

**Curriculum Vitae**  
**Karin Schon, Ph.D.**  
**72 East Concord Street, R-1008**  
**Department of Anatomy and Neurobiology**  
**Boston University School of Medicine**  
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**October 29th, 2018**

**Academic Training:**

3/2005 Ph.D. Boston University, Boston, MA; Psychology (Brain, Behavior, and Cognition program)  
6/1998 B.A./M.A. Universität Hamburg, Hamburg, Germany; Psychology ("Dipl.-Psych." degree)

**Postdoctoral Training:**

9/2010-4/2013 Pathway to Independence Awardee (Post Doc Principal Investigator) in Cognitive Neuroscience of Aging and Exercise Physiology, Mentors: Chantal Stern, D.Phil., Robert Wagenaar, Ph.D., Alice Cronin-Golomb, Ph.D., Boston University, Boston, MA, and Andrew Budson, M.D. Boston University School of Medicine (BUSM), Boston, MA (K99 award; PI: Schon)  
4/2009-8/2010 Senior Postdoctoral Associate (Post Doc) in Cognitive Neuroscience, Mentor: Chantal E. Stern, D.Phil., Boston University, Boston MA  
4/2005-3/2009 Research Associate (Post Doc) in Cognitive Neuroscience, Mentor: Chantal E. Stern, D.Phil., Boston University, Boston MA

**Academic Appointments:**

6/2015-present Investigator, Clinical Research Core, Alzheimer's Disease Center (Faculty Member since 4/2013), BUSM, Boston, MA  
6/2014-present Assistant Professor of Neuroscience, Joint Programmatic Appointment with Undergraduate Program in Neuroscience, Boston University, Boston, MA  
9/2013-present Assistant Professor of Psychological and Brain Sciences, Joint Programmatic Appointment with Dept. of Psychological and Brain Sciences and Center for Memory and Brain, Boston University, Boston, MA  
5/2013-present Assistant Professor of Anatomy and Neurobiology, BUSM, Boston MA (Primary Appointment)

**Honors:**

2015 UROP Outstanding Mentor Award, Undergraduate Research Opportunities Program, Boston University, Boston, MA (for Summer 2015 UROP mentorship)  
2015 Junior Faculty Spivack Scholar 2015, BUSM, Boston, MA  
2013 CCAD Junior Investigator, Charleston Conference on Alzheimer's Disease (CCAD), Charleston, SC  
2010 NIH Pathway to Independence Award (K99/R00)  
2005 Kavita Jain Dissertation Award, Boston University, Boston MA  
2005 Felicia Sorembe Lambros Prize for Research, Boston University, Boston MA  
7/2002 Summer Workshop in fMRI Informatics, Dartmouth College, fellowship award  
2002 Clara Mayo Memorial Fellowship, Department of Psychological and Brain Sciences, Boston University, Boston MA  
1995 Travel Scholarship, Emmy and Alfred B. Steffens Memorial Fund, German Academic Exchange Service (DAAD), Universität Hamburg, Hamburg, Germany

**Departmental and University Committees:**

- 8/2017-present Member, Department Appointment and Promotions Committee
- 10/2016-present Member, CityLab and Urban Squash NIH SEPA Steering Committee
- 6/2016-present Member, Center for Biomedical Imaging Oversight Committee, BUSM, Boston, MA
- 3/2016-present Member, Task Force on Diversity and Inclusion, Dept. of Anatomy and Neurobiology, BUSM, Boston, MA
- 11/2015-present Member, Core Committee, BUSM, Boston, MA
- 9/2014-12/2017 Faculty member, Faculty Advisory Committee for the Undergraduate Research Opportunities Program, Boston University, Boston, MA

**Dissertation Committees:**

- 9/2018-present Dissertation Committee for Lauren Zajac, Anatomy and Neurobiology Ph.D. Program, BUSM, Boston MA (2<sup>nd</sup> reader)
- 5/2017-present Dissertation Committee for Kathryn Kern, Anatomy and Neurobiology Ph.D. Program, BUSM, Boston MA (1<sup>st</sup> reader)
- 3/2014-5/2014 Dissertation Committee for Sandra Ladd, Behavioral Neuroscience Program, BUSM, Boston MA (4<sup>th</sup> reader)
- 1/2014-3/2015 Dissertation Committee for Maya Rosen, Brain, Behavior, and Cognition Program, Department of Psychological and Brain Sciences, Boston University, Boston, MA (member)
- 5/2013-4/2016 Dissertation Committee for Danielle Farrar, M.D./Ph.D. program, Department of Anatomy and Neurobiology, BUSM, Boston MA (member)
- 5/2013-12/2013 Dissertation Committee for Randall Newmark, Graduate Program in Neuroscience, Boston University, Boston MA (member)

**Teaching Experience and Responsibilities:**

- Fall 2018 Director, AN 801 Journal Club for Anatomy & Neurobiology graduate students (Dept, of Anatomy and Neurobiology, BUSM): “Neuroscience and Social Justice: What Neuroscience Can Teach Us About Current Social Justice Issues “, enrollment: 10
- Spring 2018 Course Co-Director and Co-Instructor (Director: Dr. Doug Rosene) for GMS AM 702 (BUSM): Neurobiology of Learning and Memory, 2cr, enrollment: 13
- Spring 2018 Course Director and Instructor for GMS IM630 (BUSM): Methods of Functional Imaging of the Brain, 2cr, enrollment: 14
- Spring 2017 Course Director and Instructor for GMS IM630 (BUSM): Methods of Functional Imaging of the Brain, 2cr, enrollment: 17
- Fall 2015 Director, Journal Club for Anatomy & Neurobiology graduate students (Dept, of Anatomy and Neurobiology, BUSM): “Teaching and old brain new tricks: from mouse models of neurogenesis to human neuroimaging of brain plasticity“, enrollment: 8
- Spring 2016 Course Director and Instructor for GMS IM630 (BUSM): Methods of Functional Imaging of the Brain, 2cr, enrollment: 9
- Spring 2015 Course Director and Instructor for GMS IM630 (BUSM): Methods of Functional Imaging of the Brain, 2cr, enrollment: 22
- Spring 2015 Course Director and Instructor (jointly with Dr. Mark Moss) for GMS AN811 (BUSM): Cognitive Neuroscience
- 12/3/2013 Guest lecture on exercise, aging, memory (PS337), Department of Psychological and Brain Sciences, Boston University, Boston MA

## Major Mentoring Activities:

### Doctoral Students

- 9/2018-present Razan Alotaibi, M.S., M.B.B.S., Ph.D. student (Dept. of Anatomy and Neurobiology), cognitive neuroscience and exercise physiology, graduate student, BUSM, Boston, MA
- 9/2017-present Michael Rosario, B.S., Ph.D. student (Graduate Program in Neuroscience), cognitive neuroscience of psychosocial chronic stress and cognitive aging, BU GMS, Boston, MA  
*\*Recipient of a Robert Wood Johnson Foundation Health Policy Research Scholarship Cohort 2018 (first BU recipient)*
- 1/2016-present Kathryn Kern, B.S., Ph.D. student (Dept. of Anatomy and Neurobiology), cognitive neuroscience and exercise physiology, graduate student, BUSM, Boston, MA
- 9/2013-present Rachel Nauer, B.A.\*, Ph.D. student (Dept. of Psychological and Brain Sciences; Brain, Behavior, and Cognition program), cognitive neuroscience and exercise physiology, graduate student, Boston University, Boston, MA  
*\*Recipient of the Dean of Arts and Sciences Award for best poster presentation at the Annual Research Symposium 2015 (3/2015); recipient of Clara Mayo Award, Dept. of Psychological and Brain Sciences (3/2016); recipient of an NIH-funded NRSA (9/2016).*
- 9/2013-10/2013 Mary Orczykowski, B.S./B.A., rotating 1<sup>st</sup> year Ph.D. student (Dept. of Anatomy and Neurobiology), BUSM, Boston, MA

### Master's Students

- 10/2018-present Alan Espinal Martinez, graduate student (M.S. in Anatomy and Neurobiology) and M.S. Thesis advisee, BUSM, Boston, MA
- 8/2018-present Sheba Antony, graduate student (M.S. in Mental Health Counseling and Behavioral Medicine, volunteer research assistant, BUSM, Boston, MA
- 7/2018-present Shiraz Mumtaz, graduate student (M.S. in Medical Sciences Program) and M.S. Thesis advisee, BUSM, Boston, MA
- 5/2018-9/2018 Thabit Alotaibi, graduate student (M.S. in Clinical Investigation), practicum student, BUSM, Boston, MA
- 8/2018-5/2018 Nicolle De Siqueira, graduate student (M.S. in Medical Sciences Program) and M.S. Thesis advisee, BUSM, Boston, MA
- 7/2017-5/2018 Razan Alotaibi\*, graduate student (M.S. in Anatomy and Neurobiology) and M.S. Thesis advisee, BUSM, Boston, MA  
*\*Accepted into Ph.D. program in Anatomy and Neurobiology starting 9/2018, BUSM*
- 9/2016-4/2017 Yongho Chris Jo, graduate student (M.S. in Medical Sciences Program) and M.S. Thesis advisee, BUSM, Boston, MA
- 6/2016-4/2017 Andrew Goss, graduate student (M.S. in Anatomy and Neurobiology) and M.S. Thesis advisee, BUSM, Boston, MA
- 1/2016-4/2017 Andres Velez Lopez, graduate student (M.S. in Anatomy and Neurobiology) and M.S. Thesis advisee, BUSM, Boston, MA
- 8/2015-4/2016 Corey Kronman, graduate student (M.S. in Medical Sciences Program) and M.S. Thesis advisee, BUSM, Boston, MA

### Undergraduate Students

- 9/2018-present Mabel Cheng, undergraduate student (Health Sciences), cognitive neuroscience and exercise physiology, work study/research assistant.
- 7/2018-present Alyssa DeLong, undergraduate student (Human Physiology), Effectiveness of Bio-Electro Stimulation Therapy for the Treatment of Motor and Non-Motor Symptoms of Parkinson's Disease – A Pilot Study, volunteer/research assistant.
- 9/2018-present Janelle Maxwell, undergraduate student (Psychological and Brain Sciences), physical activity and cognition in patients with Parkinson's disease, Directed Study project

- 6/2018-8/2018 Zachary Croll-Nesbeth, undergraduate student (Health Science), cognitive neuroscience of psychosocial stress, summer intern through STaRS (“Summer Training as Research Scholars”), Oakwood University, Huntsville, AL
- 6/2017-8/2018 Reagan Katulege, undergraduate student (Biochemistry and Molecular Biology, Psychology), cognitive neuroscience and exercise physiology, summer intern through STaRS (“Summer Training as Research Scholars”), Univ. of Massachusetts, Amherst, MA.
- 9/2017-5/2018 Christina Fontana, undergraduate student (Biomedical Engineering); BME senior project on automation of resting tremor assessment in Parkinson’s disease, Boston University, Boston, MA
- 9/2017-5/2018 Ayan Waite, undergraduate student (Biomedical Engineering); BME senior project on automation of resting tremor assessment in Parkinson’s disease, Boston University, Boston, MA
- 5/2017-5/2018 Tommi Zsao, undergraduate student (Biomedical Engineering), cognitive neuroscience, obesity, and gait, Undergraduate Research Opportunities Program awardee (Summer 2017); BME senior project (Fall 2017-Spring 2018) on automation of resting tremor assessment in Parkinson’s disease, Boston University, Boston, MA
- 5/2017-5/2018 Natalia Torres, undergraduate student (Biology), Work Study program, study coordinator, Undergraduate Research Opportunities Program awardee, Boston University, Boston, MA
- 9/2016-4/2017 Samantha Muyalde, undergraduate student (Undergraduate Program in Neuroscience), volunteer (Fall 2016, Spring 2017), Boston University, Boston, MA
- 9/2016-12/2016 Diana Abbas, undergraduate student (Undergraduate Program in Neuroscience), Work Study program, study coordinator, Boston University, Boston, MA
- 8/2016-4/2017 Olivia Lanman, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, Senior Thesis in Neuroscience advisee (Fall 2016/ Spring 2017), Boston University, Boston, MA
- 6/2016-5/2017 Michael Rosario\*, undergraduate student (Dept. of Psychology), cognitive neuroscience and exercise physiology, summer intern through STaRS (“Summer Training as Research Scholars”), Senior Thesis advisee, University of the Virgin Islands, St. Croix, USVI.  
\*Recipient of poster award, neuroscience category, ABRCMS 2016
- 6/2016-4/2017 Madeline Brendle, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, volunteer (Summer 2016), Undergraduate Research Opportunities Program awardee (Fall 2016, Spring 2017), Boston University, Boston, MA
- 1/2016-8/2016 Sarah Savoy, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, volunteer (Spring 2016), Undergraduate Research Opportunities Program awardee (Summer 2016), Boston University, Boston, MA
- 1/2016-4/2016 Michelle Sibol, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, volunteer (Spring 2016), Boston University, Boston, MA
- 9/2015-12/2016 Andrea Heard, undergraduate student in psychology; preclinical AD and cognitive neuroscience, volunteer (Fall 2015), Undergraduate Research Opportunities Program awardee (Spring 2016, Summer 2016), Directed Studies student (Fall 2016), Boston University, Boston, MA
- 10/2014-4/2016 Natalia Lopez, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, volunteer (Fall 2014), Senior Thesis in Neuroscience advisee (Fall 2015/ Spring 2016), Boston University, Boston MA

- 9/2014-4/2016 José Romo, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, volunteer (Fall 2014) and Undergraduate Research Opportunities Program (Summer 2015), Senior Thesis in Neuroscience advisee (Fall 2015/ Spring 2016), Boston University, Boston MA
- 6/2014-12/2014 Natalie Cherry, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, volunteer (Summer 2014) and Directed Study program (Fall 2014), Boston University, Boston MA
- 9/2013-4/2016 Alexander Delgado, undergraduate student (Biology: Neurobiology, and Psychological and Brain Sciences), cognitive neuroscience and exercise physiology, Work Study program (Summer and Fall 2014, Spring and Fall 2015, Spring 2016), Directed Study program (Fall 2014, Spring and Fall 2015), Undergraduate Research Opportunities Program (Summer 2015), Boston University, Boston MA
- 9/2013-4/2015 Victoria Gomez, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, Directed Study program (Spring 2014) and Undergraduate Research Opportunities Program (Summer and Fall 2014), volunteer (Spring 2015), Boston University, Boston MA
- 9/2013-/2016 Benjamin Coleman\*, undergraduate Kilachand Honors College (KHC) student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, preclinical Alzheimer's disease: subjective memory complaints, volunteer (Spring and Fall 2014, Spring 2015) and Undergraduate Research Opportunities Program (Summer 2014, Summer 2015), KHC Keystone project research / Senior Thesis in Neuroscience (Junior and Senior years), Boston University, Boston MA  
*\*Recipient of Mary Erskine Outstanding Undergraduate Research Award (6/2015); student research featured in Fall 2015 CAS Magazine (including on magazine cover); current position: Post-Bac IRTA at NINDS/NIH.*
- 3/2011-12/2012 Andrew Whiteman, B.A.\*, undergraduate student (Undergraduate Program in Neuroscience), cognitive neuroscience and exercise physiology, Undergraduate Research Opportunities Program (Summer 2011), Senior thesis advisee (Fall 2011, Spring 2012), research assistant (5/2012-12/2012).  
*\*UROP Summer 2011 project featured in BU Today (4/2012); now in graduate program in statistics, University of Michigan)*

#### **Other Mentees**

- 7/2018-present Marina Ritchie, M.A., Research Assistant, Effectiveness of Bio-Electro Stimulation Therapy for the Treatment of Motor and Non-Motor Symptoms of Parkinson's Disease – A Pilot Study; BUSM, Boston, MA
- 9/2013-8/2017 Matthew Dunne, B.A., Research Assistant and Lab Manager (full time), Aerobic Exercise, Neurotrophins, and fMRI of Hippocampal Function and Structure (R00 project). In the Fall semester of 2017 Matthew Dunne will join the BU Graduate Program in Neuroscience as a Ph.D. student.\*  
*\*Dunne et al. 2016 SfN Abstract 463.02 (Annual Meeting of the Society for Neuroscience, San Diego, 11/2016) "Aerobic fitness and hippocampal subfield volume in young adults" chosen as "Society for Neuroscience Hot Topic".*

#### **Other Professional Activities:**

#### **Professional Societies: Memberships, Offices, and Committee Assignments:**

- 2018-present Member, ISBM – International Society for Behavioral Neuroscience (membership by invitation only)

2014-2015	Member, Organization for Human Brain Mapping
2011-present	Member, International Neuropsychological Society
2006-present	Member, Cognitive Neuroscience Society
1999-present	Member, Society for Neuroscience

**Boston University Community Outreach:**

10/2018	“Meeting of the Minds: Jump Into Fall: Exercise for Healthy Brain.” Organized educational and recruitment event with graduate student-run exercise session targeting Black American seniors in collaboration with the MA/NH Chapter of the Alzheimer’s Association and the BU Alzheimer’s Disease Center; Berea Seventh-day Adventist Church, Dorchester, MA
7/2017	Organized educational and recruitment effort in collaboration with the BU Alzheimer’s Disease Center by providing an informal talk and an exercise session at Grove Hall Senior Center, Dorchester, MA
3/14/2016	GAP Week: Women in STEM Panel, Society of Asian Scientists and Engineers, STEM career panel participant, Boston University, Boston, MA
7/18/2014	Summer Pathways Outreach in Science and Engineering program for female high-school students; STEM career panel participant, Boston University, Boston MA

**Ad-Hoc Journal Reviews:**

American Journal of Preventive Medicine; Applied Physiology, Nutrition, and Metabolism; Brain; Brain Research Bulletin; Cerebral Cortex; Current Alzheimer Research; Current Biology; European Journal of Sports Science; Experimental Gerontology, Future Neurology; Hippocampus; International Journal of Sports Medicine; Journal of Cognitive Neuroscience; Learning and Memory; NeuroImage; PLoS One; Physiology & Behavior; Psychonomic Bulletin and Review; The Journal of Neuroscience

**Media Coverage of Research:**

10/2018	“Graduate Student Receives Health Policy Research Scholarship“, BUSM, Boston MA (story was featured on the BUSM Facebook page); “BU doctoral student received health policy research scholarship”, The Daily Free Press, BU, Boston, MA (for graduate student research on racism as a chronic stressor and cognition in Black seniors, funded by the Alzheimer’s Association; PI: Schon)
2/2017	Interview with reporter from Oprah Magazine
4/2016	BU Today writes about our research: “Unraveling Alzheimer’s Disease // PART 3: Work It Out. Can exercise help delay or prevent the disease? (story was also featured on the Boston University Facebook page)
12/2015	Media coverage of Whiteman et al. (NeuroImage 2016): 1) Neurosciencenews.com: “Importance of Physical Activity and Aerobic Exercise for Healthy Brain Function” 2) ScienceDaily.com: “Importance of Physical Activity and Aerobic Exercise for Healthy Brain Function” 3) The Telegraph (UK): “Couch potato lifestyle could damage intelligence in later life”
12/2015	The BUMC Research website features our research: “Importance of Physical Activity and Aerobic Exercise for Healthy Brain Function”
Fall 2015	CAS features undergraduate student Benjamin Coleman on the cover of the Fall 2015 CAS Magazine: “Can Exercise make you smarter? And other cool questions being asked-and answered-by undergraduate neuroscientists”
3/2014	Psychology Today mentions our research in “Eight Habits that Improve Cognitive Function“

2/2014	HHS Healthbeat describes our research in the podcast “Fit Memory”; NewsTribune.com features our HHS Healthbeat interview “Fit Memory”
1/2014	Interviewed by Good Housekeeping magazine about exercise and brain health
12/2013	Whiteman et al. (2014) is featured in ScienceDaily, and is mentioned in the Psychology Today blog “Can Physical Activities Improve Fluid Intelligence?”
4/2012	BU Today writes about our research: “Inquiring Minds: Exercise and Mental Recall”

### **Major Committee Assignments:**

11/2017-3/2018	Member, ZDK1 GRB-1 (M3) 1 MoTrPAC Ancillary Studies Study Section, NIH
9/2017-10/2017	Temporary Member, Cognition and Perception Study Section, NIH
10/2015	RR&D Fall 2015 SPiRE Reviewer, Office of Research and Development’s Rehabilitation Research and Development Service (RR&D), Department of Veterans Affairs
12/2015-present	Ad-Hoc Grant Reviewer, Alzheimer’s Association

### **Other Support:**

#### **Current:**

Anticipated	R21AG060269 (percentile score: 1, impact score: 15) PI: Karin Schon, Psychosocial stressors and the hippocampal memory system in African American seniors \$150,000 (direct cost, year 1; anticipated start date: 4/1/2019)
7/2018-6/2019	(BU-ADC Pilot Grant Program); PI: Karin Schon, Impact of psychosocial stress on hippocampal integrity in the HOPE cohort: a pilot study \$20,000 (total cost; role: PI)
3/2018-2/2021	AARG-17-529566 (Alzheimer’s Association); PI: Karin Schon, Perceived racism as a chronic stressor and cognition in Black seniors \$149,415 (total cost; role: PI)
1/2017-1/2019	Immumax International Co. Ltd., Inc. PI: Karin Schon, Effectiveness of bio-electrical stimulation therapy for the treatment of motor and non-motor symptoms in Parkinson’s disease – A pilot study \$50,000 total direct cost (role: PI)
8/2016-5/2019	R21AG049968 PI: Karin Schon, The Entorhinal Cortex and Aerobic Exercise in Aging, \$166,701 direct cost per year (role: PI)

#### **Past:**

4/2013-3/2018	R00AG036845 PI: Karin Schon, Aerobic Exercise, Neurotrophins, and fMRI of Hippocampal Function and Structure, \$149,679 direct cost per year (role: PI)
2016	BU CTSI Pilot Grant: Feasibility of using physical activity monitoring for enhancing cognition in healthy seniors, \$20,000 direct cost (role: PI)
7/2015-6/2016	AOTFIRG14 PI: Simone Gill, Use of Motor Learning Principles to Reduce Fall Risk After Surgical Weight Loss, \$50,000 direct cost (role: Co-Investigator)
9/2010-12/2012	K99AG036845 PI: Karin Schon, Aerobic Exercise, Neurotrophins, and fMRI of Hippocampal Function and Structure, \$83,199 direct cost per year

### **Invited Lectures and Conference Presentations:**

#### **Local:**

- 10/14/2018 “Meeting of the Minds: Jump Into Fall: Exercise for Healthy Brain.” Invited lecture; invited by MA/NH Chapter of the Alzheimer’s Association and the BU Alzheimer’s Disease Center; Berea Seventh-day Adventist Church, Dorchester, MA
- 12/20/2017 Modulators of the hippocampal memory system, Alzheimer’s Disease Center, Boston University School of Medicine, Boston, MA
- 9/21/2017 Exercise and the medial temporal lobe memory system, VA Boston, Boston, MA
- 5/25/2017 Exercise and the medial temporal lobe memory system, VA West Roxbury, West Roxbury, MA.
- 6/30/2015 Exercise and the Brain, Evergreen Program (geared toward adults 58 years or older), Boston University, Boston, MA
- 10/24/2014 Neuroimaging as a tool for delirium research: Functional Neuroimaging, CEDARTREE Second Annual Delirium Bootcamp, Beth Israel Diaconess Medical Center, Boston MA
- 3/20/2014 Exercise, memory, and brain plasticity, Center for Noninvasive Brain Stimulation, Beth Israel Diaconess Medical Center, Boston MA
- 4/24/2013 Walk to remember, 7<sup>th</sup> Annual South Shore Alzheimer Educational Conference, South Shore Partnership, Alzheimer’s Association Massachusetts/New Hampshire Chapter
- 3/21/2013 Cognitive neuroscience of memory, aerobic exercise and brain plasticity, Boston University Sargent College of Health and Rehabilitation Sciences, Child Development Laboratory, Boston University, Boston MA
- 5/17/2012 Is aerobic exercise good for your memory?, Department of Anatomy and Neurobiology, BUSM, Boston MA

**National:**

- 6/2018 Fitness and exercise as modulators of the medial temporal lobe memory system in young adults. Symposium I: The motor-cognitive interface – motor system contributions to cognition. ISBN – International Society for Behavioral Neuroscience, Anchorage, AK. Invited presentation.
- 3/1/2013 Memory enhancement in AD through acute aerobic exercise, Charleston Conference on Alzheimer’s Disease, Charleston, SC
- 11/15/2012 Cognitive neuroscience of memory, aerobic exercise and brain plasticity, Cardiovascular Research Center, Department of Physiology, Temple University School of Medicine, Philadelphia PA
- 4/17/2012 Cognitive neuroscience of memory, aerobic exercise and brain plasticity, Shriners Hospitals Pediatric Research Center (Center for Neural Repair and Rehabilitation), Temple University School of Medicine, Philadelphia PA
- 1/19/2012 Is aerobic exercise good for your memory?, Institute of Gerontology and Department of Psychology, Wayne State University, Detroit MI
- 3/15/2011 Is aerobic exercise good for your memory?, Department of Kinesiology, University of Maryland, College Park MD
- 12/1/2010 Aerobic exercise, neurotrophins, and fMRI of hippocampal function and structure: background and design, Center for Clinical Biopsychology, Department of Psychological and Brain Sciences, Boston University, Boston MA
- 9/24/2008 Working memory in the medial temporal lobes, LCTS – Section on Brain Electrophysiology and Imaging, National Institutes of Health, NIAAA, Bethesda MD
- 1/24/2008 Working memory in the medical temporal lobes and prefrontal cortex, Integrative Neuroimaging Unit, Clinical Brain Disorders Branch, National Institutes of Health, NIMH, Bethesda MD

**International:**



6/13/2012	Cognitive neuroscience of memory, aerobic exercise and brain plasticity, Department of Kinesiology and Physical Education, McGill University, Montréal, Québec, Canada
11/24/2011	Is aerobic exercise good for your memory?, Research Department of Neuroscience, Ruhr-Universität Bochum, Germany

## Bibliography:

### Manuscripts in Preparation:

1. C. A. Kronman, K. L. Kern, M. F. Dunne, R. K. Nauer, T. W. Storer, **K. Schon** (anticipated submission: 2018). Cardiorespiratory fitness predicts default mode network effective connectivity in young adults. In revision.
2. R. K. Nauer, Matthew F. Dunne, Chantal E. Stern, T. W. Storer, **K. Schon** (anticipated submission: 2018). Associations between changes in aerobic fitness and hippocampal subfield structure and cognition over a 12-week exercise intervention. In preparation.

### Original, Peer Reviewed Articles:

1. A. S. Whiteman, D. E. Young, A. E. Budson, C. E. Stern, **K. Schon\*** (2016). Entorhinal volume, aerobic fitness, and recognition memory in healthy young adults: A voxel-based morphometry study. *NeuroImage*. 126:229-38. [doi:10.1016/j.neuroimage.2015.11.049](https://doi.org/10.1016/j.neuroimage.2015.11.049). PMID: PMC4733633 [Available on 2017-02-01]  
\*Received media attention
2. R. K. Nauer, A. S. Whiteman, M. F. Dunne, C. E. Stern, **K. Schon** (2015). Hippocampal subfield and medial temporal cortical persistent activity during working memory reflects ongoing encoding. *Front. Syst. Neurosci.* 9:30. doi: 10.3389/fnsys.2015.00030. eCollection 2015. PMID: PMC4372545.
3. **K. Schon**, R. E. Newmark, R. S. Ross, C. E. Stern (2015). A working memory buffer in parahippocampal regions – evidence from a load effect during the delay period. *Cereb Cortex*. doi: 10.1093/cercor/bhv013 [Epub ahead of print]. PMID: In Progress.
4. A. S. Whiteman, D. E. Young, R. C. Wagenaar, C. E. Stern, **K. Schon\*** (2014). Interaction between serum BDNF and aerobic fitness predicts recognition memory in healthy young adults. *Behavioral Brain Research* 259:302-12. doi: 10.1016/j.bbr.2013.11.023. Epub 2013 Nov 21. PMID: PMC3991014.  
\*Recommended by Faculty of 1000 (12/2013) and received media attention
5. R. S. Ross, M. L. LoPresti, **K. Schon**, C. E. Stern (2013). Role of the hippocampus and orbitofrontal cortex during the disambiguation of social cues in working memory. *Cognitive, Affective and Behavioral Neuroscience* 13(4):900-15. doi: 10.3758/s13415-013-0170-x. PMID: PMC3796192 [Available on 2014/12/1]
6. R. E. Newmark, **K. Schon**, R. S. Ross, M. Young, C. E. Stern (2013). Disambiguation during working memory: A high-resolution fMRI study of the human medial temporal lobe. *Hippocampus* 23(6): 467-475. doi: 10.1002/hipo.22106. Epub 2013 Mar 18.
7. **K. Schon**, R. S. Ross, M. E. Hasselmo, C. E. Stern (2013). Complementary Roles of medial temporal lobes and dorsolateral prefrontal cortex for working memory for novel and familiar trial-unique visual stimuli: an fMRI study. *European Journal of Neuroscience* 37(4):668-678. doi: 10.1111/ejn.12062. Epub 2012 Nov 21.
8. **K. Schon**, Y. T. Quiroz, M. E. Hasselmo, C. E. Stern (2009). Greater working memory load results in greater medial temporal activity at retrieval. *Cerebral Cortex* 19(11):2561-2571 Epub 2009 Feb 18. PMID: 2758675

9. M. L. LoPresti, **K. Schon**, M. D. Tricarico, J. D. Swisher, K. A. Celone, C. E. Stern (2008). Working memory for social cues recruits orbitofrontal cortex and amygdala: a functional magnetic resonance imaging study of delayed matching to sample for emotional expressions. [\*The Journal of Neuroscience\* 28\(14\):3718-28](#). PMID: 2748754
10. **K. Schon**, S. Tinaz, D. C. Somers, and C. E. Stern (2008). Delayed match to object or place: an event-related fMRI study of short-term stimulus maintenance and the role of stimulus pre-exposure. [\*NeuroImage\* 39\(2\):857-72](#). Epub 2007 Sep 21. PMID: 2147068
11. Tinaz, H. E. Schendan, **K. Schon**, and C. E. Stern (2006). Evidence for the importance of basal ganglia output nuclei in semantic event sequencing: An fMRI study. [\*Brain Research\* 1067\(1\):239-49](#).
12. **K. Schon**, A. Atri, M. E. Hasselmo, M. D. Tricarico, M. L. LoPresti, and C. E. Stern. (2005) Scopolamine reduces persistent activity related to long-term encoding in the parahippocampal gyrus during delayed matching in humans. [\*The Journal of Neuroscience\* 25\(40\): 9112-9123](#).
13. **K. Schon**, M. E. Hasselmo, M. L. LoPresti, M. D. Tricarico, and C. E. Stern. (2004) Persistence of parahippocampal representation in the absence of stimulus input enhances long-term encoding: A functional Magnetic Resonance Imaging study of subsequent memory after a delayed match-to-sample task. [\*The Journal of Neuroscience\* 24\(49\):11088-11097](#).]

## Abstracts

1. K.L. Kern, C.A. Kronman, R.K. Nauer, M.F. Dunne, T.W. Storer, **K. Schon** (2018). Cardiorespiratory fitness predicts default mode network effective connectivity in young adults. Society for Neuroscience, November 2018, San Diego, CA.
2. R. Katulege, M. Rosario, K.L. Kern, **K. Schon** (2017). The association between depressive symptoms and cortical thickness as modulated by aerobic fitness. Annual Biomedical Research Conference for Minority Students (ABRCMS), Phoenix, AZ, November 2017.
3. R. Nauer, M. F. Dunne, T. W. Storer, **K. Schon** (2017) Increased aerobic fitness is related to increased anterior dentate gyrus/CA3 volume in healthy young adults following exercise training. Program No. 338.21. 2017 Neuroscience Meeting Planner, Washington, DC: Society for Neuroscience.
4. R. Nauer, M. F. Dunne, T. W. Storer, **K. Schon** (2017) Associations between aerobic fitness and hippocampal subfield structure and function over a 12-week exercise intervention. Symposium of Physical Exercise and Brain Health, University of California, Irvine, CA.
5. A. Velez Lopez, M. Rosario, **K. Schon** (2017) Cardiovascular fitness is positively correlated with left entorhinal cortical thickness in healthy young adults. 45<sup>th</sup> Annual Meeting. New Orleans, LA: International Neuropsychological Society.
6. M Rosario\*, A Velez Lopez, R Nauer, **K Schon** (2016). Cardiovascular fitness is positively correlated with left entorhinal cortical thickness in healthy young adults. 2016 Annual Biomedical Research Conference for Minority Students (ABRCMS), November 2016, Tampa, FL. *\*Winner of best poster in neuroscience category*.
7. M. F. Dunne\*, R. K. Nauer, **K. Schon** (2016) Aerobic fitness and hippocampal subfield volume in young adults. Program No. 463.02. 2016 Neuroscience Meeting Planner, San Diego, CA: Society for Neuroscience. *\*Selected as "Society for Neuroscience Hot Topic"*
8. B. W. Coleman, Y. Tripodis, B. Martin, C. Chaisson, E. Steinberg, N. Kowall, **K. Schon**\*, R. A. Stern\* (2016) Subjective cognitive complaints predict conversion to MCI and

- Alzheimer's disease dementia. Paper Session 14. 44<sup>th</sup> Annual Meeting. Boston, MA: International Neuropsychological Society.\**Co-Senior authorship*
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  11. R. K. Nauer\*, A. S. Whiteman, M. F. Dunne, C. E. Stern, **K. Schon** (2014) Encoding related delay period activity in hippocampal subfields and medial temporal cortex during delayed matching to sample: A high-resolution fMRI study. Program No. 551.10. 2014 Neuroscience Meeting Planner, Washington, DC: Society for Neuroscience. \**Ms. Nauer received the Dean of Arts and Sciences Award for best poster presentation at the Annual Research Symposium 2015 for this poster (3/2015).*
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  13. A. S. Whiteman, C. E. Stern, **K. Schon**. Aerobic capacity and recognition memory are positively associated with gray matter volume in the medial temporal lobe in healthy young adults. Poster A94, Cognitive Neuroscience Society Annual Meeting, Boston, MA, April 2014.
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