009 Network Analyses of Multisensory Processing
International Multisensory Research Forum, New York City, NY

10/2009 Increased Cross-Modal Distractibility in Older Adults
Aging and Speech Communication: Third International and Interdisciplinary Research, Indiana Memorial Union Hotel, Bloomington, IN

01/2010 Network Analyses Applied to Multisensory Integration
43rd Annual Winter Conference on Brain Research, Breckenridge, CO

11/2010 Complexity Theory
Bioinspiration and Biomimetics Course, Wake Forest University, Winston-Salem, NC

05/2011 Networks
Translational Science Center at Wake Forest Reynolda Campus Seminar Series, Wake Forest University, Winston-Salem, NC

07/2011 New Methods of Connectivity Analysis
The UCLA Advanced Neuroimaging Summer program, UCLA, Los Angeles, CA

09/2011 Complexity in Biology
Translational Science Freshman Seminar, Wake Forest University, Winston-Salem, NC

11/2011 Not Hypothesis Testing and Complexity in Biology
Sensational Brain Course, UNCSA, Winston-Salem, NC

02/2012 Special Interest Group: Cerebral Networks in Epilepsy: Merging Structure, Function and Clinical Care. Presentation - Evaluating Complex Networks
American Clinical Neurophysiology Society Annual Meeting, San Antonio, TX

02/2012 The New Scientific Revolution
TEDx Wake Forest U, Winston-Salem, NC

03/2012 Keynote Lecture: Network Science and Complex Systems
Rocky Mountain Bioengineering Symposium, Blacksburg, VA

09/2012 Wiring in the Aging Brain
Renaissance Weekend, Aspen Institute, Aspen, CO

09/2012 A Synthetic Brain Model for Clinical Application and Artificial Intelligence
11th Annual Technology Briefing, Benton Convention Center, Winston Salem, NC

11/2012 The Sensational Brain
UNC School of the Arts, Winston Salem, NC

01/2013 Brains and Other Complex Systems
University of Illinois at Urbana-Champaign, Urbana, IL

05/2013 Network Science, Complexity, and the Future of Brain Research
Association for Psychological Science Annual Meeting, Washington DC

05/2013 Neurocomplexity
The University of North Carolina Charlotte Complexity Institute Seminar Series, Charlotte, NC

07/2013 Brain Networks
Camp Snowball, Systems Thinking and Schools, Winston Salem, NC

11/2013 Brain Networks and Mobility Disability
Gerontology Society of America Annual Meeting, NIH Sponsored Workshop - Aging, the CNS, and Mobility, New Orleans, LA

02/2014 Complexity and Networks
Frameworks Series, Wake Forest Schools of Business, Winston Salem, NC

03/2014 It Takes the Whole Brain
Academy of Orton-Gillingham Practitioners and Educators Annual Conference, Winston Salem, NC

04/2014 Network Science, Complexity, and Brain Research
Winston Salem Forsyth County Schools, Hanes Middle School STEM Retreat, Winston Salem, NC

06/2014 Keynote Lecture: The Connected Brain
Small Boarding School Association Annual Conference, Winston Salem, NC

06/2014 The Connected Brain
Utah National Association of Therapeutic Schools and Programs, Utah Regional Conference, Provo, UT

07/2014 Complexity and the Human Brain
World Future Society, Orlando, FL

07/2014 Complexity
Chawumba, Stakeholder Health Annual Meeting, Winston Salem, NC

10/2014 Health as a Complex Adaptive System
United States Government Accountability Office, Washington DC

08/2015 Complexity, Brain Networks, and Dyslexia
The Swift School, Roswell, GA

02/2016 The Brain as a Complex Network
NC Cognition Conference, Winston Salem, NC

02/2016 Complexity, Networks, and the Human Brain
Ashby Dialogues at UNC-G, Greensboro, NC

03/2016 Complexity Theory and Brain Networks
Triangle Imaging Symposium, UNC BRIC, Chapel Hill, NC

04/2016 Interdependence and Brain Networks
SAMSI CCNS Conference, Research Triangle Park, NC

02/2017 Occupational Exposure and Brain Health in Latino Farmworkers
Oregon State University, Corvallis, Oregon

03/2017 Networks, Interdependence, and the Complex Brain
Franklin Foundation Fellows at University of Georgia, Athens, GA

04/2017 Current Farmworker Research: Youth Farmworker Health and Safety; and Effects of Pesticide Exposure on Child Neurocognitive Development
NC Farmworker Institute, Chapel Hill, NC

06/2017 Lifestyle Interventions and Brain Health
American Diabetes Association's Meeting 2017, San Diego, CA

09/2018 Finding Solutions: The Brain, Music, Complexity Science, & Rehabilitation
2018 ACRM Annual Conference, Progress in Rehabilitation Research, Dallas, TX

05/2021 Transforming Clinical Neuroscience with Brain Networks
Behavioral Health Grand Rounds, Atrium Health/Charlotte AHEC, Virtual

02/2021 Complex Brain Networks
NIAAA Collaborative T32 Seminar, Virtual

03/2023 Sensorimotor Network in Aging: Associations with Physical Function, Obesity, and Weight Loss
Radiology Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC

01/2024 Neuroscience perspective of the human connectome
UNC Education Program of Intelligence and Connectomics, Chapel Hill, NC

04/2024 I think therefore I am: breakthroughs in brain imaging predicting outcomes
Precision Prevention, Diagnostics and Treatment of Obesity: Pipedream or Reality, Pennington Biomedical Research Center, Baton Rouge LA

04/2024 Dynamic brain networks in obesity and weight loss in older adults
UNC Department of Psychiatry Seminar, Chapel Hill, NC

08/2024 Network-based cognitive reserve in the presence of amyloid
NeuroConnect 2024, Blowing Rock, NC

Industrial

04/2004 Sensory Processing in the Aging Brain
Targacept, Inc., Winston Salem, NC

08/2007 Brain Fitness
Posit Science, San Francisco, CA

09/2008 Caffeine and the Brain
Unilever, New York City, NY

01/2014 Cocoa and the Brain
The Hershey Company, Hershey, PA

Workshops and Symposia

03/2009 Godwin GW, Wiggins W, Hayasaka S, **Laurienti PJ**, Stapleton J. Overcoming Creative Obstacles in Geographically Fragmented Environments: Lessons from Small World Networks. Wake Forest University Creativity Symposium, Winston-Salem, NC.

06/2009 Hayasaka S, **Laurienti PJ**. Overview of Small-World Networks and Application in Neuroimaging In The Brain as a Small-World Network: From Micro to Macro Scale. Symposium at Human Brain Mapping Conference, San Francisco, CA.

Community Engagements

02/2004 The Aging Brain
Best Health, Winston Salem, NC

07/2004 The Aging Brain
Best Health, Winston Salem, NC

10/2004 The Aging Brain
Kernersville YMCA, Kernersville, NC

12/2004 The Aging Brain
Best Health, Winston Salem, NC

01/2005 The Aging Brain
Best Health, Winston Salem, NC

05/2005 The Aging Brain
Kiwanis Club, Winston Salem, NC

09/2006 Brain Fitness
Best Health Senior Center Grand Opening, Winston Salem, NC

04/2007 Preparing for a Visit to Your Doctor
Kiwanis Club, Winston Salem, NC

09/2007 Brain Fitness
Winston Salem Men's Group, Winston Salem, NC

04/2009 Brain Fitness
The Cliffs, Travelers Rest, SC

08/2009 Brain Fitness
The Cliffs, Travelers Rest, SC

12/2010 21st Century Science: Studies of the Complex Human Being
UNC School of the Arts ARTStem Program

02/2011 Brain Training 101
Half Century Club Founders' Day Program, Wake Forest University, Winston Salem, NC

02/2011 Is Brain Fitness the Fountain of Youth
Dean's Forum, Bridger Field House, Wake Forest University, Winston Salem, NC

02/2011 21st Century Science: Studies of the Complex Human Being,
Innovation and Creativity Lecturer Series, Winston Salem, NC

04/2012 Staying Sharp: Ask the experts about keeping your brain young
Panel discussion hosted by the WFU Graduate School of Arts and Sciences in collaboration with the Dana Alliance for Brain Initiative, Winston Salem, NC

09/2012 A Synthetic Brain Model for Clinical Application and Artificial Intelligence
Winston-Salem Tech Briefing, Winston-Salem Chamber of Commerce, Winston Salem, NC

11/2012 Welcome to Brain Rules
Inspiring Learning Series, Winston Salem, NC

01/2013 Brain Rules and Other Complex Things
Winston Salem Rotary Club, Winston Salem, NC

02/2013 Welcome to Brain Rules
Greensboro Montessori School, Greensboro, NC

03/2013 Synthetic Brains, Facebook and the New Revolution
SXSW Interactive Programming for 2013, Austin, TX

10/2013 Breaking Brains
Planned Gift Advisory Council, Wake Forest Baptist Medical Center, Winston Salem, NC

10/2013 Music and the Brain
The Music Academy, Greensboro, NC

12/2013 Aging Brain
Translational Science Center's Speakers Bureau, Archdale Senior Center, Archdale, NC

03/2014 Memory: It's About Your Brain and Your Body
Dean's Forum, Bridger Field House, Wake Forest University, Winston Salem, NC

05/2014 Memory: It's About Your Brain and Your Body
Lexington Medical Center Foundation, Lexington, NC

09/2014 Rethinking the Brain
Alumni Weekend Stay Connected Speaker Series
Winston Salem, NC

12/2015 Friends of Friends of Your Facebook Friends
Winston Salem Rotary Club
Winston Salem, NC

05/2019 Googling Dynamic Functional Brain Networks
Pint of Science
Winston Salem, NC

06/2019 Brain Networks
Wake Forest Summer Immersion Program
Winston Salem, NC

08/2023 B-NET Study Participant Appreciation Day
Sticht Center
Winston Salem, NC

DIDACTIC / SYSTEMATIC INSTUCTION

WFU, Graduate School of Arts and Sciences

Course Director, NEUR 785 & 786 Network Science & Neuroimaging Journal Club (1.0 hr each) 2007 - present

Course Director, NEUR 705 & 706, Neuroscience Tutorial (1.0 hr each) 2021 - present

MENTORING

Formal Mentor Training:

The Wake Forest School of Medicine 1/2022 - 6/2022
2022 Mentoring Academy

Inclusive mentoring workshop 5/25/2022
School of Biomedical Engineering and Sciences

Previous and Current Mentees:

Current mentees**:**

PhD Students

Mohammadreza Khodaei PhD Student 2020-present
School of Biomedical Engineering and Sciences Graduate Student at

Wake Forest University. Dr. Laurienti serves as his PhD co-advisor along with Dr. Sean Simpson while he studies the use of multivariate models to examine relationships between brain networks and human intelligence.

Haley Kirse PhD Student 2021-present
Physiology/Pharmacology Graduate Student at Wake Forest University. Dr. Laurienti serves as her PhD advisor while she studies the longitudinal effects of transcranial magnetic stimulation (TMS) as a tool to improve alcohol treatment outcomes.

Clayton McIntyre PhD Student 2023-present
Neuroscience Graduate Student at Wake Forest University. Dr. Laurienti serves as his PhD advisor while he studies effect of alcohol on the adolescent human brain.

Derek Madden PhD Student 2024-present
School of Biomedical Engineering and Sciences Graduate Student at Wake Forest University. Dr. Laurienti serves as his PhD advisor as he studies the structural and functional connectivity in the brain using a modified multivariate autoregressive model. Derek came to the lab with his personally secured NSF funding.

Junior Faculty

Heather M. Shappell Assistant Professor 2020-present
Dr. Shappell is a recent hire in the Department of Biostatistical Sciences in Public Health Sciences at Wake Forest School of Medicine. Dr. Laurienti serves as a mentoring team member.

Mohsen Bahrami, PhD Assistant Professor 2021-present
Dr. Laurienti serves as a co-mentor for Dr. Bahrami. He is continuing his graduate/post-graduate research using mixed model analysis to study changes in brain networks in multiple studies, most recently in Alzheimer's disease. Dr. Laurienti serves as a mentoring team member.

<u>Previous mentees</u>**:**

High School Students

Scott Snelgrove Loomis Chaffee HS Student Summer 2011
Dr. Laurienti served as a co-mentor for Mr. Snelgrove's summer internship with the LCBN. Scott modeled dynamic activity flow on networks.

Manisha Mishra S. Iredell HS Student Summer 2012
Dr. Laurienti served as a co-mentor for Ms. Mishra's summer internship with the LCBN. Manisha used agent based models to simulate neural activity in the brain.

Jacob Einstein NCSSM Student Summer 2014
Dr. Laurienti served as a co-mentor for Mr. Einstein's summer internship with the LCBN. Jacob worked with a human subject alcohol research study and was conducting preliminary investigations using negative networks in MRI imaging.

Undergraduate Students

Thomas Reddick WFU Student 2002-2003
Dr. Laurienti served as a mentor for Mr. Reddick's undergraduate Honor's Thesis Research. Dr. Reddick recently received his PhD from the Georgia Institute of Technology. He received a PhD GA Institute of Technology, and is currently a Professor of Cognitive Psychology at Purdue University.

Kathryn Davis WFU Student 2003
Dr. Laurienti served as a mentor for Ms. Davis's undergraduate Honor's Thesis Research. She received an MD from the University of Florida College of Medicine and is practicing Ob/Gyn & Maternal-Fetal Medicine in Ashville, NC.

Jessica Bullins Salem College Student 2011-2012
Dr. Laurienti served as Ms. Bullins' primary mentor while she worked in the lab as a Wake Forest University Translational Science Center Scholar. She subsequently became a volunteer intern beginning in the lab her junior year of college and she returned as a Wake Forest University Intern Summer 2012, assigned to Dr. Jack Rejeski, on Sabbatical in the LCBN. She received a PhD from UNC, and currently an Assistant Professor of Psychiatry at UNC-Chapel Hill.

Justyna Rzucidlo WFU Student 2011-2013
Dr. Laurienti served as the mentor for Ms. Rzucidlo's research dedicated to learning links between cognition and brain networks. This work was being completed in collaboration with Dr. Dale Dagenbach. She received a MD from Georgetown specializing in Cardiology. Currently in practice at Provo Cardiology Clinic, UT.

Arial "Logan" Rost Salem College Student Summer 2012
Dr. Laurienti served as Ms. Rost's primary mentor while she worked in the lab as a Wake Forest University Translational Science Center Scholar. She was studying the effect of obesity on brain networks. She received a Naturopathic Doctor (ND), MPH at the Bastyr Center for Natural Health, Seattle WA.

Robert Musci WFU Student 2012
Dr. Laurienti served as the co-mentor for Mr. Musci's senior honors thesis. His project evaluated relationships between brain connectivity and physical function in older adults. He received a PhD in Translational Aging from Colorado State University, and is currently an Assistant Professor at Loyola Marymount.

Matthew Stanley WFU Student 2012-2014
Dr. Laurienti serves as the mentor for Mr. Stanley's volunteer research study. His project is evaluating cascades in brain using human fMRI data. He received a PhD Cognitive Neuroscience from Duke, and is currently a Postdoctoral Researcher at the Fuqua School of Business.

Cassandra Klebous WFU Student Summer 2013
Dr. Laurienti served as Ms. Klebous' primary mentor while she worked in the lab as a Wake Forest University Translational Science Center

Scholar. She subsequently became a laboratory employee as a study coordinator upon graduation. She received a MMS, PA-C from Nova Southeastern University, currently working in Orthopedics at Nemours Children's Hospital, Florida.

Nicole Kus WFU Student Summer 2013
Dr. Laurienti served as Ms. Kus' primary mentor while she worked in the lab as a Wake Forest University Translational Science Center Scholar. She was studying the effect of beetroot juice and exercise on brain networks in older adults. She received a MD from Temple Univ, and currently a Postdoctoral Research Fellow at Chirldren's Hospital of Philadelphia.

Eric Schmid WFU Student Summer 2013
Dr. Laurienti served as Mr. Schmid's primary mentor while he worked in the lab as a Wake Forest University Translational Science Center Scholar. He was studying the effect of beetroot juice and exercise on brain networks in older adults. He received a JD from Boston College Law, and currently an Associate at Cooley, an American International law firm.

Meredith Petrie WFU Student 2014-2015
Dr. Laurienti served as the co-mentor for Ms. Petrie's senior honors thesis. Her project evaluated relationships between brain connectivity and obesity/weight loss in older adults. This work was completed in collaboration with Dr. Jack Rejeski. After graduation, Meredith continued to work in the lab under the mentorship of Drs. Laurienti and Rejeski. She received a Master of Social Work at Brown School at Washington University in St. Louis, and is currently working as a therapist in private practice.

Caroline Hayes WFU Student Summer 2015
Dr. Laurienti served as Ms. Hayes' primary mentor while she volunteered in the lab learning about the effects of moderate alcohol use on the brain. Currently she is a graduate student at NYU Steinhardt Communicative Sciences & Disorders in NYC.

John Passarelli WFU Student 2015-2016
Dr. Laurienti served as a mentor for Mr. Passarelli's undergraduate research project working on genetic algorithms to generate functional brain networks. Currently he is a Senior Machine Learning Engineer at Foxy AI in New York.

Rebecca Omonde Salem College Student Summer 2017
Dr. Laurienti served as Ms. Omonde's primary mentor while she worked in the lab as a Wake Forest University Translational Science Center Scholar. She was studying voxel based morphometry (VBM) analysis. She received an MS in Nursing from the University of AZ, and currently a community health nurse.

Emily McCarthy WFU Student Spring 2018
Dr. Laurienti served as a co-mentor to Ms. McCarthy while she collected brain MR images for a weight loss intervention study (EMPOWER). She

received a PT, DPT from Northwest University, as a pediatric physical therapist, and is currently Physical Rehabilitation Science PhD student at the University of Maryland School of Medicine.

Laura Miron WFU Student 2018-2020
Dr. Laurienti served as a co-mentor to Ms. Miron while she collected brain MR images for a weight loss intervention study (EMPOWER). She received a MD from the University of Arkansas, and is currently a Pediatric Resident at UAMS College of Medicine.

Jessy Silfer WFU Student 2018-2020
Dr. Laurienti served as Ms. Silfer's primary mentor while she volunteered in the lab learning brain anatomy and assisting with various research projects. Currently she is completing MD at Case Western Reserve University School of Medicine after her MS in Medical Physiology.

Alec Marsh UNC Student Summer 2022
Dr. Laurienti served as Mr. Marsh's primary mentor as he volunteers in the lab learning about network science as it applies to the human brain. He is currently a senior at UNC-Chapel Hill.

Madeline Boyd WFU Student 2022-2024
Dr. Laurienti served as Ms. Reddick's primary mentor as she volunteered in the lab while working on her BS degree in Biology. She is currently a Medical Assistant with Mecklenberg Heart Specialists. She is currently a Medical Assistant with Mecklenberg Heart Specialists.

Monica Soni WFU Student 2023-2024
While completing her undergraduate degree at Wake Forest, Dr. Laurienti served as an advisor while she studied the effects of pesticides on children in the PACE 5 Study. She is currently a Clinical Research Assistant at Boston Children's Hospital and Harvard Medical School.

Masters Students

Molly DuBray Masters Student 2003-2004
Ms. DuBray completed a master's degree in psychology in Spring 2004. Her thesis project investigated memory processing using functional MRI. She received MA in Psychology at WFU and PhD in Neuroscience at the University of Utah. Currently a research assistant professor in Radiology at the University of Utah and Scientist with the Waisman Center at the University of Wisconsin-Madison.

Corey Lamborn Masters Student 2003-2004
Ms. Lamborn completed a master's degree in pharmacology in the summer of 2004. Her thesis project was an extension of the work completed by Dr. Whitlow, investigating decision making in chronic marijuana users. He received an MS in Pharmacology at WFU. Currently an Associate Director, Principal Medical Writer at Incyte based in Wilmington, Delaware.

Valerie Weisser Masters Student 2004-2006
Ms. Weisser completed a master's degree in psychology and was accepted to a clinical neuropsychology PhD program. Her thesis project

was an extension of the work currently ongoing in Dr. Laurienti's laboratory that evaluated the effects of cognitive training in older adults. She received her PhD in Psychology from Drexel University, and leads the Welborn Group lab at Virginia Tech.

Michael Cartwright Masters Student 2010-2012
Department of Neurology
Dr. Cartwright completed a Master's Degree in Clinical and Population Translational Science. Dr. Laurienti served as the Chair of his thesis committee. He received MD from Wake Forest School of Medicine and is currently a professor of Neurology at Wake Forest University School of Medicine.

Crystal Vechlekar Masters Student 2010-2012
Dr. Laurienti was the primary mentor for Ms. Vechlekar. Her research focused on age-related changes in complex brain networks. Dr. Laurienti served as the Chair of her thesis committee. She received an MS in Neuroscience at WFU, and Clinical Mental Health Counseling at UNC-G. Currently a counselor at UNCSA.

Paige Roseman Masters Student 2011-2013
WFU Graduate Student in the Department of Psychology. Dr. Laurienti served as a co-mentor as Paige used network science methodologies to evaluate changes in the brains of US veterans who have experienced traumatic brain injury (TBI). She received an MA in Research and Experimental Psychology from WFU and is currently a professor of Psychology at Wake Technical Community College.

Ryan Hampton Masters Student 2012-2014
WFU Graduate Student in the Department of Psychology. Dr. Laurienti served as an imaging advisor and committee member. Ryan used network science methods to analyze the Human Connectome Data Set. He received an MA in Psychology from WFU and PhD in Social Psychology from Arizona State. Currently at Postdoc at Univ. Wisconsin-Madison.

Taylor Bolt Masters Student 2014-2015
WFU Graduate Student in the Department of Psychology. Dr. Laurienti served an imaging advisor and committee member. Taylor studied repeated measures of the Iowa Gambling Task (IGT), N-back, and fMRI. He received an MA in Psychology from WFU and PhD in Psychology from the University of Miami. Currently employed with Deloitte / University of California, Los Angeles.

Jared Hesse Masters Student 2014-2016
Dr. Laurienti served as an imaging advisor and committee member for Mr. Hess' master thesis study. His thesis project investigated the changes in brain networks in patients with Parkinson's Disease using fMRI data. He received an MA in Psychology from WFU and currently living in Las Vegas and working full-time as a data scientist for a healthcare analytics company.

Alexis Tanase Masters Student 2021-2024
Neuroscience Graduate Student at Wake Forest University. Dr. Laurienti served as her Master's program advisor while she studies effect of mobility and aging use on the human brain. She received an MS in Neuroscience at WFU. Currently a study coordinator in Radiology at WFUSM and applying to graduate schools.

Medical Students

Hesham Hussain Medical Student 2002-2007
Dr. Laurienti was an advisor for Mr. Hussain. Currently he is a Radiologist at Wilmington Health Care Center in Wilmington, NC.

Carter Brown MD/PhD Student 2002-2005
Dr. Laurienti was the mentor for Dr. Brown's research endeavors throughout medical school. Carter worked on several fMRI and behavioral studies. He is currently a practicing diagnostic radiologist at Tidelands Georgetown Memorial Hospital in South Carolina. Currently he is a Radiologist at Tidelands Georgetown Memorial Hospital in SC.

Harsha Setty Medical Student 2003-2007
Dr. Laurienti was an advisor for Mr. Setty. Currently he is an Anesthesiologist with Advent Health Tampa in August, GA.

David Joyner Medical Student Summer 2005
Dr. Laurienti was the mentor for Mr. Joyner during his summer research project. His work was an extension of the ongoing behavioral and imaging research on multisensory integration and aging. Currently he is a Diagnostic Neuroradiologist with UVA Health in Charlottesville, VA.

William Barrett Medical Student Summer 2009
Dr. Laurienti was the mentor for Mr. Barrett during his summer research project. His project was the evaluation of network metrics on various components of an aging invention study. Currently he is a Interventional Radiologist, Assistant Professor of Radiology at Vanderbilt.

Kevin Hiatt Medical Student Summer 2011
Dr. Laurienti was the mentor for Mr. Hiatt during his summer research project. His work used novel network methods evaluation of an existing data set of MRI brain images from a dyslexia cohort. Currently he is a Radiologist, Assistant Professor of Radiology at Atrium Health Wake Forest Baptist in Winston Salem, NC.

John Tobben Medical Student Summer 2011
Dr. Laurienti was a mentor for Mr. Tobben during his summer research project. His work examined the cognitive effects of obesity in both younger and older adults. Currently he is a Radiologist with UNC Hospitals in Charlotte, NC.

Sean Miller Medical Student Summer 2011
Dr. Laurienti was a mentor for Mr. Miller during his summer research project. His work examined the physical effects of obesity in both younger and older adults. Currently he is a Neuroradiologist with UNC Hospitals in Charlotte, NC.

Daniel Hampton Medical Student Summer 2012
Dr. Laurienti was a mentor for Mr. Hampton during his summer research project. His work examines the effects of assaulting functional brain networks. Currently he is a Diagnostic Radiologist with Gainesville Radiology Group in Gainesville, GA.

Michelle Grata Medical Student Summer 2012
Dr. Laurienti was a mentor for Ms. Grata during her summer research project. Her work examines the effects of moderate alcohol use and aging on functional brain networks. Currently she is a Anesthesiologist with Memorial Hermann Greater Heights Hospital in Houston, TX.

Aaron Winkler Medical Student Summer 2013
Dr. Laurienti was a mentor for Mr. Winkler during his summer research project. His work examines the effects of caffeine on functional brain networks. Currently he is a Psychiatrist, founded the Adults ADHD Clinic as Stanford before entering private practice in Palo Alto, CA.

PhD Students

Christina Hugenschmidt PhD Student 2003 - 2008
Dr. Laurienti was the primary mentor for Ms. Hugenschmidt. She worked on a project that assessed the role of selective attention in sensory integration changes in the elderly. She is currently an Associate Professor and Director for Memory Counseling Program, Gerontology and Geriatrics, Wake Forest University School of Medicine, Winston Salem, NC.

Jennifer Mozolic PhD Student 2005 - 2009
Dr. Laurienti was the primary mentor for Ms. Mozolic. She was awarded an NRSA from NIA to work on a project to determine if attention training can improve sensory processing in the elderly. Jennifer completed her PhD training in June of 2009. She is currently a Professor of Psychology at Waren Wilson College, Ashville, NC.

Merideth Addicott PhD student 2006 - 2009
Dr. Laurienti was the primary mentor for Ms. Addicott. She was awarded an NRSA from NIDA to fund her graduate research investigating caffeine withdrawal and cognition. She completed her PhD training in August 2009. She is currently an Associate Professor of Translational Neuroscience, Wake Forest University School of Medicine, Winston Salem, NC.

Karen Joyce PhD Student 2009-2012
Dr. Laurienti served as a PhD advisor and co-mentor for Ms. Joyce. She had a patent pending, along with Dr. Laurienti and Satoru Hayasaka., for “Agent-Based Brain Model and Related Methods” developed during her dissertation work. She is currently a Vice President of Cognitive Computing with Novant Health.

Qawi Telesford PhD Student 2009-2013
Dr. Laurienti served as a PhD advisor and co-mentor for Mr. Telesford. His PhD was awarded in Biomedical Engineering. Dr. Laurienti served as a PhD advisor and also assisted with Qawi’s Ruth L. Kirschstein National

Research Service Award (NRSA) submission and award. He is currently a Research Scientist at The Nathan Kline Institute for Psychiatric Research in South Orange, NJ.

Malaak Moussa PhD Student 2010-2015
Dr. Laurienti was the primary mentor for Ms. Moussa. Her PhD work was performed in collaboration with Dr. Linda Porrino. The studies evaluated changes in brain networks following chronic alcohol use. She is currently a Senior Director in Global Medical Affairs Strategy with Otsuka Pharmaceutical Company in Research Triangle, NC.

Robin Wilkins PhD Student 2010-2015
UNC Greensboro Graduate Student in the Department of Music. Dr. Laurienti served as a co-advisor. Ms. Wilkins was studying music preference and emotion and the association with brain network topology. She is currently a Director of Human Neuroimaging Gateway MRI Center Joint School for Nanoscience and Nanoengineering at UNC-G in Greensboro, NC.

Rhiannon Mayhugh PhD Student 2013-2018
Dr. Laurienti served as a PhD advisor while she studied the changes in brain networks associated with moderate alcohol use in human aging. She is currently a Workshop leader and Yoga Instructor (YRT200) St. Petersburg, FL.

Fatemeh Mokhtari PhD Student 2015-2018
School of Biomedical Engineering and Sciences Graduate Student at Wake Forest University. Dr. Laurienti served as her PhD advisor while she studied the changes in brain networks during a weight-loss intervention using machine learning methods. She is currently a Machine Learning Engineer with Apple in Cupertino, CA.

Mohsen Bahrami PhD Student 2015-2019
School of Biomedical Engineering and Sciences Graduate Student at Wake Forest University. Dr. Laurienti serves as his PhD advisor as he uses mixed model analysis to study changes in brain networks. He is currently an Assistant Professor of Radiology at WFUSM in Winston Salem, NC.

Hope Peterson-Sockwell PhD Student 2018-2023
Neuroscience Graduate Student at Wake Forest University. Dr. Laurienti served as her PhD advisor while she studied the effect of moderate alcohol use on the human brain. She is currently a post-doctoral fellow with R00 funding at UNC-Chapel Hill, NC.

MD/PhD Students

Christopher Whitlow MD/PhD Student 2002-2003
Dr. Laurienti served as the fMRI advisor/co-mentor and dissertation committee chairman for Dr. Whitlow in collaboration with Dr. Linda Porrino. Dr. Whitlow's dissertation focused on the effects of chronic marijuana use on brain function. He is currently Chair of Radiology,

Isadore Meschan Distinguished Professorship, Wake Forest University School of Medicine, Winston Salem, NC.

Brielle Paolini MD/PhD Student 2011-2015
Dr. Laurienti was the co-mentor along with Dr. Jack Rejeski for Ms. Paolini's dissertation. She completed her dissertation on studies of eating behavior, brain and body health in older adults, and returned to complete medical school Spring 2015. She is currently a Radiologist, Neuroscientist, Team Trainer and Leadership Coach at MUSC in Charlestown, SC.

Medical Residents

John Kaufman, MD Radiology Resident 2006 - 2007
Dr. Laurienti was the co-mentor for Dr. Kaufman in collaboration with Dr. Maldjian. Dr. Kaufman used quantitative perfusion and diffusion tensor MR imaging techniques to study cerebrovascular disease in diabetics. Currently a Neuroradiologist with Kaiser Permanente San Leandro Medical Center in CA.

Andrew Deibler, MD Radiology Resident 2006 - 2007
Dr. Laurienti was a co-mentor for Dr. Deibler. He worked on a project to assess blood flow and functional activity in older adults. Currently a Radiologist and Director of MRI with Triad Radiology Associates in Winston Salem, NC.

Post-Doctoral Fellows

Ann Peiffer, PhD Post Doctoral Fellow 2004 - 2010
Dr. Laurienti was the primary mentor for Dr. Peiffer. She had prior training in animal behavior and joined Dr. Laurienti's laboratory to gain experience with human functional imaging. She was funded for three years through an NRSA from NINDS. Currently an Assistant Professor, Department of Biomedical Sciences and Western Michigan University in Kalamazoo, MI.

Luke Burnett, PhD Post Doctoral Fellow 2005 - 2006
Dr. Laurienti served as Dr. Burnett's mentor during his post-doctoral fellowship. Dr. Burnett has a PhD in neurobiology and came to Dr. Laurienti's laboratory to learn human imaging methods. He served as a fellow in the laboratory for 1 year before he was sent to serve in Iraq. Currently Chief Executive Officer and Chief Science Officer of KeraNetics and Kera Vet Bio (founder) in Winston Salem, NC.

Lucie Yang, MD, PhD Post Doctoral Fellow 2007 - 2009
Dr. Laurienti served as Dr. Yang's mentor during her post-doctoral fellowship. She came from clinical Neuroradiology to a full time research position. Dr. Yang investigated the effects of caffeine on multiple aspects of human brain imaging.

Dorothy Dobbins, PhD Post-Doctoral Fellow 2020-2021
Dr. Laurienti was the primary mentor for Dr. Dobbins. She had prior training in network science and optogenetics and joined Dr. Laurienti's laboratory to assist with the PACE 5 Study, dealing with the effects of pesticides on Hispanic children of farmworkers and non-farmworkers. Currently a Medical writer at Fingerpaint Medical, a Pharmaceutical

Manufacturing Company in Research Triangle Park, NC .

Research Associate

Mohsen Bahrami, PhD Research Associate 2020-2021
Dr. Laurienti served as a co-mentor for Dr. Bahrami. He was continuing his undergraduate research using mixed model analysis to study changes in brain networks in multiple studies both in and outside the LCBN. Currently he is an Assistant Professor of Radiology at WFUSM in Winston Salem, NC.

Junior Faculty

Satoru Hayasaka Assistant Professor 2005-2011
Department of Biostatistical Sciences
Former Wake Forest School of Medicine TSI Scholar.
Dr. Laurienti served as his primary mentor. Currently he is a Data Scientist at KNIME, a Software Development Firm in Austin TX.

Colleen Hanlon Instructor 2008-2010
Department of Physiology and Pharmacology
She received the K01 Mentored Research Scientist Development Award from NIDA. Her research involved using functional magnetic resonance imaging to examine neural networks affected in chronic cocaine users. Dr. Laurienti served as a member of her mentoring team. Currently she is a Vice President of Medical Affairs at Brains Way, a Medical Equipment Manufacturer in Burlington, MA.

Michael Cartwright Assistant Professor 2008-2013
Department of Neurology
NIH K23 Award Recipient
Presented the President's Research Initiative Award by the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) in 2009. Dr. Laurienti served as a member of his mentoring team. He received MD from Wake Forest School of Medicine and is currently a professor of Neurology at Wake Forest University School of Medicine.

Sean Simpson Assistant Professor 2009-2018
Department of Biostatistical Sciences
Current Wake Forest School of Medicine TSI Scholar
Dr. Laurienti served as his primary mentor and his mentor on a K-Award through the NIBIB. Currently he is a Professor of Biostatistics and Data Science, Wake Forest University School of Medicine in Winston Salem, NC.

HOSTED AND VISITING FACULTY

Walter S. Pritchard Visiting Scientist 2009-2010
Instructor of Psychology Adjunct Faculty 2012-2018
Surry Community College, Dobson, NC
Dr. Pritchard authored many of the seminal papers in Chaos Theory, Non-linear Dynamics, and Fractal scaling in the human brain in the 1980s and 1990s. His initial mentoring and continued collaboration is a vital component of the LCBN. In 2012 Dr. Pritchard became Adjunct Faculty of the Department of Radiology at Wake Forest School of Medicine.

Kourtland R. Koch Visiting Scientist 2009-2010
Associate Professor of Special Education
Ball State University, Muncie, IN
Dr. Koch traveled several times to Wake Forest School of Medicine to collaborate with Dr. Laurienti and learn about functional brain Imaging. Publications of this collaboration are pending.

Janine Jennings Sabbatical Spring 2009
Associate Professor of Psychology
Wake Forest University, Winston Salem, NC
Dr. Jennings spent her Sabbatical in the Spring of 2009 working with the faculty of the LCBN. Collaborations and publications are ongoing.

Dale Dagenbach Sabbatical Fall 2011
Professor & Chair Psychology Visiting Scientist 2012-present
Wake Forest University, Winston Salem, NC
Dr. Dagenbach spent the Fall semester of 2011 on Sabbatical in the LCBN looking at the differences in brain networks between resting and task induced states. He continues to spend 1-2 days a week working with faculty, staff, and students in the lab, even after retiring in 2024. Drs. Dagenbach and Laurienti served as mentors for many WFU undergraduate and graduate students. Collaborations and publications are ongoing.

W. Jack Rejeski Sabbatical 2012- 2013
Thurman D. Kitchin Professor - Retired
Director of the Behavioral Physiology Laboratory
Wake Forest University, Winston Salem, NC
Dr. Rejeski spent his extended sabbatical in the LCBN study the effects of Mindfulness and Food Craving on networks in the brain. Collaborations and publications are ongoing.

COMMUNITY ACTIVITES AND SERVICES

Patronage:

Bookmarks, Winston Salem, NC

Hospice & Palliative Care Center, Winston Salem, NC

St. Paul’s Episcopal Church, Winston Salem, NC

Summit School, Winston Salem, NC