

## Kirk I. Erickson, Ph.D.

### Curriculum Vitae

---

---

Professor  
Department of Psychology  
Center for the Neural Basis of Cognition  
University of Pittsburgh  
3107 Sennott Square  
210 South Bouquet St.  
Pittsburgh, PA 15260

Email: [kiericks@pitt.edu](mailto:kiericks@pitt.edu)  
Phone: 412-624-4533

### Professional History

<b>Professor</b> Department of Psychology Center for the Neural Basis of Cognition University of Pittsburgh	2017-current
<b>Associate Professor</b> Department of Psychology Center for the Neural Basis of Cognition University of Pittsburgh	2013 - 2017
<b>Assistant Professor</b> School of Medicine, Department of Geriatric Medicine University of Pittsburgh	2011
<b>Teaching Faculty</b> Center for Neuroscience University of Pittsburgh	2011 - current
<b>Assistant Professor</b> Department of Psychology Center for the Neural Basis of Cognition University of Pittsburgh	2008 - 2013
<b>Post-doctoral Scientist</b> Beckman Institute for Advanced Science and Technology Department of Psychology Neuroscience Program University of Illinois at Urbana-Champaign	2005 - 2008

### Education

<b>Graduate Education</b> Department of Psychology, University of Illinois at Urbana-Champaign Awarded Doctor of Philosophy degree in 2005. <b>Thesis title:</b> "Training-induced changes in dual-task fMRI activation in young and old adults". <b>Mentor:</b> Dr. Arthur Kramer	1999 - 2005
--	-------------

Kirk I. Erickson, Ph.D.

### **Undergraduate Education**

Marquette University, Milwaukee, WI  
St. Clare's College, Oxford, UK  
Awarded Bachelor of Art's degree in 1999.

1996 –1999

### **Fellowships and Awards**

Fellow, Academy of Behavioral Medicine Research	2016
Chancellor's Distinguished Research Award	2015
Senior Beckman Institute Fellow	2014
Illinois Transdisciplinary Obesity Prevention Program Visiting Faculty Scholar	2014
Neal Miller Young Investigator Award from Academy of Behavioral Medicine Research	2013
Pepper Center Junior Scholar Award	2010 – 2011
NIMH Cognitive Psychophysiology Training Fellowship	2004
Psychology Department Travel Award	2004
Graduate College Travel Award	2004
Paul D. Doolen Scholarship for the Study of Aging	2003 – 2004
Beckman Institute Predoctoral Fellowship	2002 – 2003
NIMH Cognitive Psychophysiology Training Fellowship	2001 – 2002

### **Teaching**

#### **Undergraduate Courses**

Introduction to Psychology (2009)  
Psychology of Aging (2009, 2010, 2011, 2015, 2016, 2017)  
Advanced Research Methods: functional MRI (2012; 2013, 2015)

#### **Graduate Courses**

Health and Aging (2010; 2013)  
Neuroimaging Methodology (2010; 2012)  
Advanced Laboratory Methods: functional MRI (2011; 2013; 2015)

#### **Other Courses**

Co-Director of Psychology Department Genetics Journal Club (2010-present)  
Center for Neuroscience Graduate Journal Club (2012)  
Coordinator, Biological/Health Psychology Brown Bag (2012)  
Multi-modal Neuroimaging Training Program – fMRI series (2014)

#### **Guest Lectures**

Behavioral Medicine Interventions University of Pittsburgh, Department of Psychology Dr. Tom Kamarck	2016
Chronic Disease Case Studies University of Pittsburgh, Department of Health and Physical Activity Dr. Christopher Kline	2016, 2017, 2018
Chronic Disease Case Studies University of Pittsburgh, Department of Health and Physical Activity Dr. Renee Rogers	2015

Kirk I. Erickson, Ph.D.

Research Emphasis in Chronic Disorders University of Pittsburgh, Department of Epidemiology Dr. Lora Burke	2013
Advanced Laboratory Methods – Magnetic Resonance Imaging University of Pittsburgh Dr. John Jakicic	2011
Introduction to Biology Art Institute of Pittsburgh Ms. Barbara Suever	2008
Cognitive Neuroscience Illinois Wesleyan University Dr. Renee Countryman	2006
fMRI Methods University of Illinois Urbana-Champaign Dr. Stan Colcombe	2005
Neurobiology of Aging University of Illinois Urbana-Champaign Dr. Donna Korol	2005
Estrogen and Aging University of Illinois Urbana-Champaign Dr. Donna Korol	2005
Neuropsychology University of Illinois Urbana-Champaign Dr. Wendy Heller	2002
Cognitive Psychology University of Illinois Urbana-Champaign Dr. Mike Wilson	2002

## **Mentoring**

### **Junior Faculty**

Marc Coutanche (University of Pittsburgh)

Klaus Libertus (University of Pittsburgh)

### **Post-doctoral and K-awardee mentoring**

2015-	Dr. Chelsea Stillman – T32 primary mentor
2013-	Dr. Christina Hugenschmidt – K99 consultant
2013-2015	Dr. Kristine Wilckens – T32 co-mentor
2014-2016	Dr. Fatma Uyar – Post-doctoral mentor
2011-2012	Dr. Tim Verstynen – Post-doctoral mentor

### **Current Graduate (PhD) Students:**

Sarah Aghjayan (started 2017)

Program: Clinical/Health Psychology

Awards:

- University of Pittsburgh Art's and Sciences Fellowship - 2017

Alina Lesnovskaya (started 2017)

Program: Clinical/Health Psychology

Jamie Cohen (started in 2015)

Program: Clinical/Health Psychology

Awards:

- University of Pittsburgh Art's and Sciences Fellowship – 2015-2016

Kirk I. Erickson, Ph.D.

- E.B. Huey Award – 2016
- Predoctoral Training Fellowship in Behavioral Brain Research – 2017-2018
- Bassell Student Publication Award – 2018

Lauren Oberlin (started 2012)

Program: Clinical/Health Psychology

Awards:

- Predoctoral Training Fellowship in Behavioral Brain Research - 2014
- Multi-Modal Neuroimaging Training Program (MNTP) fellowship – 2015
- Bassell Student Publication Award – 2015
- Bassell Student Publication Award – 2016
- Mellon Scholarship – 2017-2018
- Bassell Student Publication Award – 2018

### **Completed PhD Students:**

Destiny Miller (started 2009) – Defended 2013

Program: Biological/Health Psychology (transitioned from Social Psychology program)

Awards:

- Center for Neural Basis of Cognition Teaching Fellowship (2011)

Andrea Weinstein (started 2009) – Defended 2015

Program: Clinical/Health Psychology

Awards:

- University of Pittsburgh Art's and Sciences Fellowship
- Predoctoral Training Fellowship in Behavioral Brain Research
- International Neuropsychological Society Phillip K. Rennick Award for Excellence
- Travel Award, Alzheimer's Association International Conference, Vancouver, Canada
- Mellon Scholarship – 2013-2014
- Lazovik Dissertation Award – 2013-2014
- NRSA fellowship – 2014-2015
- APA Division 20 Walter G. McMillen Memorial Award for Parkinson's Disease Research – 2014
- Bassell Student Award – 2015

Regina Leckie (started 2011) – Defended 2016

Program: Cognitive Psychology

Awards:

- Ruth L. Myers Mentoring Excellence Award – 2014
- Multi-Modal Neuroimaging Training Program (MNTP) fellowship – 2015
- Mellon Scholarship – 2015-2016

Swathi Gujral (started 2012) – Defended 2018

Program: Clinical/Health Psychology

Awards:

- University of Pittsburgh Art's and Sciences Fellowship - 2012
- National Science Foundation (NSF) Graduate Fellowship – 2014-2017
- Bassell Student Publication Award – 2014
- Lazovik Dissertation Award – 2015-2016

### **Master's Degree Committee**

Kristine Wilckens (Advisor: Dr. Mark Wheeler) – 2009

Andrea Weinstein (Chair) - 2012

Ikechukwu Onyewuenyi (Advisor: Dr. Peter Gianaros) - 2012

Regina Leckie (Chair) – 2013

Bart Larsen (Advisor: Dr. Bea Luna) - 2013

Becky Roush (Advisor: Dr. Nancy Glynn) - 2013

Kirk I. Erickson, Ph.D.  
Jon Siegel (Advisor: Dr. Mark Wheeler) - 2014  
Swathi Gujral (Chair) - 2014  
Lauren Oberlin (Chair) - 2014  
Rebecca Emery (Advisor: Dr. Michele Levine) - 2015  
Lea Martin (Advisor: Dr. Michael Sayette) - 2016  
Jamie Cohen (Chair) - 2017

### **Comprehensive Exam Committee**

Destiny Miller (Chair) - 2010  
Kristine Wilckens (Advisor: Dr. Mark Wheeler) - 2010  
Aarthi Padmanabhan (Advisor: Dr. Bea Luna) - 2011  
Michelle Carter (Advisor: Dr. Amy Wagner) - 2011  
Andrea Weinstein (Chair) - 2012  
Hyunjung Oh (Advisor: Dr. Etienne Sibille) - 2012  
Adrienne Taren (Carnegie Mellon University; Advisor: Dr. David Creswell) - 2013  
Regina Leckie (Chair) - 2013  
Ikechukwu Onyewuenyi (Advisor: Dr. Peter Gianaros) - 2014  
Mary Gilliam (Advisor: Dr. Daniel Shaw) - 2014  
Scott Marek (Advisor: Dr. Bea Luna) - 2014  
Shannon Donofry (Advisor: Dr. Kathryn Roecklein) - 2015  
Megan Miller (Advisor: Dr. Kathryn Roecklein) - 2015  
Susan Kuo (Advisor: Dr. Michael Pogue-Geile) - 2016  
Swathi Gujral (Chair) - 2016  
Lauren Oberlin (Chair) - 2016  
Lisanne ten Brinke (University of British Columbia; Advisor: Dr. Teresa Liu-Ambrose) - 2016  
Jamie Cohen (Chair) - 2018

### **Doctoral Degree Committee**

Victoria Egizio (Advisor: Dr. J. Richard Jennings) - completed 2011  
Jessica Yokley (Advisor: Dr. Michael Pogue-Geile) - completed 2012  
Kristin Long (Advisor: Dr. Anna Marsland) - completed 2012  
Lindsay Jorgensen (Advisor: Dr. Catherine Palmer) - completed 2012  
Kristine Wilckens (Advisor: Dr. Mark Wheeler) - completed 2012  
Laura Chaddock (University of Illinois; Advisor: Dr. Arthur Kramer) - completed 2012  
Aarthi Padmanabhan (Advisor: Dr. Bea Luna) - completed 2012  
Lindsay Victoria (Carnegie Mellon University; Advisor: Dr. Michael Tarr) - completed 2013  
Teresa (Qu) Tian (Advisor: Dr. Caterina Rosano) - completed 2013  
Stephanie Davis (Advisor: Dr. Jen Silk) - completed 2014  
Michelle Failla-Carter (Advisor: Dr. Amy Wagner) - completed 2014  
Hyunjung Oh (Advisor: Dr. Etienne Sibille) - completed 2015  
Adrienne Taren (Carnegie Mellon University; Advisor: Dr. David Creswell) - completed 2015  
Dani Simmonds (Advisor: Dr. Bea Luna) - completed 2015  
Andrea Weinstein (Chair) - completed 2015  
Regina Leckie (Chair) - completed 2016  
David Montez (Advisor: Dr. Bea Luna) - completed 2016  
Shinjini Kungu (Carnegie Mellon University; Advisor: Dr. Gustave Rhode) - completed 2016  
Scott Marek (Advisor: Dr. Bea Luna) - completed 2017  
Beata Ferencz (Karolinska Institute; Advisor: Lars Backman) - completed 2017  
Megan Miller (Advisor: Dr. Kathryn Roecklein) - completed 2017  
Shannon Donofry (Advisor: Dr. Kathryn Roecklein) - completed 2017  
Swathi Gujral (Chair) - completed 2018  
Lisanne ten Brinke (University of British Columbia; Advisor: Dr. Teresa Liu-Ambrose) -  
Beth Shaaban (Advisor: Dr. Caterina Rosano) - completed 2018

Kirk I. Erickson, Ph.D.

Cristina Cadenas Sanchez (University of Granada; Advisor: Dr. Francisco Ortega) – completed 2018

Anne Kaer Gejl (University of Southern Denmark; Advisor: Dr. Lars Bo Anderson) – completed 2018

### **Other Graduate Mentoring**

Andrea Weinstein – B<sup>2</sup> Training Grant Mentor

Kristine Wilckens – B<sup>2</sup> Training Grant Mentor

Lauren Oberlin - B<sup>2</sup> Training Grant Mentor

Jamie Cohen - B<sup>2</sup> Training Grant Mentor

### **Post-Baccalaureate Mentoring**

Lisheema Barr – Hot Metal Bridge Program, University of Pittsburgh (2010-2011)

Indira Turney - Hot Metal Bridge Program, University of Pittsburgh (2011-2012)

Travis Alvarez - Hot Metal Bridge Program, University of Pittsburgh (2011-2012)

Colleen Vaughan – Hot Metal Bridge Program, University of Pittsburgh (2015-2016)

Jermon Drake – Hot Metal Bridge Program, University of Pittsburgh (2018-2019)

### **Senior Thesis Committee**

Christopher Stevens (Advisor: Dr. Mark Wheeler) - 2010

KayLoni Olson (Advisor: Dr. Dana Rofey) - 2010

Sara Troupe (Advisor: Dr. Dana Rofey) - 2011

Rachel Milgrom (Chair – Neuroscience Program) - 2012

Alexis Wnuk (Chair – Neuroscience Program) – 2012

Brigid Lynch (Chair- Neuroscience Program) – 2013

Mariegold Wollam (Chair – Psychology Program) – 2013

Rebecca Sax (Chair – Psychology Program) – 2014

Maria Alessi (Chair – Psychology Program) – 2015

Jonae Lloyd (Chair- Neuroscience Program) – 2015

Winnie Rao (Chair- Neuroscience Program) – 2015

Jordan Baird (Chair- Neuroscience Program) – 2015

Kaitlin Dlugosz (Advisor: Dr. Kathryn Roecklein) – 2015

Sara Winter (Chair – Psychology Program) – 2015

Shelly Burke (Chair – Neuroscience Program) – 2016

Aasha Waiwood (Chair – Psychology Program) – 2017

Leighanne Ohlinger (Chair – Psychology Program) – 2018

Morgan Lehman (Chair – Neuroscience Program) - 2018

### **Undergraduate Mentoring**

30 undergraduate Psychology and Neuroscience students

University of Pittsburgh – Directed Research

1 undergraduate student in internship at Romine Shelter Group Home

University of Pittsburgh

18 undergraduate Psychology students

University of Illinois Urbana-Champaign

1 undergraduate in Psychology Honor's Program

University of Illinois Urbana-Champaign

1 undergraduate Anthropology student

University of Illinois Urbana-Champaign

### **Research Training Seminars**

fMRI training seminar – Multimodal neuroimaging training program

2014, 2015

fMRI data analysis seminar at Johns Hopkins U

2007 – 2009

Voxel-based morphometry seminar at Wayne State U.

2005

Voxel-based morphometry seminar at U. of Michigan

2004

Kirk I. Erickson, Ph.D.

### **Public Outreach Programs**

Dorm Advisor – Lothrop Hall, University of Pittsburgh 2009 – 2010  
Brain Awareness Week – Urbana-Champaign 2006

### **Visiting Fellows:**

Sarah Valkenboroughs – University of Newcastle (2018)  
Dr. Cristina Cadenas Sanchez – University of Granada, Spain (2018)  
Dr. Irene Esteban-Cornejo – University of Granada, Spain (2018)  
Radka Hlavackova – Charles University of Prague (2018)  
Dr. Natali Valim Oliver Bento Torres – Institute of Science, Brasil (2017-2018)  
Dr. Joao Bento Torres - Institute of Science, Brasil (2017-2018)  
Dr. Ina Tarkka – University of Jyvaskyla, Finland (2017)  
Dr. Maria Mataro – University of Barcelona (2015; 2017)  
Feng-Tzu Chen - National Taiwan Sports University (2017)  
Sarah Valkenboroughs – University of Newcastle (2015)  
Dr. Xiaofeng Xie – Wuhan University (2015)  
Dr. Belinda Brown – Edith Cowan University (2015)

### **Professional Memberships**

Alzheimer’s Association (ISTAART) 2011 – current  
American Psychological Association (Member) 2009 – current  
American Psychological Society 2009 – current  
American College of Sports Medicine 2009 – 2011  
Society for Psychophysiological Research 2007 – 2009  
Organization for Human Brain Mapping 2005 – current  
Cognitive Neuroscience Society 2002 – current  
Society for Neuroscience 2000 – current

### **Clinical Experience**

Neuropsychological Assessment Practicum 2001 – 2002  
University of Illinois Urbana-Champaign  
Autistic Treatment Center, Milwaukee, WI 1998 – 1999  
Internship at Oxford School for Autistic Children 1998

### **Professional Services**

#### **National and International Panels**

Global Council on Brain Health (2016) – AARP  
Physical Activity Guidelines Advisory Committee (2016-2018) – Federal appointment by Secretary of Health and Human Services.  
    Subcommittee: Brain Health (chair)  
    Subcommittee: Aging (member)  
    Subcommittee: Leaders committee (member)

#### **Editorship:**

Guest editor: *Journal of Aging Research* - Special Edition: Physical Exercise and Brain Functions in Older Adults (2012)

Guest editor: *Journal of the International Neuropsychological Society*: Physical Activity and Brain Plasticity (2014-2015).

#### **Editorial Board:**

Kirk I. Erickson, Ph.D.

*Aging Research* (2010-2014)

*Journal of the American Geriatric Society* (2012-current)

*Neuroimage* (2015-current)

*Journal of Cognitive Enhancement* (2016-current)

Ad hoc referee (51 different journals):

*Alzheimer's and Dementia* • *Annals of Neurology* • *Archives of General Psychiatry* • *Archives of Internal Medicine* • *Brain* • *Brain Research* • *British Journal of Sports Medicine* • *Cerebral Cortex* • *The Cleft Palate-Craniofacial Journal* • *Clinical Neurophysiology* • *Cognitive, Affective, and Behavioral Neuroscience* • *Comprehensive Physiology* • *Current Opinion in Behavioral Sciences* • *Developmental Neuroscience* • *Diabetes Care* • *Emotion* • *European Journal of Neuroscience* • *European Journal of Aging* • *Experimental Aging Research* • *Frontiers in Aging Neuroscience* • *Frontiers in Human Neuroscience* • *Human Brain Mapping* • *International Journal of Obesity* • *Journal of Aging and Physical Activity* • *Journal of the American Geriatric Society* • *Journal of Cognitive Neuroscience* • *Journal of Gerontology: Medical Sciences* • *Journal of the International Neuropsychological Society* • *Journal of Psychiatric Research* • *Journal of Psychophysiology* • *Journal of Neurology* • *Journal of Neuroscience* • *Journal of Sport Sciences* • *Medicine & Science in Sport and Exercise* • *Menopause* • *Molecular Psychiatry* • *Neurobiology of Aging* • *Neurobiology of Learning and Memory* • *Neurology* • *Neuroimage* • *Neuropsychologia* • *Neuropsychology* • *Neuroscience Letters* • *Neurotoxicology and Teratology* • *Proceedings of the National Academy of Sciences* • *Progress in Neurobiology* • *Psychology and Aging* • *Psychoneuroendocrinology* • *Psychonomic Bulletin & Review* • *Psychophysiology* • *Psychosomatic Medicine*

Grant Reviewer Services:

Western Psychiatric – University of Pittsburgh

National Science Foundation

Austrian Science Fund

Indo-US Science and Technology Forum

University of Wisconsin-Milwaukee Research Growth Initiative

University of Pittsburgh Alzheimer's Disease Research Center

Alzheimer's Association

NIH study section – Risk, Prevention, and Health Behavior

NIH study section – Special section on prevention of Alzheimer's Disease

NIH study section – Social Psychology, Personality and Interpersonal Processes (Standing Member 2017- )

Kansas University Medical Center Clinical Research Pilot Grant Program

University of Pittsburgh Institute on Aging

Telux Stiftung Association

Committee Services:

Psychology Department Colloquium Committee, University of Pittsburgh

2009, 2016

Department of Psychology Executive Committee

2015 - 2016

University of Pittsburgh Senate subcommittee on Research

2015 - current

University of Pittsburgh Senate subcommittee on student affairs

2013 - 2015

University of Pittsburgh Faculty Assembly

2012 - 2015

Psychology Department Diversity Travel Award Committee

2012

Biological/Health Program Brown Bag Coordinator

2011, 2018

Magnetic Resonance Research Center Users Committee

2010 – 2014

Undergraduate Education Committee, University of Pittsburgh

2009 – 2013

Program Committee for Society for Psychophysiological Research

2008

Paul D. Doolen Scholarship Committee

2004

**Grants**

**Current:**



Kirk I. Erickson, Ph.D.

<b>P01 HL040962</b>	2018-2023
TDC: \$7,520,150	
Role: Subproject 3 Lead Principal Investigator	
"Biobehavioral Studies of Cardiovascular Disease"	
<b>R01 AG060741</b>	2018-2023
TDC: \$2,361,911	
Role: Principal Investigator	
"Rhythm Experience and Africana Culture Trial (REACT)"	
<b>R01 CA221882</b>	2018-2023
TDC: \$1,710,692	
Role: Co-Principal Investigator (co-PI: Conley, Bender)	
"Epigenomics of Neurocognitive Function in Breast Cancer"	
<b>UPMC Enterprises</b>	2017 - 2020
TDC: \$1,994,089	
Role: Co-Investigator (PI: Ambrosio/Jakicic)	
"A precision rehabilitation approach to counteract age-related cognitive declines"	
<b>R56 HL128317</b>	2017 - 2018
TDC: \$497,484	
Role: Co-investigator (PI: Rofey)	
"Impact of cognitive function on weight management outcomes"	
<b>PSI2016-77475-R</b>	2017 - 2019
Total costs: \$103,200 (Euros)	
Role: Co-investigator (PI: Maria Mataro, PhD)	
"Integrative omics study on the neurobiological effects of physical activity and cognitive stimulation"	
<b>R01 AG053952</b>	2016 - 2021
Total costs: \$21,899,529	
TDC: \$14,401,831	
Role: Principal Investigator	
"IGNITE: Investigating Gains in Neurocognition in an Intervention Trial of Exercise"	
<b>R01 CA196762</b>	2016 - 2021
TDC: \$2,215,368	
Role: Co-Principal Investigator (co-PI: Bender)	
"Influence of exercise on neurocognitive function in breast cancer"	
<b>CIHR 366276</b>	2016 - 2021
TDC: \$1,108,525	
Role: Co-investigator (PI: Liu-Ambrose)	
"One size does not fit all: Tailoring exercise prescription for brain health based on BDNF polymorphism"	
<b>1UF1AG051197-NIA</b>	2016 - 2020
TDC: \$4,408,658	
Role: Co-Investigator (PI: Becker)	
"Connectomics of Brain Aging and Dementia"	
<b>Australian Research Council - DP160104162</b>	2016 - 2019
TDC: \$401,000	

Kirk I. Erickson, Ph.D.

Role: Co-Investigator (PI: Copland)

“Enhancing language learning in aging with exercise”

**5P30 AG024827**

TDC: \$1,026,227

Role: Co-Investigator

“Pittsburgh Older Americans Independence Center”

2004 - 2020

**Completed:**

**NPSASA-14-321093 Alzheimer’s Association**

2014 - 2017

TDC: \$250,000

Role: Principal Investigator

“Influence of African Dance on Neurocognitive Function”

**R01 DK095172**

2012 - 2017

TDC: \$1,401,926

Role: Principal Investigator

“Influence of physical activity and weight loss on brain plasticity.”

**Pilot P30 MH90333 (PI: Reynolds)**

2014 - 2016

TDC: \$100,000

Role: Co-Principal Investigator (co-PI: Aizenstein)

“A multi-level life-span characterization of adult depression and effects of medication and exercise”

**R01 DK092237**

2011 - 2015

TDC: \$2,445,572

Role: Co-Investigator (PI: Espeland)

“Action for health in diabetes brain magnetic resonance imaging ancillary study.”

**CLSA**

2013 - 2014

TDC: \$24,620

Role: Co-Investigator (PI: Liu-Ambrose)

“Gaining insight to Brain-Behaviour Relationships: Developing a Neuroepidemiology Study Using the Canadian Longitudinal Study of Aging.”

**W81XWH-06-02 Department of Defense**

2011 - 2013

TDC: \$31,718

Role: Co-Investigator (PI: Rofey)

“Identifying cognitive, functional, and structural brain-based differences in obese children with and without Type 2 Diabetes.”

**P30 AG024827 - Claude D. Pepper Center**

2010 - 2012

TDC: \$70,000

Role: Co-Investigator (PI: van Swearingen)

“Benefits of two types of therapeutic exercise on gait and cognition.”

**The Office of Naval Research**

2007 - 2012

TDC: \$6,750,000

Role: Co-Investigator (PI: Kramer)

“Capitalizing on research on animal and human brain plasticity to enhance warfighter training and performance.”

Kirk I. Erickson, Ph.D.

<b>P30 AG024827 - Claude D. Pepper Center</b> TDC: \$5,000 Role: Co-Investigator (PI: Nadkarni) "Association between brain amyloid deposition and gait performance in cognitively normal older adults."	2012
<b>P30 AG024827 - Claude D. Pepper Center</b> TDC: \$20,000 Role: Co-Principal Investigator "Neural adaptation: motor learning induced changes in functional brain networks."	2012
<b>Competitive Medical Research Fund of the UPMC Health System</b> TDC: \$25,000 Role: Principal Investigator "Influence of physical activity on brain and cognition in mild cognitive impairment."	2011 - 2012
<b>P30 AG024827 - Claude D. Pepper Center</b> TDC: \$35,000 Role: Principal Investigator "The influence of a dancing intervention on neurocognitive function in postmenopausal healthy women."	2010 - 2011
<b>P50-AG05133 - Alzheimer's Disease Research Center</b> TDC: \$25,000 Role: Principal Investigator "The impact of physical activity on neurocognitive function in adults with cognitive impairment."	2010 - 2011
<b>Center for Healthy Minds Seed Grant</b> TDC: \$10,000 Role: Principal Investigator "Aerobic exercise and neurocognitive function in APOE epsilon 4 carriers."	2006 - 2007
<b>Institute for the Study of Aging</b> TDC: \$50,000 Role: Co-Investigator (PI: Kramer) "Influence of fitness on neurocognitive function of older adults."	2006 - 2008
<b>Consultant:</b> <b>R21 AG040310 (PI: Etnier)</b> "The effect of physical activity on cognition relative to ApoE and BDNF genotypes."	2012 - 2014

## **Publications (174 journal articles)**

\* graduate student; ^ post-doc; \*\* undergraduate student

1. Kramer, AF, Colcombe, SJ, **Erickson, KI**, Belopolsky, A, McAuley, E, Cohen, NJ, Webb, A. (2002). Effects of aerobic fitness training on human cortical function: A proposal. *Journal of Molecular Neuroscience*. 19(1-2): 227-31.
2. Milham, MP, **Erickson, KI**, Banich, MT, Kramer, AF, Webb, A, Wszalek, T, Cohen, NJ. (2002). Attentional control in the aging brain: Insights from an fMRI study of the Stroop task. *Brain & Cognition*. 49(3): 277-96.
3. Kramer AF, Colcombe, SJ, McAuley, E, **Erickson, KI**, Scalf, PE, Jerome, GJ, Marquez, DX, & Webb, AG. (2003). Enhancing brain and cognitive function of older adults through fitness training. *Journal of Molecular Neuroscience*. 20(3): 213-21.
4. Colcombe, SJ, **Erickson, KI**, Raz, N, Webb, AG, Cohen, NJ, McAuley, E, Kramer, AF. (2003). Aerobic fitness reduces brain tissue loss in aging humans. *Journal of Gerontology: Biological and Medical Sciences*. 58(2): 176-80.

Kirk I. Erickson, Ph.D.

5. Colcombe, SJ, Kramer, AF, McAuley, E, **Erickson, KI**, Scalf, PE. (2004). Neurocognitive aging and cardiovascular fitness: Recent findings and future directions. *Journal of Molecular Neuroscience*. 24(1): 9-14.
6. Colcombe, SJ, Kramer, AF, **Erickson, KI**, Scalf, PE, McAuley, E, Cohen, NJ, Webb, A, Jerome, GJ, Marquez, DX, Elavsky, S. (2004). Cortical recruitment and aging: The influence of cardiovascular fitness on executive brain function as assessed by event-related fMRI. *Proceedings of the National Academy of Sciences USA*. 101(9): 3316-21.
7. **Erickson, KI**, Milham, MP, Colcombe, SJ, Kramer, AF, Banich, MT, Webb, A, Cohen, NJ. (2004). Behavioral conflict, anterior cingulate cortex, and experiment duration: Implications of diverging data. *Human Brain Mapping*. 21(2): 96-105.
8. Bherer, L, Kramer, AF, Peterson, M, Colcombe, SJ, **Erickson, KI**, Becic, E. (2005). Training effects on dual-task performance: are there age-related differences in plasticity of attentional control? *Psychology and Aging*. 20(4): 695-709.
9. Kramer, AF, Colcombe, SJ, McAuley, E, Scalf, PE, **Erickson, KI**. (2005). Fitness, Aging, and Neurocognitive function. *Neurobiology of Aging*. 26 Suppl 1: 124-7.
10. Colcombe, SJ, Kramer, AF, **Erickson, KI**, Scalf, PE. (2005). The implications of cortical recruitment and brain morphology for individual differences in cognitive performance in aging humans. *Psychology and Aging*. 20(3): 363-75.
11. **Erickson, KI**, Colcombe, SJ, Raz, N, Korol, DL, Scalf, PE, Webb, A, Cohen, NJ, McAuley, E, Kramer, AF. (2005). Selective sparing of brain tissue in post-menopausal women receiving hormone replacement therapy. *Neurobiology of Aging*. 26(8): 1205-13.
12. **Erickson, KI**, Colcombe, SJ, Wadhwa, R, Bherer, L, Peterson, M, Scalf, PE, Kramer, AF. (2005). Neural correlates of dual-task performance after minimizing task preparation. *NeuroImage*. 28(4): 967-79.
13. **Erickson, KI**, Ho, R, Colcombe, SJ, Kramer, AF. (2005). A structural equation modeling analysis of attentional control: An event-related fMRI study. *Cognitive Brain Research*. 22: 349-357.
14. Nielson, KA, Yee, D, **Erickson, KI**. (2005). Memory enhancement by a semantically unrelated emotional arousal source induced after learning. *Neurobiology of Learning and Memory*. 84(1): 49-56.
15. Bherer, L, Kramer, AF, Peterson, M, Colcombe, SJ, **Erickson, KI**, Becic, E. (2006). Testing the limits of cognitive plasticity in older adults: Application to attentional control. *Acta Psychologica*. 123(3): 261-78.
16. Colcombe, SJ, **Erickson, KI**, Scalf, PE, Kim, JS, Wadhwa, R, McAuley, E, Kramer, AF. (2006). Aerobic exercise training increases brain volume in aging humans: evidence from a randomized clinical trial. *Journal of Gerontology: Biological and Medical Sciences*. 61(11): 1166-70.
17. Kramer, AF, **Erickson, KI**, Colcombe, SJ. (2006). Exercise, cognition and the aging brain. *Journal of Applied Physiology*. 101 (4): 1237-42.
18. **Erickson, KI**, Colcombe, SJ, Elavsky, S, McAuley, E, Korol, DL, Scalf, PE, Kramer, AF. (2007). Interactive effects of fitness and hormone treatment on brain health in postmenopausal women. *Neurobiology of Aging*. 28(2): 179-85.
19. **Erickson, KI**, Colcombe, SJ, Wadhwa, R, Bherer, L, Peterson, M, Scalf, PE, Kim, JS, Alvarado, M, Kramer, AF. (2007). Training-induced functional activation changes in dual-task processing: An fMRI study. *Cerebral Cortex*. 17(1): 192-204.
20. **Erickson, KI**, Colcombe, SJ, Wadhwa, R, Bherer, L, Peterson, M, Scalf, PE, Kim, JS, Alvarado, M, Kramer, AF. (2007). Training-induced plasticity in older adults: effects of training on hemispheric asymmetry. *Neurobiology of Aging*. 28(2): 272-83.
21. Kramer, AF, **Erickson, KI**. (2007). Capitalizing on cortical plasticity: influence of physical activity on cognition and brain function. *Trends in Cognitive Sciences*. 11(8): 342-8.
22. Kramer, AF, **Erickson, KI**. (2007). Physical activity effects on cognition, well-being and brain: human interventions. *Alzheimer's and Dementia*. 3(2): S45-S51.
23. Prakash, RS, Snook, EM, **Erickson, KI**, Colcombe, SJ, Webb, ML, Motl, RW, Kramer, AF. (2007). Cardiovascular fitness: a predictor of cortical plasticity in multiple sclerosis. *NeuroImage*. 34(3): 1238-44.
24. Scalf, PE, Colcombe, SJ, McCarley, JS, **Erickson, KI**, Alvarado, M, Kim, JS, Wadhwa, R, Kramer, AF. (2007). The neural correlates of an expanded functional field of view. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 62(1): 32-44.

Kirk I. Erickson, Ph.D.

25. Bherer, L, Kramer, AF, Peterson, M, Colcombe, SJ, **Erickson, KI**, Bécic, E. (2008). Transfer effects in task-set cost and dual-task cost after dual-task training in older and younger adults: Further evidence for cognitive plasticity in attentional control in late adulthood. *Experimental Aging Research*. 34(3): 188-219.
26. Chang, S, **Erickson, KI**, Ambrose, P, Hasegawa-Johnson, M. (2008). Brain anatomy differences in childhood stuttering. *NeuroImage*. 39(3): 1333-44.
27. **Erickson, KI**, Kim, JS, Suever, BL, Voss, MW, Francis, BM, Kramer, AF. (2008). Genetic contributions to age-related decline in executive function: a 10-year longitudinal study of COMT and BDNF polymorphisms. *Frontiers in Human Neuroscience*. 2(11): 1-9.
28. **Erickson, KI**, Suever, BL, Prakash, RS, Colcombe, SJ, McAuley, E, Kramer, AF. (2008). Greater intake of vitamin B6 and B12 spares brain volume in the elderly: An optimized voxel-based morphometry study. *Brain Research*. 1199: 20-6.
29. Hillman, CH, **Erickson, KI**, Kramer, AF. (2008). Be smart, exercise your heart: Exercise effects on brain and cognition. *Nature Reviews Neuroscience*. 9(1): 58-65.
30. Prakash, RS, **Erickson, KI**, Snook, EM, Colcombe, SJ, Motl, RW, Kramer, AF. (2008). Cortical recruitment during selective attention in multiple sclerosis: An fMRI investigation of individual differences. *Neuropsychologia*. 46(12): 2888-95.
31. Voss, MW, **Erickson, KI**, Chaddock, L, Prakash, RS, Colcombe, SJ, Morris, KS, Doerksen, S, Hu, L, McAuley, E, Kramer, AF. (2008). Dedifferentiation in the visual cortex: an fMRI investigation of individual differences in older adults. *Brain Research*. 1244: 121-31.
32. Carlson, MC, **Erickson, KI**, Voss, MW, Kramer, AF, Bolea, N, Mielke, M, Rebok, G, McGill, S, Fried, LF. (2009). Evidence for neurocognitive plasticity in At-risk older adults: The Experience Corps Program. *Journal of Gerontology: Medical Sciences*. 64 (12): 1275-82.
33. **Erickson, KI**, Prakash, RS, Kim, JS, Sutton, BP, Colcombe, SJ, Kramer, AF. (2009). Top-down attentional control in spatially coincident stimuli enhances activity in both task-relevant and task-irrelevant regions of cortex. *Behavioral Brain Research*. 197(1): 186-97.
34. **Erickson, KI**, Kramer, AF. (2009). Exercise effects on cognitive and neural plasticity in older adults. *British Journal of Sports Medicine*, 43(1): 22-4.
35. **Erickson, KI**, Prakash, RS, Voss, MW, Chaddock, L, Hu, L, Morris, KS, White, SM, Wojcicki, TR, McAuley, E, Kramer, AF. (2009). Aerobic fitness is associated with hippocampal volume in elderly humans. *Hippocampus*. 19(10): 1030-1039.
36. Kennedy, KM, **Erickson, KI**, Rodrigue, KM, Voss, MW, Colcombe, SJ, Kramer, AF, Raz, N. (2009). Age-related differences in brain volume: Manual volumetry vs. voxel-based morphometry. *Neurobiology of Aging*, 1199: 20-6.
37. Prakash, RS, **Erickson, KI**, Colcombe, SJ, Kim, JS, Sutton, B, Kramer, AF. (2009). Age-related differences in the involvement of the prefrontal and parietal cortex in attentional control. *Brain & Cognition*. 71(3): 328-35.
38. Basak, C, Boot, W, **Erickson, KI**, Voss, MW, Prakash, RS, Kramer, AF. (2011). Regional differences in brain volume predict the acquisition of skill in a complex real-time strategy video game. *Brain & Cognition*. 76: 407-14.
39. Boot, WR, Basak, C, **Erickson, KI**, Neider, MB, Simons, DJ, Fabiani, M, Gratton, G, Voss, MW, Prakash, RS, Lee, H, Kramer, AF. (2010). Transfer of skill engendered by complex task training under conditions of variable priority. *Acta Psychologica*. 135: 349-57.
40. Chaddock, L, **Erickson, KI**, Prakash, RS, Kim, JS, Voss, MW, VanPatter, M, Pontifex, MB, Raine, LB, Konkel, A, Hillman, CH, Cohen, NJ, Kramer, AF. (2010). A neuroimaging investigation of the association between aerobic fitness, hippocampal volume and memory performance in preadolescent children. *Brain Research*. 1358: 172-83.
41. Chaddock, L, **Erickson, KI**, Prakash, RS, VanPatter, M, Voss, MW, Pontifex, MB, Raine, LB, Hillman, CH, Kramer, AF. (2010). Basal ganglia volume is associated with aerobic fitness in preadolescent children. *Developmental Neuroscience*. 32: 249-256.
42. **Erickson, KI**, Boot, WR, Basak, C, Neider, MB, Prakash, RS, Voss, MW, Graybiel, AM, Simons, DJ, Fabiani, M, Gratton, G, Kramer, AF. (2010). Striatum volume predicts level of video game skill acquisition. *Cerebral Cortex*. 20(11): 2522-30.

Kirk I. Erickson, Ph.D.

43. **Erickson, KI**, Prakash, RS, Voss, MW, Chaddock, L, Heo, S, \*\*McLaren, M, Pence, BD, Martin, SA, Vieira, VJ, Woods, JA, McAuley, E, Kramer, AF. (2010). BDNF is associated with age-related decline in hippocampal volume. *Journal of Neuroscience*. 30: 5368-75.
44. **Erickson, KI**, Raji, CA, Lopez, OL, Becker, JT, Rosano, C, Newman, AB, Gach, HM, Thompson, PM, Ho, AJ, Kuller, LH. (2010). Physical activity predicts gray matter volume in late adulthood: the Cardiovascular Health Study. *Neurology*. 75: 1415-22.
45. **Erickson, KI**, Voss, MW, Prakash, RS, Chaddock, L, Kramer, AF. (2010). A cross-sectional study of hormone treatment and hippocampal volume in postmenopausal women: Evidence for a limited window of opportunity. *Neuropsychology*. 24(1): 68-76.
46. Heo, S, Prakash, RS, Voss, MW, **Erickson, KI**, Ouyang, C, Sutton, BP, Kramer, AF. (2010). Resting hippocampal blood flow, spatial memory and aging. *Brain Research*. 1315: 119-27.
47. Voss, MW, **Erickson, KI**, Prakash, RS, Chaddock, L, Malkowski, E, Alves, H, Kim, JS, Morris, KS, White, SM, Wojcicki, TR, Szabo, A, Klamm, E, McAuley, E, Kramer, AF. (2010). Functional connectivity: a source of variance in the association between cardiorespiratory fitness and cognition? *Neuropsychologia*. 48: 1394-1406.
48. Voss, MW, Prakash, RS, **Erickson, KI**, Basak, C, Chaddock, L, Kim, JS, Alves, H, Heo, S, Szabo, A, White, SM, Wojcicki, TR, Klamm, E, Gothe, N, Olson, EA, McAuley, E, Kramer, AF. (2010). Plasticity of brain networks in a randomized intervention trial of exercise training in older adults. *Frontiers in Aging Neuroscience*. 2: 1-17.
49. Chaddock, L, **Erickson, KI**, Prakash, RS, Voss, MW, VanPatter, M, Pontifex, MB, Hillman, CH, Kramer, AF. (2012). A functional MRI investigation of the association between childhood aerobic fitness and neurocognitive control. *Biological Psychology*. 89: 260-8.
50. **Erickson KI**, \*Miller DL, Roecklein KA. (2012). The aging hippocampus: interactions between exercise, depression, and BDNF. *Neuroscientist*. 18: 82-97.
51. **Erickson KI**, Voss, MW, Prakash, RS, Basak, C, Szabo, A, Chaddock, L, Kim, JS, Heo, S, Alves, H, White, SM, Wojcicki, TR, Mailey, E, Vieira, VJ, Martin, SA, Pence, BP, Woods, JA, McAuley, E, Kramer, AF. (2011). Exercise training increases size of hippocampus and improves memory. *Proceedings of the National Academy of Sciences*. 108: 3017-22.
52. McAuley E, Mullen SP, Szabo AN, White SM, Wojcicki TR, Mailey EL, Gothe N, Voss MW, **Erickson KI**, Prakash RS, Kramer AF. (2011). Self-regulatory processes and exercise adherence in older adults: executive function, self-efficacy, and strategy effects. *American Journal of Preventive Medicine*. 41: 284-290.
53. McAuley, E, Szabo, AN, Mailey, E, **Erickson, KI**, Voss, MW, White, SM, Wojcicki, TR, Gothe, N, Olson, EA, Mullen, SP, Kramer, AF. (2011). Non-exercise estimated cardiorespiratory fitness: associations with brain structure and memory complaints in older adults' mental health and physical activity. *Mental Health and Physical Activity*. 4: 5-11.
54. Prakash, RS, Voss, MW, **Erickson, KI**, Lewis, JM, Chaddock, L, Malkowski, E, Alves, H, Kim, JS, Szabo, A, White, SM, Wojcicki, TR, Klamm, EL, McAuley, E, Kramer, AF. (2011). Cardiorespiratory fitness predicts neural flexibility of anterior processing regions in older adults. *Frontiers in Human Neuroscience*. 4 (229): 1-12.
55. Sattler, C, **Erickson, KI**, Toro, P, Schroder, J. (2011). Physical fitness as a protective factor for cognitive impairment in a prospective-based study in Germany. *Journal of Alzheimer's Disease*. 26: 709-18.
56. Szabo, AN, McAuley, E, **Erickson, KI**, Voss, MW, Prakash, RS, Mailey, EL, Wojcicki, TR, White, SM, Gothe, N, Olson, EA, Kramer, AF. (2011). Cardiorespiratory fitness, hippocampal volume and frequency of forgetting in older adults. *Neuropsychology*. 25: 545-53.
57. Vo, LTK, Walther, DB, Kramer, AF, **Erickson, KI**, Boot, WR, Voss, MW, Prakash, RS, Fabiani, M, Gratton, G, Simons, D, Wang, YM. (2011). Predicting individuals learning success from patterns of pre-learning MRI activity. *PLoS One*. 6(e16093): 1-9.
58. \*Weinstein, AM, **Erickson, KI**. (2011). Healthy body equals healthy mind. *Generations – Journal of the American Society on Aging*. 35: 92-98.
59. **Erickson KI**, \*Miller, DL, \*Weinstein, AM, Akl, SL, Banducci, SE. (2012). Physical activity and brain plasticity in late adulthood: a conceptual review. *Ageing Research*. 4: 34-47.
60. **Erickson, KI**, \*Weinstein, AM, Lopez, OL. (2012). Physical activity, brain plasticity, and Alzheimer's disease. *Archives of Medical Research*, 43: 615-21.

Kirk I. Erickson, Ph.D.

61. **Erickson, KI**, \*Weinstein, AM, Sutton, BP, Prakash, RS, Voss, MW, Chaddock, L, Szabo, A, Mailey, E, White, SM, Wojcicki, TR, McAuley, E, Kramer, AF. (2012). Beyond vascularization: aerobic fitness on n-acetylaspartate and memory. *Brain and Behavior*. 2: 32-41.
62. Jovanecevic, J, Rosano, C, Perera, S, **Erickson, KI**, Studenski, S. (2012). A protocol for a randomized clinical trial of interactive video dance: potential for effects on cognitive function. *BMC Geriatrics*. 12:23.
63. \*Leckie, RL, \*Weinstein, AM, Hodzic, JC, **Erickson, KI**. (2012). Potential moderators of physical activity on brain health. *Journal of Aging Research*, 2012: 948981.
64. Lee H, Boot WR, Basak C, Voss MW, Prakash RS, Neider M, **Erickson KI**, Simons DJ, Fabiani M, Gratton G, Low KA, Kramer AF. (2012). Performance gains from directed training do not transfer to untrained tasks. *Acta Psychologica*. 139: 146-58.
65. ^Verstynen, TD, \*\*Lynch, B, \*Miller, DL, Voss, MW, Prakash, RS, Chaddock, L, Basak, C, Szabo, A, Olson, EA, Wojcicki, TR, Fanning, J, Gothe, NP, McAuley, E, Kramer, AF, **Erickson, KI**. (2012). Caudate nucleus volume mediates the link between cardiorespiratory fitness and cognitive flexibility in older adults. *Journal of Aging Research*. 2012: 939285.
66. ^Verstynen, TD, \*Weinstein, AM, Schneider, WW, Jakicic, JM, Rofey, DL, **Erickson, KI**. (2012). Increased body mass index is associated with global decreases in white matter microstructural integrity. *Psychosomatic Medicine*, 74: 682-90.
67. Voss, M.W., Prakash, R.S., **Erickson, K.I.**, Boot, W.R., Basak, C., Neider, M.B., Simons, D.J., Fabiani, M., Gratton, G., & Kramer, A.F. (2012). Effects of training strategies implemented in a complex videogame on functional connectivity of attentional networks. *NeuroImage*. 59: 138-48.
68. \*Weinstein, AM, Voss, MW, Prakash, RS, Chaddock L, Szabo, A, White, SM, Wojcicki, TR, Mailey, E, McAuley, E, Kramer, AF, **Erickson, KI**. (2012). The association between aerobic fitness and executive function is mediated by prefrontal cortex volume. *Brain, Behavior, and Immunity*, 26: 811-9.
69. Wilckens, KA, **Erickson, KI**, Wheeler, ME. (2012). Age-related decline in controlled retrieval: the role of the PFC and sleep. *Neural Plasticity*. 2012: 624795.
70. \*\*Wnuk, A, Korol, DL, **Erickson, KI**. (2012). Estrogens, hormone therapy, and hippocampal volume in postmenopausal women. *Maturitas*. 73: 186-90.
71. Bherer, L, **Erickson, KI**, Liu-Ambrose, T. (2013). A review of the effects of physical activity and exercise on cognitive and brain functions in older adults. *Journal of Aging Research*, 657508.
72. Chaddock-Heyman, L, **Erickson, KI**, Voss, MW, Knecht, AM, Pontifex, MB, Castelli, DM, Hillman, CH, Kramer, AF. (2013). The effects of physical activity on functional MRI activation associated with cognitive control in children: A randomized controlled intervention. *Frontiers in Human Neuroscience*, 7, 2-13.
73. Chaddock-Heyman, L, **Erickson, KI**, Voss, MW, Powers, JP, Knecht, A, Pontifex, MB, Drollette, ES, Moore, RD, Raine, LB, Scudder, MR, Hillman, CH, Kramer, AF. (2013). White matter microstructure is associated with cognitive control in children. *Biological Psychology*, 94: 109-115.
74. **Erickson, KI**. (2013). Evidence for structural brain plasticity in humans: comment on Thomas and Baker (2012). *Neuroimage*, 73: 237-38.
75. **Erickson, KI**, Banducci, SE, \*Weinstein, AM, MacDonald, AW 3<sup>rd</sup>, Ferrel, RE, Halder, I, Flory, JD, Manuck, SB. (2013). The BDNF val66met polymorphism moderates an effect of physical activity on working memory performance. *Psychological Science*, 24: 1770-79.
76. **Erickson, KI**, Barr, LL, \*Weinstein, AM, Banducci, SE, Akl, SL, Santo, NM, \*Leckie, RL, Oakley, M, Saxton, J, Aizenstein, HJ, Becker, JT, Lopez, OL. (2013). Measuring physical activity with accelerometry in a community sample with dementia. *Journal of the American Geriatric Society*, 61: 158-59.
77. **Erickson, KI**, Gildengers, AG, Butters, MA. (2013). Physical Activity and Brain Plasticity in Late Adulthood. *Dialogues in Clinical Neuroscience*, 15: 99-108.
78. **Erickson, KI**, Hohmann, T. Aging, Exercise, and Brain Health. (2013). *German Journal of Sport Sciences*, 20; 25-32 [printed in German].
79. Gianaros, PJ, Marsland, AL, Sheu, LK, **Erickson, KI**, Verstynen, TD. (2013). Inflammatory pathways link socioeconomic disadvantage to white matter architecture. *Cerebral Cortex*, 23(9): 2058-71.
80. Muldoon, MF, **Erickson, KI**, Goodpaster, BH, Jakicic, JM, Conklin, SM, Sekikawa, A, Yao, JK, Manuck, SB. (2013). Concurrent physical activity modifies the association between n-3 long-chain fatty acids and cardiometabolic risk in midlife adults. *Journal of Nutrition*, 143(9): 1414-20.

Kirk I. Erickson, Ph.D.

81. Verstynen TD, \*Weinstein, AM, **Erickson, KI**, Sheu LK, Marsland A, Gianaros, PJ. (2013). Competing physiological pathways link individual differences in weight and abdominal adiposity to white matter microstructure. *NeuroImage*, 79: 129-37.
82. Voss, MW, **Erickson, KI**, Prakash, RS, Chaddock, L, Kim, JS, Alves, H, Szabo, A, White, SM, Wojcicki, TR, Mailey, EL, Olson, EA, Gothe, N, Potter, VV, Martin, SA, Pence, BD, Cook, MD, Woods, JA, McAuley, E, Kramer, AF. (2013). Neurobiological markers of exercise-related brain plasticity in older adults. *Brain, Behavior, and Immunity*, 28: 90-99.
83. Voss, MW, Heo, S, Prakash, RS, **Erickson, KI**, Alves, H, Chaddock, L, Szabo, A, Mailey, E, Wojcicki, T, White, S, Gothe, N, McAuley, E, Sutton, B, Kramer, AF. (2013). The influence of aerobic fitness on cerebral white matter integrity and cognitive function in older adults: results of a one-year exercise intervention. *Human Brain Mapping*, 34: 2972-85.
84. Voss, MW, Wong, CN, Baniqued, PL, Burdette, JH, **Erickson, KI**, Prakash, RS, McAuley, E, Laurienti, PJ, Kramer, AF. (2013). Aging brain from a network science perspective: something to be positive about? *PLoS One*, 8(11): e78345.
85. Barnard, ND, Bush, AI, Ceccarelli, A, Cooper, J, de Jager, CA, **Erickson, KI**, Fraser, G, Keller, S, Levin, SM, Lucey, B, Morris, MC, Squitti, R. (2014). Dietary and Lifestyle Guidelines for the Prevention of Alzheimer's Disease. *Neurobiology of Aging*, 35: S74-S78.
86. Chaddock-Heyman, L, **Erickson, KI**, Holtrop, JL, Pontifex, MB, Raine, LB, Hillman, CH, Kramer, AF. (2014). Aerobic fitness is associated with greater white matter integrity in children. *Frontiers in Human Neuroscience*, 8: 584.
87. Chuang, YF, Eldreth, D, **Erickson, KI**, Varma, V, Harris, G, Fried, LP, Rebok, GW, Tanner, EK, Carlson, MC. (2014). Cardiovascular risks and brain function: an fMRI study of executive function in older adults. *Neurobiology of Aging*, 35: 1396-403.
88. Diniz BS, Reynolds CF, Begley A, Dew MA, Anderson SJ, Lotrich F, **Erickson KI**, Butters MA. (2014). Brain-derived neurotrophic factor levels in late-life depression and comorbid Mild Cognitive Impairment: a longitudinal study. *Journal of Psychiatric Research*, 49: 96-101.
89. **Erickson, KI**, \*Leckie, RL, \*Weinstein, AM. (2014). Physical activity, fitness, and gray matter volume. *Neurobiology of Aging*, 35: S20-S28.
90. **Erickson KI**, \*Oberlin L, \*Gujral S, \*Leckie R, \*Weinstein A, Hodzic, J, Dabbagh A, Whitmoyer P, Wollam M. (2014). Exercise as a way of capitalizing on neuroplasticity in late adulthood. *Topics in Geriatric Rehabilitation*, 30: 8-14.
91. Gothe, N, Fanning, J, Awick, E, Chung, D, Wocicki, TR, Olson EA, Mullen SP, Voss, M, **Erickson, KI**, Kramer, AF, McAuley, E. (2014). Executive function processes predict mobility in older adults. *Journal of the American Geriatrics Society*, 62: 285-90.
92. \*Gujral, S, Manuck, SB, Ferrell, RE, Flory, JD, **Erickson, KI**. (2014). The BDNF Val66Met polymorphism does not moderate the effect of physical activity on depressive symptoms in midlife. *Journal of Psychiatry Research*, 218: 93-97.
93. Karim, HT, Sparto PJ, Aizenstein, HJ, Furman JM, Huppert, TJ, **Erickson, KI**, Loughlin, PJ. (2014). Functional MR imaging of a simulated balance task. *Brain Research*, 1555: 20-27.
94. \*Leckie, RL, Manuck, SB, Bhattacharee, N, Muldoon, MF, Flory, JM, **Erickson, KI**. (2014). Omega-3 fatty acids moderate effects of physical activity on cognitive function. *Neuropsychologia*, 59: 103-111.
95. Muhei-aldin, O, VanSwearingen, J, Karim, H, Huppert, TJ, Sparto, PJ, **Erickson, KI**, Sejdic, E. (2014). An investigation of fMRI time series stationarity during motor sequence learning foot tapping tasks. *Journal of Neuroscience Methods*, 227C: 75-82.
96. Nagamatsu, LS, Flicker, L, Kramer, AF, Voss, MW, **Erickson, KI**, Hsu, CL, Liu-Ambrose, T. (2014). Exercise is medicine, for the body and the brain. *British Journal of Sports Medicine*, 48: 943-44.
97. Onyewuenyi, IC, Muldoon, MF, Christie, IC, **Erickson, KI**, Gianaros, PJ. (2014). Basal ganglia morphology links the metabolic syndrome and depressive symptoms. *Physiology and Behavior*, 123: 214-22.
98. Pardini, DA, Raine, A, **Erickson, KI**, Loeber, R. (2014). Lower amygdala volume in men is associated with childhood aggression, early psychopathic traits, and future violence. *Biological Psychiatry*, 75(1): 73-80.
99. Raji, CA, **Erickson, KI**, Lopez, O, Kuller, LH, Gach, HM, Thompson, PM, Riverol, M, Becker, JT. (2014). Regular fish consumption and age-related brain gray matter loss. *American Journal of Preventive Medicine*, 47: 444-51.



Kirk I. Erickson, Ph.D.

100. Tian, Q, **Erickson, KI**, Simonsick, EM, Aizenstein, HJ, Glynn, NW, Boudreau, RM, Newman, AB, Kritchevsky, SB, Yaffe, K, Harris, T, Rosano, C. (2014). Physical Activity Predicts Microstructural Integrity in Memory Networks in Very Old Adults. *Journal of Gerontology: Medical Sciences*, 69: 1284-90.
101. Tian, Q, Simonsick, EM, **Erickson, KI**, Aizenstein, HJ, Glynn, NW, Boudreau, RM, Newman, AB, Kritchevsky, SB, Yaffe, K, Harris, T, Rosano, C. (2014). Cardiorespiratory fitness and diffusion tensor imaging in adults over 80 years of age. *Brain Research*, 1588: 63-72.
102. Vaughan, L, **Erickson, KI**, Espeland, MA, Smith JC, Tindle, H, Rapp, SR. (2014). Concurrent and longitudinal relationships between cognitive activity engagement, cognitive performance, and brain volume in older adult women. *Journal of Gerontology: Psychological Sciences*, 69: 826-36.
103. Wilckens, KA, Woo, S, **Erickson, KI**, Wheeler, ME. (2014). Sleep continuity and total sleep time are associated with task-switching and preparation in young and older adults. *Journal of Sleep Research*, 23: 508-16.
104. Wilckens, KA, Woo, SG, Kirk, AR, **Erickson, KI**, Wheeler, ME. (2014). The role of sleep continuity and total sleep time on executive function across the adult lifespan. *Psychology and Aging*, 29: 658-65.
105. Bender, CM, Merriman, JD, Ahrendt, GM, Berga, SL., Brufsky, AM, Casillo, FE, Dailey, MM, **Erickson, KI**, Kratofil, FM, McAullife, PF, Rosenzweig, MQ, Ryan, CM, Sereika, SM. (2015). Patterns of change in cognitive function with anastrozole therapy. *Cancer*, 121: 2627-36.
106. Boyle CP, Raji CA, **Erickson KI**, Lopez OL, Becker JT, Gach HM, Longstreth WT, Teverovskiy L, Kuller LH, Carmichael O, Thompson PM. (2015). Obesity, Physical Activity, and Brain Atrophy in Alzheimer's Disease. *Neurobiology of Aging*, 36: S194-202.
107. Carlson, MC, Kuo, J, Chuang, YF, Varma, V, Harris, G, Albert, M, **Erickson, KI**, Kramer, AF, Parisi, J, Xue, QL, Tan, E, Tanner, E, Gross, A, Seeman, TE, Gruenwald, T, McGill, S, Rebok, GW, Fried, LP. (2015). Impact of the Baltimore Experience Corps Trial on cortical and hippocampal volumes. *Alzheimer's & Dementia*, 11:1340-8.
108. Carson-Smith, J, **Erickson, KI**, Rao, SM. (2015). Introduction to the JINS special issue: Physical activity and brain plasticity. (2015). *Journal of International Neuropsychological Society: JINS*, 21(10):743-4.
109. Chaddock-Heyman, L, **Erickson, KI**, Kienzler, C, King, M, Pontifex, MB, Raine, LB, Hillman, CH, Kramer, AF. (2015). The role of aerobic fitness in cortical thickness and mathematics achievement in preadolescent children. *PLoS ONE*, 10(8): e0134115.
110. Chaddock-Heyman, L, Mackenzie, MJ, Zuniga, K, Cooke, G, Awick, E, Roberts, S, **Erickson, KI**, McAuley, E, Kramer, AF. (2015). Higher cardiorespiratory fitness levels are associated with greater hippocampal volume in breast cancer survivors. *Frontiers in Human Neuroscience*, 9:465.
111. **Erickson, KI**, Creswell, JD, Verstynen, T, Gianaros, PJ. (2014). Health Neuroscience: Defining a new field. *Current Directions in Psychological Science*, 23: 446-53.
112. **Erickson, KI**, Hillman, CH, Kramer, AF. (2015). Physical Activity, Brain, and Cognition. *Current Opinion in Behavioral Sciences*, 4: 27-32.
113. **Erickson, KI**, \*Leckie, RL, \*Weinstein, AM, Rachenkova, P, Sutton, B, Prakash, RS, Voss, MW, Chaddock-Heyman, L, McAuley, E, Kramer, AF. (2015). Education mitigates an age-related decline in N-acetylaspartate levels. *Brain and Behavior*, 5: e00311.
114. Gilliam, MC, Forbes, E, Gianaros, PJ, **Erickson, KI**, Brennan, L, Shaw, D. (2015). Maternal depression in childhood and adolescence and aggression in young adulthood: evidence for mediation by offspring amygdala:hippocampal volume ratio. *Journal of Child Psychology and Psychiatry*, 56: 1083-91.
115. Kong, L, Herold, C, Zollner, F, Salat, DH, Lasser, MM, Schmid, LA, Fellhauer, I, Thomann, PA, Essig, M, Schad, LR, **Erickson, KI**, Schroder, J. (2015). Comparison of grey matter volume and thickness for analyzing cortical changes in chronic schizophrenia: A matter of surface area, grey/white matter intensity contrast and curvature. *Psychiatry Research: Neuroimaging*, 231: 176-183.
116. \*Leckie, RL, \*Oberlin, LE, Voss, MW, Prakash, RS, Szabo-Reed, A, Chaddock-Heyman, L, Phillips, SM, Gothe, NP, Mailey, E, Vieira-Potter, VJ, Martin, SA, Pence, BD, Lin, M, Parasuraman, R, Greenwood, PM, Fryxell, KJ, Woods, JA, McAuley, E, Kramer, AF, **Erickson, KI**. (2014). BDNF mediates improvements in executive function following a 1-year exercise intervention. *Frontiers in Human Neuroscience*, 8: 985.
117. Miller, MA, \*Leckie, RL, Donofry, SD, Gianaros, PJ, **Erickson, KI**, Manuck, SB, Roecklein, KA. (2015). Seasonal variation in hippocampal volume and its relationship to mood. *Hippocampus*, 25: 534-43.

Kirk I. Erickson, Ph.D.

118. Novelli, EM, Sarles, CE, Aizenstein, HJ, Ibrahim, TS, Butters, MA, Jennings, RJ, Ritter, AC, Barge, S, **Erickson, KI**, Rosano, C. (2015). Abnormal venular density by 7Tesla MRI Correlates with Cognitive Function and Severity of Anemia in Sickle Cell Anemia. *Psychiatry Research: Neuroimaging*, 233: 18-22.
119. \*Oberlin, LE, Manuck, SB, Gianaros, PJ, Ferrell, RE, Muldoon, MF, Jennings, JR, Flory, JD, **Erickson, KI**. (2015). Blood pressure interacts with APOE e4 genotype to predict memory performance in a midlife sample. *Neuropsychology*, 5: 693-702.
120. Prakash, RS, Voss, MW, **Erickson, KI**, Kramer, AF. (2015). Physical Activity and Cognitive Vitality. *Annual Review of Psychology*, 66: 769-97.
121. Rofey, DL, Arslanian, SA, el Nokali, NE, Verstynen, TD, Watt, JC, Black, JJ, Sax, R, Krall, JS, Proulx, C, Dillon, M, **Erickson, KI**. (2015). Brain volume and white matter in youth with Type 2 Diabetes compared to obese and normal weight peers: a pilot study. *International Journal of Developmental Neuroscience*, 46: 88-91.
122. Smith, JC, **Erickson, KI**, Rao, SM (2015). Introduction to the JINS Special Issue: Physical Activity and Brain Plasticity. *Journal of the International Neuropsychological Society*, 21: 743-4.
123. Tian, Q, Glynn, NW, **Erickson, KI**, Aizenstein, HJ, Simonsick, EM, Yaffe, K, Harris, TB, Boudreau, RM, Newman, AB, Lopez, OL, Saxton, J, Rosano, C. (2015). Objective measures of physical activity, white matter integrity, and cognitive status in adults over age 80. *Behavioural Brain Research*, 284: 51-57
124. Wollam, ME, \*Weinstein, AM, Saxton, JA, Morrow, L, Snitz, B, Fowler, NR, Suever Erickson, BL, Roecklein, KA, **Erickson, KI**. (2015). Genetic risk score predicts late-life cognitive impairment. *Journal of Aging Research*, 2015: 267062.
125. Wong, CN, Chaddock-Heyman, L, Voss, MW, Burzynska, AZ, Basak, C, **Erickson, KI**, Prakash, RS, Szabo-Reed, AN, Phillips, SM, Wojcicki, T, Mailey, EL, McAuley, E, Kramer, AF. (2015). Brain activation during dual-task processing is associated with cardiorespiratory fitness and performance in older adults. *Frontiers in Aging Neuroscience*, 7: 154.
126. Casanova, R, Hayasaka, Saldana, S, Bryan, RN, Demos, KE, Desiderio, L, **Erickson, KI**, Espeland, MA, Nasrallah, IM, Wadden, T, Laurienti, P. (2016). Relative differences in resting-state brain connectivity associated with long-term intensive lifestyle intervention. *Psychoneuroendocrinology*, 74: 231-239.
127. Chaddock-Heyman, L, **Erickson, KI**, Chappell, MA, Kienzler, C, Johnson, CL, Knecht, A, Drollette, ES, Raine, LB, Scudder, MR, Kao, SC, Hillman, CH, Kramer, AF. (2016). Aerobic fitness is associated with greater hippocampal cerebral blood flow in children. *Developmental Cognitive Neuroscience*, 20: 52-8.
128. Donofry, SD, Roecklein, KA, Wildes, JE, Miller, MA, & **Erickson, KI** (2016). Alterations in Emotion Generation and Regulation Neurocircuitry in Depression and Eating Disorders: A Comparative Review of Structural and Functional Neuroimaging Studies. *Neuroscience and Biobehavioral Reviews*, 68: 911-927.
129. Drollette, ES, Scudder, MR, Raine, LB, Moore, RD, Pontifex, MB, **Erickson, KI**, Hillman, CH. (2016). The sexual dimorphic association of cardiorespiratory fitness to working memory in children. *Developmental Science*, 19: 90-108.
130. Espeland, MA, **Erickson, KI**, Neiberg, RH, Jakicic, JM, Wadden, TA, Wing, RR, Desiderio, L, Erus, G, Hsieh, MK, Davatzikos, C, Maschak-Carey, BJ, Laurienti, PJ, Demos-McDermott, K, Bryan, RN. (2016). Brain and white matter hyperintensity volumes after ten years of random assignment to lifestyle intervention. *Diabetes Care*, 39: 764-71.
131. Gildengers, AG, Butters, MA, Albert, SM, Anderson, SJ, Dew, MA, **Erickson, KI**, Garand, L, Karp, JF, Lockovich, MH, Morse, J, Reynolds, CF. (2016). The design and implementation of an intervention development study: Retaining Cognition While Avoiding Late-Life Depression. *American Journal of Geriatric Psychiatry*, 24: 444-54.
132. Jackson, PA, Pialoux, V, Corbett, D, Drogos, L, **Erickson, KI**, Eskes, GA, Poulin, MJ. Promoting brain health through exercise and diet in older adults: a physiological perspective (2016). *Journal of Physiology*, 594: 4485-98.
133. Jorgensen, L, Palmer, C, Pratt, S, **Erickson, KI**, Moncrieff, D. (2016). The effect of decreased audibility on MMSE performance: a measure commonly used for diagnosing dementia. *Journal of the American Academy of Audiology*, 27: 311-323.
134. Lukach, AJ, Jedrziwski, MK, Grove, GA, Mechanic-Hamilton, DJ, Williams, SS, Wollam, ME, **Erickson, KI**. (2016). Rhythm Experience and Africana Culture Trial (REACT!): A culturally salient intervention to promote neurocognitive health, mood, and well-being in older African Americans. *Contemp Clin Trials*, 48: 41-5.

Kirk I. Erickson, Ph.D.

135. Nagamatsu, LS, \*Weinstein, AM, **Erickson, KI**, Fanning, J, Awick, EA, Kramer, AF, McAuley, E. (2016). Exercise mode moderates the relationship between mobility and basal ganglia volume in healthy older adults. *Journal of the American Geriatric Society*, 64: 102-108.
136. \*Oberlin, LE, Verstynen, TD, Burzynska, AZ, Voss, MW, Prakash, RS, Chaddock-Heyman, L, Wong, C, Fanning, J, Awick, E, Gothe, N, Phillips, SM, Mailey, E, Ehlers, D, Olson, E, Wojcicki, T, McAuley, E, Kramer, AF, **Erickson, KI**. (2016). White matter microstructure mediates the relationship between cardiorespiratory fitness and spatial working memory in older adults. *NeuroImage*, 131: 91-101.
137. Raji, CA, Merrill, DA, Eyre, H, Malla, S, Torosyan, N, **Erickson, KI**, Lopez, OL, Becker, JT, Carmichael, OT, Gach, HM, Thompson, PM, Longstreth, WT, Kuller, LH. (2016). Longitudinal relationships between caloric expenditure and gray matter in the Cardiovascular Health Study. *Journal of Alzheimer's Disease*, 52: 719-29.
138. ^Stillman, CM, \*Cohen, J, Lehman, M, **Erickson, KI**. (2016). Mediators of physical activity on neurocognitive function: a review at multiple levels of analysis. *Frontiers in Human Neuroscience*, 10: 626.
139. ^Stillman, CM, Watt, JC, Grove, GA, Wollam, ME, Uyar, F, Mataro, M, Cohen, NJ, Howard, DV, Howard, JH, **Erickson, KI**. (2016). Physical activity is associated with impaired implicit learning but enhanced relational memory and executive functioning in young adults. *PlosOne*, 11(9):e0162100.
140. Yeh, FC, Vettel, JM, Singh, A, Poczos, B, Grafton, S, **Erickson, KI**, Tseng, WYI, Verstynen, TD. (2016). Quantifying differences and similarities in whole-brain white matter architecture using local connectome fingerprints. *PLOS Computational Biology*, 12: e1005203.
141. Barha, C, Galea, L, Nagamatsu, L, **Erickson, KI**, Ambrose, TL. (2017). Personalizing exercise recommendations for brain health: considerations and future directions. *British Journal of Sports Medicine*, 51: 636-639.
142. Hillman, CH, **Erickson, KI**, Hatfield, BD. (2017). Run for your life! Childhood physical activity effects on brain and cognition. *Kinesiology Review*, 6: 12-21.
143. Karim, HT, Huppert, TJ, **Erickson, KI**, Wollam, M, Sparto, PJ, Sejdic, E, VanSwearingen, JM. (2017). Motor sequence learning-induced neural efficiency in functional brain connectivity. *Behavioral Brain Research*, 319: 87-95.
144. Nadkarni, NK, Lopez, OL, Perera, S, Studenski, SA, Snitz, BE, **Erickson, KI**, Mathis, CA, Nebes, RD, Redfern, M, Klunk, WE. (2017). Cerebral amyloid deposition and dual-tasking in cognitively normal, mobility unimpaired older adults. *Journal of Gerontology: Medical Sciences*, 72: 431-437.
145. Nunley, KA, Leckie, RL, Orchard, TJ, Costacou, T, Aizenstein, HJ, Jennings, JR, **Erickson, KI**, Rosano, C. (2017). Physical activity and hippocampal volume in middle-aged patients with type 1 diabetes. *Neurology*, 88(16)1564-1570.
146. Rosano, C, Guralnik, J, Pahor, M, Glynn, NW, Newman, AB, Ibrahim, TS, **Erickson, KI**, Cohen, R, Shaaban, CE, MacCloud, RL, Aizenstein, HJ. (2017). Hippocampal response to a 24-month physical activity intervention in sedentary older adults. *Am J Geriatr Psychiatry*, 25: 209-17.
147. Wilckens, KA, Hall, MH, **Erickson, KI**, Germain A, Nimgaonkar, VL, Monk, TH, Buysse, DJ. (2017). Task switching in older adults with and without insomnia. *Sleep Medicine*, 30:113-120.
148. Khasawinah, S, Chuang, YF, Caffo, B, **Erickson, KI**, Kramer, AF, Carlson, MC. (2017). The association between functional connectivity and cognition in older adults. *Journal of Systems and Integrative Neuroscience*, 3: 1-10.
149. ^Stillman, CM, Lopez, OL, Becker, JT, Kuller, LH, Mehta, PD, Tracy, RP, **Erickson, KI**. (2017). Physical activity reduces plasma  $\beta$  amyloid levels and decreases risk for cognitive impairment in older adults: Longitudinal results from the Cardiovascular Health Study. *Annals of Clinical and Translational Neurology*, 4: 284-91.
150. ^Stillman, CM, Weinstein, AM, Gianaros, PJ, Marsland, AM, **Erickson, KI**. (2017). Body-brain connections: the effects of obesity and behavioral interventions on neurocognitive aging. *Frontiers in Aging Neuroscience*, 9: 115.
151. \*Gujral, S, Aizenstein, H, Reynolds, CF, Butters, MA, **Erickson, KI**. (2017). Exercise effects on depression: possible neural mechanisms. *Gen. Hosp. Psychiatry*, 49: 2-10.
152. Brown, BM, Sohrabi, HR, Taddei, K, Gardener, SL, Rainey-Smith, SR, Peiffer, JJ, Xiong, C, Fagan, AM, Benzinger, T, Buckles, V, **Erickson, KI**, Clarnette, R, Shah, T, Masters, CL, Weiner, M, Cairns, N, Rossor, M, Graff-Radford, NR, Salloway, S, Voglein, J, Laske, C, Noble, J, Schofield, PR, Bateman, RJ, Morris, JC, Martins, RN (2017). Habitual exercise levels are associated with cerebral amyloid load in presymptomatic autosomal dominant Alzheimer's disease. *Alzheimer's & Dementia*, 13: 1197-1206.

Kirk I. Erickson, Ph.D.

153. Shaaban, CE, Aizenstein, HJ, Jorgensen, DJ, MacCloud, RL, Meckes, NA, **Erickson, KI**, Glynn, NW, Mettenberg, J, Guralnik, J, Newman, AB, Ibrahim, TS, Laurienti, PJ, Vallejo, AN, Rosano, C. (2017). In Vivo Imaging of Venous Side Cerebral Small-Vessel Disease in Older Adults: an MRI method at 7T. *AJNR American Journal of Neuroradiology*, 38: 1923-1928.
154. DiNapoli, E, Gebara, MA, Kho, T, Butters, MA, Gildengers, A, Albert, S, Dew, MA, **Erickson, KI**, Reynolds, C, Karp, J. (2017). Subjective-Objective Sleep Discrepancy in Older Adults with MCI and Subsyndromal Depression. *Journal of Geriatric Psychiatry and Neurology*, 30:316-323.
155. \*Oberlin, LE, Waiwood, A, Cumming, T, Marsland, A, Bernhardt, J, **Erickson, KI**. (2017). Effects of physical activity on post-stroke cognitive function: a meta-analysis of randomized controlled trials. *Stroke*, 48: 3093-3100.
156. Valkenborghs, S, Visser, M, Dunn, A, **Erickson, KI**, Nilsson, M, Callister, R, van Vliet, P. (2017). AExaCTT – Aerobic Exercise and Consecutive Task-Specific Training for the Upper Limb After Stroke: Protocol for a Randomized Controlled Pilot Study. *Contemporary Clinical Trials*, 7: 179-85
157. Espeland, ME, Luchsinger, J, Neiberg, R, Carmichael, O, Laurienti, P, Pi-Sunyer, F, Wing, R, Cook, D, Horton, E, Casanova, R, **Erickson, KI**, Bryan, R. (2018). Long-term impact of intensive lifestyle intervention on cerebral blood flow. *Journal of the American Geriatrics Society*. 66(1): 120-126.
158. Chaddock-Heyman, L, Weng, TB, Kienzler, C, **Erickson, KI**, Voss, MW, Drollette, E, Raine, L, Kao, SC, Hillman, CH, Kramer, AF. (2018). Scholastic performance and functional connectivity of brain networks in children. *PlosOne*. 13(1): e0190073
159. \*Gujral, S, McAuley, E, \*Oberlin, LE, Kramer, AF, **Erickson, KI**. (2018). Neural predictors of adherence to a 12-month randomized physical activity trial. *Psychosomatic Medicine*. 80: 69-77.
160. Myers, JS, **Erickson, KI**, Sereika, S, Bender, C. (2018). Exercise as an intervention to mitigate decreased cognitive function from cancer and cancer treatment. *Cancer Nursing*, 41: 327-343.
161. Kundu, S, Kolouri, S, **Erickson, KI**, Kramer, AF, McAuley, E, Rohde, GK. (2018). Discovery and visualization of structural biomarkers from MRI using Transport-Based Morphometry. *Neuroimage*, 167: 256-75.
162. Wilckens, KA, **Erickson, KI**, Wheeler, ME. (in press). Physical activity and cognition: a mediating role of efficient sleep. *Behavioral Sleep Medicine*.
163. ^Stillman, CM, ^Uyar, F, Huang, H, Grove, GA, Watt, JC, Wollam, ME, **Erickson, KI**. (2018). Cardiorespiratory fitness is associated with enhanced hippocampal functional connectivity in healthy young adults. *Hippocampus*, 28: 239-247.
164. Hillman, C, McAuley, E, **Erickson, KI**, Liu-Ambrose, T, Kramer, AF. (in press). On mindful and mindless physical activity and executive function: a response to Diamond and Ling (2016). *Developmental Neuroscience*.
165. ^Stillman, CM, **Erickson, KI**. (2018). Physical activity as a model for health neuroscience. *Annals of the New York Academy of Science*. 1428: 103-111.
166. Gentry, A, Grove, G, Crisafio, M, Donahue, P, Watt, J, **Erickson, KI**, Bender, C. (2018). Protocol for exercise program in cancer and cognition (EPICC): a randomized controlled trial of the effects of aerobic exercise on cognitive function in postmenopausal women with breast cancer receiving aromatase inhibitor therapy. *Contemporary Clinical Trials*, 67: 109-115.
167. Smagula, SF, Karim, HT, Rangarajan, A, Pasquini Santos, F, Wood, SC, Santini, T, Jakicic, JM, Reynolds, CF, Cameron, J, de Vallejo, AN, Butters, MA, Rosano, C, Ibrahim, TS, **Erickson, KI**, Aizenstein, HJ. (2018). Association of hippocampal substructure resting-state functional connectivity with memory performance in older adults. *American Journal of Geriatric Psychiatry*, 26: 690-699.
168. Jedrzejewski, MK, Meekins, D, Gorka, SA, Wollam, ME, Williams, M, Grove, G, Lwanga, C, Stillman, CM, **Erickson, KI**. (2018). A randomized controlled trial to test the impact of African Dance on cognitive function and risk of dementia: the REACT! Study – Anecdotal evidence on feasibility. *Journal of Mental Health and Clinical Psychology*, 2(1): 12-13.
169. Peven, J, Grove, G, Jakicic, JM, Alessi, MG, **Erickson, KI**. (2018). Associations between short and long bouts of physical activity with cognitive function in older adults. *Journal of Cognitive Enhancement*, 2: 137-145.
170. Esteban-Cornejo, I, Catena, A, Hillman, CH, Kramer, AF, **Erickson, KI**, Ortega, FB. (2018). Commentary: At least eighty percent of brain grey matter is modifiable by physical activity: A review study. *Frontiers in Human Neuroscience*, 12: 195.

Kirk I. Erickson, Ph.D.

171. Hall, P, Bickel, W, **Erickson, KI**, Wagner, D. (2018). Neuroimaging, neuromodulation, and population health: The neuroscience of chronic disease prevention. *Annals of the New York Academy of Sciences*. 1428: 240-256.
172. Wilckens, KA, Tudorascu, D, Snitz, BE, Price, J, Aizenstein, HJ, Lopez, O, **Erickson, KI**, Lopresti, B, Laymon, C, Minhas, D, Mathis, C, Buysse, DJ, Klunk, W, Cohen, A. (2018). Sleep moderates the relationship between amyloid beta and memory recall. *Neurobiology of Aging*. 71: 142-148.
173. Stillman, CM, Donahue, PT, Williams, MF, Callas, M, Lwanga, C, Brown, C, Wollam, ME, Jedrziwski, MK, Kang, C, **Erickson, KI**. (in press). Weight loss outcomes from a pilot study of African Dance in older African Americans. *Obesity*.
174. Galloway, M, Marsden, DL, Callister, R, **Erickson, KI**, Nilsson, M, English, C. (in press). What is the dose-response relationship between exercise and cardiorespiratory fitness after stroke? A systematic review. *Physical Therapy*.

### **Submitted Manuscripts**

1. Bento-Torres, J, Bento-Torres, NVO, Stillman, CM, Grove, GA, Huang, H, Uyar, F, Watt, JC, Wollam, ME, **Erickson, KI**. Associations between cardiorespiratory fitness, physical activity, intraindividual variability and cingulate cortex in younger adults.
2. Boyle, C, Raji, CA, **Erickson, KI**, Lopez, OL, Becker, JT, Gach, HM, Longstreth, WT, Popov, M, Kuller, L, Carmichael, OT, Thompson, PM. Estrogen and brain structure in a multi-center cohort of post-menopausal women.
3. Chaddock-Heyman, L, **Erickson, KI**, Kienzler, C, Drollette, ES, Raine, LB, Kao, SC, Bensken, J, Weissshappel, R, Castelli, DM, Hillman, CH, Kramer, AF. Physical activity increases white matter microstructure in children.
4. Chen, FT, **Erickson, KI**, Huang, H, Chang, YK. The association between exercise type and white matter integrity in older adults: a diffusion tensor imaging study.
5. DiPietro, L, Campbell, WW, Buchner, DM, **Erickson, KI**, Powell, KE, Bloodgood, B, Hughes, T, Day, KR, Piercy, KL, Vaux-Bjerke, A, Olsen, R. The importance of physical activity to physical function in aging: a systematic review.
6. Donofry, SD, Jakicic, JM, Rogers, RJ, Watt, JC, Roecklein, KA, **Erickson, KI**. Functional network architecture in obesity: comparison of task-evoked and resting state connectivity.
7. Dostalova, R, Stillman, C, **Erickson, KI**, Slepicka, P, Mudrak, J. The relationship between physical activity, perceived health, and cognitive function in older adults.
8. **Erickson, KI**, Hillman, C, Stillman, CM, Ballard, RM, Bloodgood, B, Conroy, DE, Macko, R, Marquez, DX, Petruzzello, SJ, Powell, KE. Physical activity and cognition: a review of the 2018 Physical Activity Guidelines.
9. Esteban-Cornejo, I, Hillman, CH, Kramer, AF, **Erickson, KI**, Ortega, F. Fitness, cortical thickness and surface area in overweight/obese children from the ActiveBrains Project: the mediating role of body composition and relationship with intelligence.
10. Kundu, S, **Erickson, KI**, McAuley, E, Kramer, AF, Rhode, G. Aerobic fitness is associated with brain tissue distribution in older adults.
11. Kuo, JH, Parisi, JM, **Erickson, KI**, Nahin, R, Rapp, SR, Snitz, B, Williamson, J, Fitzpatrick, A, Carlson, MC. Late-life lifestyle activity as a buffer for cognitive decline.
12. Lehman, DE, Leckie, RL, Gianaros, PJ, **Erickson, KI**, Sereika, SM, Kuan, DCH, Manuck, SB, Ryan, CM, Yao, JK, Muldoon, MF. The effects of omega-3 fatty acids on neuropsychological functioning and brain morphology in mid-life adults: a randomized clinical trial.
13. McSween, MP, Coombes, JS, MacKay, CP, Rodriguez, AD, **Erickson, KI**, Copland, DA, McMahon, KL. The immediate effects of acute aerobic exercise on cognition in healthy older adults: a systematic review.
14. Miller, MA, Germain, A, Van Cott, AC, Donofry, SD, **Erickson, KI**, Roecklein, KA. Circadian disruption as a mechanism in long-term mood and cognitive impairments following TBI.
15. Powell, KE, King, AC, Buchner, D, Campbell, W, DiPietro, L, **Erickson, KI**, Hillman, CH, Jakicic, JM, Janz, KF, Katzmarzyk, PT, Kraus, WE, Macko, RF, Marquez, DX, McTiernan, A, Pate, RR, Pescatello, LS, Whitt-Glover, MC. The scientific foundation for the 2018 physical activity guidelines for Americans.
16. Rodriguez Ayllon, M, Cadenas-Sanchez, C, Estevez-Lopez, F, Ernesto Munoz, N, Mora Gonzalez, J, Migueles, JH, Molina-Garcia, P, Henriksson, H, Mena-Molina, A, Martinez-Vizcaino, V, Catena, A, Lof, M, **Erickson, KI**,

Kirk I. Erickson, Ph.D.

Lubans, D, Ortega, FB, Esteban-Cornejo, I. Role of physical activity and sedentary behavior in the mental health of preschoolers, children and adolescents: a systematic review and meta-analysis.

17. Shaaban, CE, Aizenstein, HJ, Jorgensen, DR, MacCloud, RL, Meckes, NA, **Erickson, KI**, Glynn, N, Mettenberg, J, Guralnik, J, Newman, AB, Ibrahim, TS, Laurienti, PJ, Vallejo, AN, Pahor, M, Rosano, C. Physical activity and cerebral small vessel integrity in older adults.
18. Valkenborghs, SR, **Erickson, KI**, Nilsson, M, van Vliet, P, Callister, R. Feasibility of aerobic interval training in non-ambulant persons after stroke.
19. Valkenborghs, SR, van Vliet, P, Nilsson, M, Zalewska, K, Visser, M, **Erickson, KI**, Callister, R. Aerobic exercise and consecutive task-specific training (AExaCTT) for upper limb recovery after stroke: a randomized controlled pilot study.
20. Verstynen TD, \*Leckie RL, \*Weinstein AM, Jakicic JM, Rofey DL, **Erickson KI**. Weight-related variation in cortico-basal ganglia connectivity predicts inefficient executive control processing.
21. Vo, LTK, Wang, MY, Kramer, AF, Lee, H, Boot, WR, Voss, MW, **Erickson, KI**, Walther, DB. Nonheme iron captured by the time-averaged T2\* signal predicts learning abilities.

## **Editorials:**

1. **Erickson, KI.** (2013). Therapeutic effects of exercise on cognitive function. *Journal of the American Geriatric Society*, 61: 2038-9.
2. Bherer, L, **Erickson, KI**, Liu-Ambrose, T. (2013). Physical Exercise and Brain Functions in Older Adults. *Journal of Aging Research*, 197326: 1-2.
3. Hall, PA, **Erickson, KI**, Gianaros, PJ (2017). The neurobiology of health communication. *Psychosomatic Medicine*, 79(4):37-38.

## **Book Chapters**

1. Kramer, AF, **Erickson, KI**, McAuley, E. (2008). Effects of physical activity on cognition and brain. Stuss, DT, Winocur, G, Robertson, IH. (Eds), Cognitive neurorehabilitation: Evidence and applications (2<sup>nd</sup> Edition). United Kingdom: Cambridge University Press.
2. **Erickson, KI**, Korol, DL. (2009). The effects of hormone replacement therapy on the brains of postmenopausal women: A review of human neuroimaging studies. Chodzko-Zajko, W, Kramer, AF., Poon, L. (Eds), Enhancing Cognitive Functioning and Brain Plasticity (1<sup>st</sup> Edition).
3. **Erickson, KI.** (2011). Augmenting brain and cognition by aerobic exercise. *Foundations of Augmented Cognition. Directing the Future of Adaptive Systems*, Volume 6780, p. 30-38.
4. **Erickson, KI.** (2012). Physical Activity and Brain Functions. Blair, S, Haskell, B, Bouchard, C, (Eds). Physical Activity and Health (2<sup>nd</sup> Edition). Human Kinetics.
5. **Erickson, KI**, \*Miller, DL, \*Weinstein, AM. (2012). Physical activity training on brain and cognition. Wahl, HW, Tesch-Romer, C, Ziegelmann, J. (Eds). *Angewandte Gerontologie: Interventionen für ein gutes Altern in 100 Schlüsselbegriffen*. Kohlhammer.
6. **Erickson, KI**, Banducci, SE, Akl, SL. (2012). Effects of exercise on cognitive processing studied by MRI in elderly people. Boecker, H, Hillman, C, Scheef, L, Struder, HK. Functional Neuroimaging in Exercise and Sport Sciences. Springer, NY.
7. \*Miller, DL, \*Weinstein, AM, **Erickson, KI.** (2012). Structural plasticity induced by physical exercise. Boecker, H, Hillman, C, Scheef, L, Struder, HK. Functional Neuroimaging in Exercise and Sport Sciences. Springer, NY.
8. **Erickson, KI.** (2013). Exercise on the Brain. Pashler, Harold (Ed), Encyclopedia of the Mind. SAGE publications.
9. **Erickson, KI.** (in press). Aging, Training, and Brain Plasticity. Proceedings from the Marcilius-Kolleg Summer School Program.
10. Hillman, CH, **Erickson, KI.** (2012). Cognition, Exercise. Mooren, F & Skinner, J (Eds). Encyclopedia of Exercise Medicine in Health and Disease. Springer.
11. Voss, MW, **Erickson, KI.** (2013). Exercise effects on Brain and Cognition in Older Adults. Ekkakakis (Ed). Routledge Handbook of Physical Activity and Mental Health, Routledge.
12. **Erickson, KI** & Liu-Ambrose, T (in press). Exercise and Health on Brain Function. Schaie & Willis (Eds). Handbook for the Psychology of Aging.
13. **Erickson, KI** & Oberlin, LE. (2016). Exercise and Brain Functions. Park, Cabeza, Nyberg (Eds.) Handbook for the Cognitive Neuroscience of Aging.
14. Peven, JC, Stillman, CM, **Erickson, KI** (in press). Influence of Physical Exercise on Cognitive Aging. Heliman & Nadeau (Eds). Cognitive Changes and the Aging Brain.

## **Invited Lectures**

**[Keynote]** Fit body, fit brain: exercise is the key. American Congress of Rehabilitation Medicine, (Presented: October, 2018), Dallas, TX.

**[Keynote]** Exercise and Brain Health. Health Across the Lifespan (Presented: September, 2018), Magdeburg, Germany.

Healthy Brain Aging: Effects of Exercise. Promoting Healthy Brain Aging and Preventing Dementia: Research and Translation (June, 2018), Banff, CA.

Kirk I. Erickson, Ph.D.

Physical Activity Guidelines Report: Brain Health. American College of Sports Medicine (May, 2018), Minneapolis, MN.

Exercise effects on brain health in mid-life and older adults. American Psychological Society (May, 2018), San Francisco, CA.

NIH Science of Behavior Change. American Psychological Society (May, 2018), San Francisco, CA.

Exercise and Cognition. Presented at UPMC International Workshop (May, 2018), Chianciano Terme, Italy.

**[Keynote]** Aging, Exercise, and Brain Plasticity. Presented at Learning and Plasticity (April, 2018), Akaslampolo, Finland.

**[Keynote]** Effects of physical exercise and fitness on brain in old age: the state of the art and future projects. (March, 2018), University of Granada, Spain.

Brain plasticity throughout the lifespan and approaches for initiating health behaviors. Presented at Science Strategy Meeting for the Royal Society. (February, 2018), University of West Indies, Kingston, Jamaica.

How to maintain your aging brain. Presented at BRITE program, (January 2018), University of Pittsburgh, PA.

Therapy: targets and approaches to improve cognitive and sensory outcomes. Presented at NIH workshop on Sensory Impairment and Cognitive Decline. (October, 2017), Bethesda, MD.

Effects of exercise on brain and cognition in healthy aging. Presented at European Congress on Neuropsychology and practice (September, 2017), Paris, France.

**[Keynote]** Aging, Exercise, and Brain Plasticity. Presented, American College of Sports Medicine (June, 2017), Denver, CO.

Aging, Exercise, and Brain Plasticity. Presented, CIHR Summer Program in Aging (May, 2017), Montreal, Canada.

Exercise and brain plasticity. Presented, Reversibility Network Meeting (April, 2017), New York, NY.

Exercise and brain plasticity. Presented, Physical Exercise and Brain Health Symposium, University of California, Irvine (March, 2017), Irvine, CA.

Exercise and brain function. Brain, Behavior, and Cancer series. Presented, University of Pittsburgh (January 2017), Pittsburgh, PA.

Run for your life: exercise effects on brain and cognition. Presented, Western Psychiatry, University of Pittsburgh (January 2017), Pittsburgh, PA.

Aging, exercise, and brain plasticity. Society for Neuroscience (November, 2016), San Diego, CA.

**[Keynote]** - Aging, exercise, and brain plasticity. Interdisciplinary work in social psychiatry (November, 2016), Heidelberg, Germany.

Effects of exercise on brain outcomes. National Taiwan Sports University (August 2016), Taiwan, China.

Aging, Exercise, and Brain Plasticity. World Congress on Active Ageing (June 2016), Melbourne, Australia.

Fit body, fit brain: effects of exercise training on brain health. Umea Center for Functional Brain Imaging (June 2016), Umea, Sweden.

Fit body, fit brain: effects of exercise on the aging brain and biomarkers of AD. Fudacio ACE. University of Barcelona (May 2016), Barcelona, Spain.

Using technology to enhance exercise adherence in middle-aged adults. University of British Columbia (May 2016), Vancouver, BC.

Fit body, fit brain: effects of exercise on brain plasticity. New York Association for Neuropsychologists (April 2016), New York, NY.



Kirk I. Erickson, Ph.D.

**[Keynote].** Fit body, fit brain: effects of exercise on brain health. Active Living for Healthy Brains: a community engagement event (April 2016), Calgary, CA.

Exercise and brain plasticity. Presented at the American Association for Geriatric Psychiatry (March 2016), Washington DC.

New Research on Walking Effects on the Brain. Walk Works program, Indiana PA (March, 2016).

Fit body, fit brain. Presented at the University of Pittsburgh Winter Academy. West Palm Beach and Naples, Florida (February, 2016).

Exercise and Brain Plasticity. Presented at Neuroscience Colloquium, Syracuse University (January 2016). Syracuse, NY.

Predicting physical activity adherence from brain imaging data. Presented at the Behavioral and Psychological Phenotyping NIH Workshop (December 2015). Bethesda, MD.

Exercise and Brain Plasticity. Presented at the Network on Reversability, Rockefeller University (October, 2015). New York City, NY.

Exercise and hippocampal function. Presented at the Swiss Memory Workshop (August, 2015), Spiez, Switzerland.

Exercise and Brain Health. Presented at the 1<sup>st</sup> Congreso Internacional de Educacion Fisica y Deporte Escolar (August, 2015), Lima, Peru.

Exercise and brain plasticity. Presented at the University of Michigan (May, 2015), Ann Arbor, MI.

Effects of exercise on hippocampal volume and function. Presented at the Physiology Society (April, 2015). Edinburgh, UK.

Exercise and Human Brain Plasticity. Presented at the Neuroplasticity and Brain Repair Retreat (March, 2015). Los Angeles, CA.

Exercise and Brain Health. Presented at Annual Society for Experimental Neurotherapeutics (February, 2015). Washington D.C.

Moderators and Mediators of Exercise-induced brain plasticity. Presented at International Neuropsychological Society (February, 2015). Denver, CO.

Exercise and Brain Plasticity. Chronic Disorders Seminar (January, 2015), Pittsburgh, PA.

Preliminary results from the Look AHEAD Brain ancillary study. Presented at Look AHEAD Executive Steering Committee (November, 2014). Bethesda, MD.

Healthy Brain Aging. Presented at Wilkins Community Center (November, 2014). Pittsburgh, PA.

**[Keynote].** Aging, Exercise, and Brain Plasticity. Presented at Hong Kong Hospital Authority (October, 2014). Hong Kong.

**[Keynote].** Exercise and brain plasticity. Presented at International Society for Neuroimaging in Psychiatry (September, 2014). Halifax, Nova Scotia, CA.

**[Keynote].** Exercise and brain functions. Presented at Stroke Rehabilitation Research Workshop (July, 2014), Hamilton Island, Australia.

Aging, Exercise and Brain Plasticity. Presented at Summer Clinical Symposium, (July, 2014), Chicago, IL.

Aging and Exercise. Presented at Homewood Senior Center (June, 2014), Pittsburgh, PA.

Physical activity versus sedentary time. Presented at Institute of Medicine. Committee on the Public Health Dimensions of Cognitive Aging. Arnold and Mabel Beckman Center of the National Academies, (June, 2014), Irvine CA.

Kirk I. Erickson, Ph.D.

Moderators and mediators of exercise-related brain plasticity. Presented at PERFORM center – Concordia University (May, 2014), Montreal, CA.

Aging, Exercise and Cognition – a brief overview. Presented at Research Day – Aging Institute (April, 2014), Pittsburgh, PA.

Aging, Exercise and Cognition – an Overview. Presented at Cognitive Aging Conference – Overview talk (April, 2014), Atlanta, GA.

Exercise, obesity, and brain function throughout the lifespan. Presented at Illinois Transdisciplinary Obesity Prevention Program (February, 2014), Champaign, IL.

Aging, Exercise and Brain Plasticity. Presented at Association for the Advancement of Science (February, 2014), Chicago, IL.

Update on exercise and brain health. Communication Sciences Roundtable Talk (January, 2014), Pittsburgh, PA.

Exercise and Brain Health. Presented at International College of Geriatric Psychoneuropharmacology (October, 2013), Pittsburgh, PA.

Aging, Exercise, and Brain Plasticity. Presented at Neuroscience Colloquium. Rosalind Franklin Medical School (September, 2013), Chicago, IL.

Lifestyle variables and brain health. Presented at Healthy Brain Workshop (September, 2013), Pittsburgh, PA.

Exercise and Brain Plasticity. Presented at National Space and Biomedical Research Institute (August, 2013), Houston, TX.

Exercise and Brain Health. Presented at Nutrition and Brain Conference (July, 2013), Washington DC.

Aging, Exercise, and Brain Plasticity. Presented at Pittsburgh Parkinson's Disease Support Group, (June, 2013), Pittsburgh, PA.

Effects of exercise on brain structure and function. Presented at Academy of Behavioral Medicine Research – Acceptance presentation for the Neal Miller Junior Investigator Prize. (June, 2013), Monterrey, CA.

Exercise and dementia. Presented at American College of Sports Medicine (May, 2013), Indianapolis, IN.

Exercise, Brain Health, and Alzheimer's Disease. Presented at American College of Sports Medicine (May, 2013), Indianapolis, IN.

Exercise and brain plasticity. Presented at University of Medicine and Dentistry at New Jersey (March, 2013), Newark, NJ.

Exercise and brain health in late life [Keynote Address]. Presented at Motor and Cognitive Performance Across the Lifespan (February, 2013), Stuttgart, Germany.

Exercise and brain health in late life. Presented at Department of Psychology Colloquium Series – University of Texas, Dallas (February, 2013), Dallas, TX.

Exercise and Brain Plasticity in Late Adulthood. Presented at University of Pennsylvania Institute Visiting Scholars Series (January, 2013), Philadelphia, PA.

Aging, Exercise, and Brain Plasticity. Presented at Rutgers University Psychology Department Colloquium Series (October, 2012), Newark, NJ.

Aging, Exercise, and Brain Plasticity. Presented at Marquette University Neuroscience Colloquium Series (October, 2012), Milwaukee, WI.

Exercise and brain health in late life. To be presented at National Institute of Aging (October, 2012), Bethesda, MD.

Exercise, Aging, and Brain Plasticity. Presented at Multimodal Neuroimaging Training Program (June, 2012), Pittsburgh, PA.

Kirk I. Erickson, Ph.D.

Exercise, training, and Alzheimer's Disease. Presented at NIH Alzheimer's Disease Summit (May 2012), Bethesda, MD.

Exercise and Brain Plasticity in Humans. Presented at Brain Plasticity: Itself a plastic concept? (May, 2012), New York City, NY.

Physical activity, Cognition, and Brain-derived Neurotrophic Factor. Presented at Seizing the Opportunity: Planning and Developing Future Directions in Aging Research Using the Canadian Longitudinal Study on Aging (April, 2012), Vancouver, Canada.

Exercise and brain plasticity in late life. Presented at Seizing the Opportunity: Planning and Developing Future Directions in Aging Research Using the Canadian Longitudinal Study on Aging (April, 2012), Vancouver, Canada.

Physical activity and memory functions. Presented at Oxford Athletic Club for Alzheimer's Disease Research Center (April, 2012), Wexford, PA.

Physical activity and brain function in late life. Presented at Pittsburgh Alzheimer's Disease Research Center Review Conference (April, 2012), New Orleans, LA.

Exercise effects on brain health in late adulthood. Presented at American Society for Aging (March, 2012), Washington D.C.

Effects of exercise on brain plasticity. Presented at 5<sup>th</sup> NBCNS Research Symposium (March, 2012), Stockholm, Sweden.

Obesity and physical activity on brain health. Presented at Department of Nutritional Sciences (February, 2012), Champaign-Urbana, IL.

The Emerging Field of Health Neuroscience. Presented at Pittsburgh Undergraduate Neuroscience Club (February, 2012), Pittsburgh, PA.

The Emerging Field of Health Neuroscience. Presented at Pittsburgh Panther Psychology Club (January, 2012), Pittsburgh, PA.

Physical activity effects on brain health in late life. Presented at the Pittsburgh Alzheimer's Disease Research Center (November, 2011), Pittsburgh, PA.

Aging, Exercise, and Brain Health. Presented at Max Planck Institute (November, 2011), Berlin, Germany.

Physical activity effects on brain health. Presented at Center for the Neural Basis of Cognition (October, 2011), Seven Springs, PA.

The potential preventive benefits of exercise on Alzheimer's Disease. Presented at Western Pennsylvania Alzheimer's Association (October, 2011), Mars, PA.

Physical activity and brain health. Presented at Satellite symposium on Cognitive Neuroscience of Aging at International Conference on Cognitive Neuroscience (September, 2011), Palma, Spain.

The effects of physical activity on brain health in late life. Presented at Tannenbaum brain health symposium (September, 2011), Toronto, Canada.

From video games to sports: the influence of leisure activities on brain health. Presented at the American Museum of Natural History (September, 2011), New York, NY.

Exercise training on brain and cognition. Presented at Center for Advanced Study of Language (August, 2011), College Park, MD.

Effects of Exercise on Brain and Cognitive Function. Presented at 13<sup>th</sup> Annual Harvard Postgraduate Nutrition Symposium, (July, 2011), Boston, MA.

Aging and exercise: New Directions. Presented at Claude D. Pepper Center for Older Americans, (April, 2011), Pittsburgh, PA.

Kirk I. Erickson, Ph.D.

Aging, Exercise, and Brain Health. Presented at Mood, Brain, and Biology working group, (March, 2011), Pittsburgh, PA.

Aging, Exercise, and Brain Health. Presented at Pittsburgh VA, (February, 2011), Pittsburgh, PA.

Physical Activity as a means to enhance cognitive and brain health. Presented at International Neuropsychological Society (February, 2011), Boston, MA.

Aging, Exercise, and Brain Health. Presented at Institute on Aging (January, 2011), Pittsburgh, PA.

Aging, Exercise, and Brain Health. Presented at University of Heidelberg (January, 2011), Heidelberg, Germany.

Exercise and Brain Plasticity in Late Adulthood. Presented for the Graduate School of Public Health at University of Pittsburgh (November, 2010).

Aging, Exercise, and Brain Plasticity. Presented for the Department of Kinesiology at Penn State University (September, 2010).

Aging, Exercise, and Brain Plasticity. Presented for the Claude D. Pepper Center for Older Americans, University of Pittsburgh (September, 2010).

Aging, Exercise, and Brain Plasticity. Presented at Pittsburgh Mind Body Center (January, 2010), Pittsburgh, PA.

Aging, training, and neuroplasticity. Presented at Aging & Training Summer School Program, University of Heidelberg, Germany (September, 2009), Heidelberg, Germany.

Aerobic exercise: A method for preventing and reversing age-related cognitive and neural decline. Presented (April, 2008), Stockholm, Sweden.

## **Select Conference Symposia**

(\* student/post-doc presentation; † Chaired symposium)

**Erickson, KI.** Modifiers of the effects of exercise on the brain. Presented at the International Neuropsychological Society conference (February, 2015), Denver, CO.

\* Weinstein, AM, Whitmoyer, P, Saxton, J, Morrow, L, Snitz, B, **Erickson, KI.** The relationship between physical activity and neurocognitive function in adults with cognitive impairment. Presented at Alzheimer's Association International Conference (July, 2012), Vancouver, Canada.

**Erickson, KI,** Weinstein, AM, Verstynen, TD, Voss, MW, Prakash, RS, Woods, J, McAuley, E, Kramer, AF. The influence of an aerobic exercise intervention on brain volume in late adulthood. Presented at Alzheimer's Association International Conference (July, 2012), Vancouver, Canada.

\* Weinstein, AM, Verstynen, TD, Prakash, RS, Voss, MW, Chaddock, L, Szabo, A, Kramer, AF, **Erickson, KI.** Gray matter volume, cardiorespiratory fitness, and cognitive function: a whole brain, voxel-based mediation analysis. Presented at Society for Neuroscience (November, 2012), New Orleans, LA.

\* Verstynen, TD, Leckie, RL, Weinstein, AM, Jakicic, JM, Rofey, DL, **Erickson, KI.** Altered cortico-basal ganglia connectivity with obesity predicts inefficient executive control processing. Presented at Society for Neuroscience (November, 2012), New Orleans, LA.

Basak, C, Kim, J, Voss, MW, Prakash RS, **Erickson, KI,** Szabo, A, McAuley, E, Kramer, AF. Determining a causal relationship between fitness and cognition in late adulthood. Presented at Cognitive Aging Conference (April, 2012), Atlanta, GA.

† **Erickson, KI.** Effects of physical activity training on cognitive and brain function. Presented at International Society for Neuroimaging in Psychiatry (September, 2011), Heidelberg, Germany.

Kirk I. Erickson, Ph.D.

**Erickson, KI.** Aging, Exercise, and Brain Health. Presented at International Conference on Augmented Cognition (July, 2011), Orlando, FL.

**Erickson, KI.** Aging, exercise, and brain health. Presented at International Neuropsychological Society (February, 2011). Boston, MA.

\* Weinstein, AM, Sutton, BP, Prakash, RS, Voss, MW, Chaddock, L, Szabo, A, Mailey, E, White, SM, Wojcicki, TR, McAuley, E, Kramer, AF, **Erickson, KI.** The effect of aerobic fitness on n-acetylaspartate and memory in neurologically healthy older adults. Presented at International Neuropsychological Society (February, 2011). Boston, MA.

Raji, C, **Erickson, KI,** Lopez, O, Becker, JT, Rosano, C, Newman, A, Kuller, LH. Effect of walking on gray matter volume in Alzheimer's Disease. Presented at the Radiological Society of North America (November, 2010), Chicago, IL.

**Erickson, KI.** Aging, Exercise, and Brain Function. Presented at Winter Conference on Brain Research (January, 2010), Breckenridge, CO.

**Erickson, KI.** Aging, Exercise, and neuroplasticity. Presented at Aging and Speech Communication Research Conference (October, 2009), Bloomington, IN.

**Erickson, KI.** Effect of aerobic exercise on hippocampal volume and function. Presented at the American College of Sports Medicine (May, 2009), Seattle, WA.

**Erickson, KI.** Aerobic Exercise: a method for preserving and enhancing cognitive and brain function in old age. Presented at Winter Conference on the Neurobiology of Learning and Memory (January, 2009), Park City, UT.

**Erickson, KI,** Kramer, AF. Aging and training-induced plasticity. Presented at the International Congress of Psychology (July, 2008), Berlin, Germany.

**Erickson, KI.** The relationship between brain structure and brain function in older adults: The influence of lifestyle factors and genetics. Presented at Society for Psychophysiological Research (October, 2007), Savannah, GA.

**Erickson, KI,** Kramer, AF. Aging and training-induced plasticity. Presented at Aging and Speech Communication Research Conference (October, 2007), Bloomington, IN.

Kramer, AF, **Erickson, KI,** Boot, W, Becic, E. Aging and Attention. Presented at Aging and Speech Communication Research Conference (October, 2007), Bloomington, IN.

**Erickson, KI,** Malkowski, E, Voss, MW, Colcombe, SJ, Kramer, AF. Physical fitness alters the locus of activity in the right prefrontal cortex of older adults during the encoding of non-famous faces. Presented at Cognitive Aging Conference (July, 2007), Adelaide, South Australia.

Basak, C, Voss, MW, Boot, W, **Erickson, KI,** Kramer, AF. Can older adults benefit from videogame training? Relationship among cognition, game performance and brain structure. Presented at the Cognitive Aging Conference (July, 2007), Adelaide, South Australia.

Prakash, RS, **Erickson, KI,** Snook, EM, Colcombe, SJ, Motl, RW, Kramer, AF. Altered patterns of brain activation in Multiple Sclerosis during response inhibition: An fMRI investigation. Presented at International Neuropsychological Society (February, 2007), Portland, OR.

Kirk I. Erickson, Ph.D.

Kramer, AF, Colcombe, SJ, **Erickson, KI**, Scalf, PE. Fitness training and the brain: From molecules to minds. Presented at Cognitive Aging Conference (April, 2006), Atlanta, GA.

**Erickson, KI**, Kramer, AF. Aging & Fitness: Implications for cognitive and cortical plasticity? Presented at Winter Conference on Brain Research (January, 2005), Breckenridge, CO.

Behrer, L, Kramer, AF, Colcombe, SJ, **Erickson, KI**, Peterson, M, McCarley, J, Becic, E. Cognitive plasticity and aging: The effect of laboratory-based dual-task training on attentional time-sharing. Presented at Cognitive Aging Conference (April, 2004), Atlanta, GA.

Nielson, KA, Yee, D, **Erickson, KI**, Bryant, T. Enhancement of delayed memory retrieval by arousal after learning: A possible intervention approach. Presented at Society for Applied Research in Memory and Cognition (July, 2003), Aberdeen, Scotland, UK.

Kramer, AF, Colcombe, SJ, **Erickson, KI**, Scalf, PE. Enhancing cognitive vitality in older adults. Presented at Chicagoland Symposium on Functional MRI of the Brain in Health and Disease (2003), Chicago, IL.

Kramer, AF, Colcombe, SJ, **Erickson, KI**, Scalf, PE, McAuley, E. Cognitive and brain plasticity of older adults. Presented at Society for Psychophysiological Research (October, 2003), Chicago, IL.

Colcombe, SJ, **Erickson, KI**, Kramer, AF. Neurocognitive decline in older adults: Descriptions and developments. Presented at Life Long Learning Conference (December, 2002), Yokohama, Japan.

Colcombe SJ, Kramer AF, **Erickson, KI**, Belopolsky, A, Webb A, Cohen N, McAuley E, Wszalek T. An fMRI examination of models of age-related decline in cognitive functioning. Presented at Cognitive Aging Conference (2002), Atlanta, GA.

## **Selected Posters**

(\* student/post-doc presentation; † Chaired symposium)

Raji, CA, **Erickson, KI**, Lopez, OL, Becker, JT, Carmichael, O, Gach, H. Energy expenditure is associated with brain injury in normal cognition, MCI, and AD. To be presented at Radiological Society of North America (November, 2012), Chicago, IL.

\* Alvarez, TA, Turney, IC, Leckie, R, Voss, MW, Prakash, RS, Chaddock, L, Szabo, A, Mailey, E, White, SM, Wojcicki, TR, Veira, VA, Martin, SA, Pence, BD, Woods, JA, McAuley, E, Kramer, AF, **Erickson, KI**. Aerobic fitness moderates and age-related decline in serum BDNF. Presented at Cognitive Aging Conference (April, 2012), Atlanta, GA.

\* Turney, IC, Weinstein, AM, Alvarez, TA, Prakash, RS, Voss, MW, Kim, J, Chaddock, L, Woods, JA, McAuley, E, Greenwood, PM, Parasuraman, R, Fryxell, KJ, Kramer, AF, **Erickson, KI**. Val66Met polymorphism is not associated with volume of the hippocampus or basal ganglia in older adults. Presented at Cognitive Aging Conference (April, 2012), Atlanta, GA.

Vo, LT, Wang, MY, Lee, H, Kramer, AF, **Erickson, KI**, Voss, MW, Prakash, RS, Walther, DB. Predicting individual differences in future learning success from T2\* images: physiological basis and mechanisms. Presented at Society for Neuroscience (November, 2011), Washington D.C.

Raji, CA, **Erickson, KI**, Lopez, OL, Kuller, LH, Gach, MG, Thompson, P. Regular fish consumption is neuroprotective and reduces risk for cognitive decline in the cardiovascular health study. Presented at Radiological Society of North America (November, 2011), Chicago, IL.

Kirk I. Erickson, Ph.D.

\* Garcia, J, **Erickson, KI**, Raji, C, Lopez, OL, Newman, A, Rosano, C, Kuller, L. Physical activity is predictive of dementia but not mortality. Presented at International Conference on Alzheimer's Disease (July, 2011), Paris, France.

\* Verstynen, T, Weinstein, AM, Schneider, WW, Jakicic, JM, **Erickson, KI**. Increased BMI is associated with globally decreased white matter integrity. Presented at Organization for Human Brain Mapping (June, 2011), Quebec City, CA.

\* Miller, DL, **Erickson, KI**, Prakash, RS, Voss, MW, Basak, C, Kim, JS, Chaddock, L, Szabo, A, Mailey, E, White, SM, Wojcicki, TR, McAuley, E, Kramer, AF. Fitness, cognition, and basal ganglia volume in older adults. Presented at Organization for Human Brain Mapping (June, 2011), Quebec City, CA.

\* Weinstein, AM, Milgrom, R, Casey, M, Miller, DL, Banducci, S, Akl, S, **Erickson, KI**. Investigating cue-related brain activity during task-switching. Presented at Cognitive Neuroscience Society (April, 2011), San Francisco, CA.

Fanning, J. T., Mullen, S. P., Szabo, A. N., **Erickson, K.I.**, Kramer, A. F., & McAuley, E. Individual Differences in Fitness and Memory Response Trajectories Across a 12-month Exercise Trial. Presented at the annual meeting of the Society of Behavioral Medicine (April, 2011), Washington, DC.

Mourany, L, Prakash, RS, Lee, H, Voss, MW, **Erickson, KI**, Boot, WR, Basak, C, Neider, MB, Simons, DJ, Fabiani, M, Gratton, G, Kramer, AF. Videogame training and cortical recruitment of the attentional and default-mode networks. Presented at Cognitive Neuroscience Society (April, 2011), San Francisco, CA.

Jelinek, PE, Leigh, SR, **Erickson, KI**. Allometry of sexual dimorphism in subcortical structures of the human brain. To be presented at the American Association of Physical Anthropologists. (April, 2011), Minneapolis, MN.

Onyewuenyi, IC, Christie, IC, **Erickson, KI**, Sheu, LK, Gianaros, PJ. Presence of the metabolic syndrome covaries with basal ganglia morphology and anhedonia. Presented at American Psychosomatic Society (March, 2011), San Antonio, TX.

Voss, M.W., **Erickson, K.I.**, Prakash, R.S., Basak, C., Chaddock, L., Kim, J.S., Alves, H., Heo, S., Szabo, A.N., White, S.M., Wojcicki, T.R., Mailey, E.L., Olson, E.A., Gothe, N., Potter, V.V., Martin, S.A., Pence, B.D., Cook, M.D., Woods, J.A., McAuley, E.M., & Kramer, A.F. Neurobiological markers on plasticity of brain networks in a randomized intervention trial of exercise training in older adults. Presented at the 2<sup>nd</sup> Biennial International Conference on Resting-State Connectivity (November, 2010), Milwaukee, WI.

Szabo, A. N., Mailey, E. L., White, S. M., Wójcicki, T. R., **Erickson, K.I.**, Voss, M., Kramer, A. F., & McAuley, E. Validating a non-exercise measure of cardiorespiratory fitness: Associations with brain structure and function. Paper presented at the annual meeting of the Gerontological Society of America (November 2010), New Orleans, LA.

Vo, L, Walther, D, Kramer, AF, **Erickson, KI**, Boot, WR, Lee, H, Voss, MW, Prakash, RS, Fabiani, M, Gratton, G, Wang, YM. Predicting training success for a video game: effect of number of subjects on prediction power. Presented at Organization for Human Brain Mapping (June, 2010), Barcelona, Spain.

Jelinek, PE, Leigh, SR, **Erickson, KI**. Sexual dimorphism of sub-cortical structures in the adult human brain using MRI. Presented at the American Association of Physical Anthropologists. (April, 2010), Albuquerque, NM.

Kirk I. Erickson, Ph.D.

Prakash, RS, Heo, S, **Erickson, KI**, Colcombe, SJ, Kramer, AF. Investigating effects of parametric manipulation and white matter integrity on age-related neural differences. Presented at Cognitive Aging Conference (April, 2010), Atlanta, GA.

Voss, MW, Prakash, RS, **Erickson, KI**, Basak, C, Chaddock, L, Kim, JS, Alves, H, Heo, S, Szabo, A, White, SM, Wojcicki, TR, Mailey, EL, Gothe, N, Olson, EA, McAuley, E, Kramer, AF. Plasticity of brain networks in a randomized intervention trial of exercise training in older adults. Presented at Cognitive Aging Conference (April, 2010), Atlanta, GA.

Kim, JS, Basak, C, **Erickson, KI**, Prakash, RS, Voss, MW, Fryxell, KJ, Parasuraman, R, Greenwood, PM, Kramer, AF. The effect of DBH genotype on executive control in healthy older adults. Presented at Cognitive Aging Conference (April, 2010), Atlanta, GA.

\* Miller, DL, McGarry, C, Lane, J, McLaren, M, Weinstein, AM, Brown, RL, **Erickson, KI**. Cueing the target: examining the effect of cues to ameliorate age-related deficits in attentional control. Presented at Cognitive Aging Conference (April, 2010), Atlanta, GA.

\* Weinstein, AM, Glaser, JR, Tunacao, JM, Brown, RL, Miller, DL, **Erickson, KI**. The effect of extended cueing periods on task-switch performance in late adulthood. Presented at Cognitive Aging Conference (April, 2010), Atlanta, GA.

Chaddock, L, **Erickson, KI**, Prakash, RS, Kim, JS, Voss, MW, VanPatter, M, Pontivex, MB, Raine, LB, Konkel, A, Hillman, CH, Cohen, NJ, Kramer, AF. A neuroimaging investigation of the association between aerobic fitness, hippocampal volume and memory performance in preadolescent children. Presented at Cognitive Neuroscience Society (April, 2010), Montreal, Canada.

Voss, MW, Prakash, RS, **Erickson, KI**, Boot, W, Basak, C, Neider, M, Fabiani, M, Gratton, G, Kramer, AF. Training-induced plasticity in large-scale brain networks from the acquisition of skilled space fortress performance. Presented at Cognitive Neuroscience Society (April, 2010), Montreal, Canada.

**Erickson, KI**, Miller, DL, Weinstein, AM, Jakicic, JM. How normal weight, overweight, and obese brains work differently: differential neural responses to food stimuli and inhibition tasks. Presented at Cognitive Neuroscience Society (April, 2010), Montreal, Canada.

Szabo, AN, Voss, M, **Erickson, KI**, White, SM, Wojcicki, T, Mailey, E, Kramer, AF, McAuley, E. Hippocampus volume, memory function, and frequency of forgetting in older adults. Presented at Gerontological Society of America (November, 2009), Atlanta, GA.

Vo, LTK, Walther, DB, Wang, YM, **Erickson, KI**, Boot, WR, Voss, MW, Prakash, RS, Kramer, AF. Predicting training success for individuals from patterns of pre-training fMRI activity. Presented at Human Brain Mapping Conference (June, 2009), San Francisco, CA.

**Erickson, KI**, Epstein, DE, Malkowski, EJ, Warrach, Z, Korol, DL. Voluntary exercise enhances place-learning in young male rats. Presented at Society for Neuroscience (November, 2007), San Diego, CA.

Kim, JS, **Erickson, KI**, Suever, BL, Colcombe, SJ, McAuley, E, Francis, BM, Kramer, AF. COMT and DBH genotype predict performance in healthy older adults. Presented at Society for Neuroscience (November, 2007), San Diego, CA.

**Erickson, KI**, Kim, JS, Suever, BL, Colcombe, SJ, McAuley, E, Francis, BM, Kramer, AF. COMT val158met polymorphism is associated with working memory and executive function in community-dwelling older adults. Presented at Cognitive Aging Conference (July, 2007), Adelaide, South Australia.



Kirk I. Erickson, Ph.D.

**Erickson, KI**, Suever, BL, Prakash, RS, Colcombe, SJ, Kramer, AF. Greater intake of vitamins B<sub>6</sub> and B<sub>12</sub> spares gray matter in healthy elderly: A voxel-based morphometry study. Presented at Cognitive Aging Conference (July, 2007), Adelaide, South Australia.

Alvarado, M, **Erickson, KI**, Kim, JS, Voss, MW, Colcombe, SJ, Kramer, AF. Higher physical fitness levels are associated with greater cortical activity in a dual-task paradigm. Presented at Cognitive Aging Conference (July, 2007), Adelaide, South Australia.

Kennedy, KM, **Erickson, KI**, Rodrigue, KM, Voss, MW, Kramer, AF, Raz, N. Age-related changes in regional brain volume: manual volumetry vs. voxel-based morphometry. Presented at Cognitive Neuroscience Society (April, 2007), New York, NY.

Prakash, RS, **Erickson, KI**, Colcombe, SJ, Kim, JS, Sutton, B, Kramer, AF. Age-related differences in the involvement of the prefrontal and parietal cortex in attentional control. Presented at Society for Psychophysiological Research (November, 2006), Vancouver, Canada.

Prakash, RS, Snook, EM, **Erickson, KI**, Colcombe, SJ, Webb, ML, Motl, RW, Kramer, AF. Cardiorespiratory Fitness: A Predictor of Cortical Plasticity in Multiple Sclerosis. Presented at Society for Psychophysiological Research (November, 2006), Vancouver, Canada.

**Erickson, KI**, Pruis, T, Debrey, S, Bohacek, J, Korol, DL. Estrogen and exercise interact to up-regulate BDNF levels in the hippocampus but not striatum of middle-aged brown-norway rats. Presented at Society for Neuroscience (October, 2006), Atlanta, GA.

Wadhwa, R, **Erickson, KI**, Colcombe, SJ, Kim, JS, Kramer, AF. Age-related differences in activation of the prefrontal cortex in response to modulation of levels of conflict. Presented at Society for Psychophysiological Research (2006), Vancouver, Canada.

Wadhwa, R, Snook, EM, **Erickson, KI**, Colcombe, SJ, Webb, ML, Motl, RW, Kramer, AF. Cardiorespiratory fitness: a predictor of cortical plasticity in multiple sclerosis. Presented at Society for Psychophysiological Research (2006), Vancouver, Canada.

Chang, SE, **Erickson, KI**, Ambrose, NG, Hasegawa-Johnson, M, Ludlow, CL. White matter development in left hemisphere speech-language regions differentiates stuttering children from normally fluent children: A diffusion tensor imaging (DTI) study. Presented at Society for Neuroscience (October, 2006), Atlanta, GA.

Kennedy, KM, **Erickson, KI**, Rodrigue, KM, Webb, M, Colcombe, SJ, Kramer, AF., Raz, N. Age-related differences in regional brain volumes: A manual volumetric vs voxel-based morphometry comparison. Presented at Human Brain Mapping (June, 2006), Florence, Italy.

**Erickson, KI**, Colcombe, SJ, Wadhwa, R, Bherer, L, Peterson, MS, Scalf, PE, Kim, JS, Alvarado, M, Kramer, AF. Training-induced plasticity in older adults: Effects of training on hemispheric asymmetry. Presented at Cognitive Aging Conference (April, 2006), Atlanta, GA.

Colcombe, SJ, Wadhwa, R, **Erickson, KI**, Scalf, PE, Kim, JS, Alvarado, M, Kramer, AF. Old brains do not learn new tricks: Intact functional specificity in the aging prefrontal cortex. Presented at Cognitive Aging Conference (April, 2006), Atlanta, GA.

Kirk I. Erickson, Ph.D.

Scalf, PE, Colcombe, SJ, McCarley, JS, **Erickson, KI**, Alvarado, M, Kim, JS, Wadhwa, R, Kramer, AF. Age-differences in the impact of functional field of view (FFOV) training on brain activation. Presented at Cognitive Aging Conference (April, 2006), Atlanta, GA.

Bherer, L, Kramer, AF, Peterson, MS, Colcombe, SJ, **Erickson, KI**, Becic, E. Training effects on dual-task performance in older adults: Further evidence for cognitive plasticity in attentional control. Presented at Cognitive Aging Conference (April, 2006), Atlanta, GA.

Chang, S, **Erickson, KI**, Ambrose, N. Structural brain abnormalities in children who stutter: Preliminary evidence for altered development in speech-relevant sensorimotor regions. Presented at Society for Neuroscience (November, 2005), Washington D.C.

**Erickson, KI**, Colcombe, SJ, Wadhwa, R, Bherer, L, Peterson, M, Scalf, PE, Kim, JS, Alvarado, M, Kramer, AF. The neural correlates of dual-task performance after minimizing effects of task-preparation. Presented at Organization for Human Brain Mapping (June, 2005), Toronto, CA.

Wadhwa, R, **Erickson, KI**, Colcombe, SJ, et al. An fMRI investigation of inhibitory control in younger and older adults. Presented at Organization for Human Brain Mapping (June, 2005), Toronto, CA.

**Erickson, KI**, Colcombe, SJ, Elavsky, S, Korol, DL, Scalf, PE, McAuley, E, Kramer, AF. Mind your body, spare your brain: interactive effects of fitness and estrogen treatment on brain and cognitive health. Presented at Cognitive Neuroscience Society (April, 2005), New York, NY.

Scalf, PE, Colcombe, SJ, Kramer, AF, **Erickson, KI**, Kim, JS, Alvarado, M, Wadhwa, R. Neural correlates of attentional demand within the Useful Field of View task. Presented at Organization for Human Brain Mapping (June, 2004), Budapest, Hungary.

**Erickson, KI**, Milham, MP, Colcombe, SJ, Kramer, AF, Banich, MT, Webb, A, Cohen, NJ. Behavioral conflict, anterior cingulate cortex, and experiment duration: Implications of diverging data. Presented at Cognitive Neuroscience Society (April, 2004), San Francisco, CA.

**Erickson, KI**, Colcombe, SJ, Korol, D, Scalf, PE, Cohen, NJ, Webb, A, Kramer, AF. Hormone Replacement Therapy Spares Brain Tissue in Postmenopausal Women. Presented at Cognitive Aging Conference (April, 2004), Atlanta, GA.

Colcombe, SJ, Kramer, AF, **Erickson, KI**, Scalf, PE. Cardiovascular fitness, cortical plasticity and aging. Presented at Cognitive Aging Conference (April, 2004), Atlanta, GA.

Scalf, PE, Colcombe, SJ, Kramer, AF, **Erickson, KI**. Age-related patterns of cortical recruitment during response inhibition remains consistent across task and performance. Presented at Cognitive Aging Conference (April, 2004), Atlanta, GA.

**Erickson, KI**, Ho, MH, Colcombe, SJ, Kramer, AF. A structural equation modeling analysis of attentional control: An event-related fMRI study. Presented at Cognitive Neuroscience Society (2003), New York, NY.

Colcombe SJ, **Erickson KI**, Raz N, Webb A, Cohen NJ, McAuley E, Kramer, AF. Cardiovascular fitness: Its moderating effects on age-related decline in human brain tissue. Presented at Cognitive Neuroscience Society (2003), New York, NY.

Nielson, KA, Yee, D, Lapka, LA, **Erickson, KI**. Emotion-induced modulation of story memory. Presented at Midwestern Psychological Association (2001), Chicago, IL.

Kirk I. Erickson, Ph.D.

Banich, MT, Milham, MP, **Erickson, KI**, Wzsalek, T, Webb, A, Kramer, A, Cohen, NJ, Barad, V, Atchley, R. Components of the neural network underlying the Stroop task in the elderly as assessed by fMRI. Presented at Society for Neuroscience (2000), New Orleans, LA.

Heller, W, Banich, MT, Herrington, JD, Mohanty, A, Fisher, JE, Jacobson, BL, Scalf, PE, **Erickson, KI**, Koven, NS, Compton, RJ, Miller, GA. Differential brain activation in response to positive and threat stimuli in an emotional Stroop paradigm. Presented at Society for Research in Psychopathology (2000), Boulder, CO.