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CURRICULUM VITAE
Susanne M. Jaeggi, PhD

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Education

2012	Habilitation (Venia Docendi), Psychology, University of Bern, Switzerland
2007	Ph.D. in Neuroscience, University of Bern (BENEFRI), Switzerland
2005	Ph.D. in Cognitive Psychology, University of Bern, Switzerland (summa cum laude)
2002	Licentiate in Psychology (Major: Clinical Psychology and Experimental Psychology, Minor: Psychopathology), University of Bern, Switzerland (Grade 6; excellent)
1999-2000	One term at the University of Edinburgh, UK (Psychology and Biology/ General Physiology)
1995-2002	Studies at the University of Bern, Switzerland (Clinical Psychology, Experimental Psychology, Psychopathology, and Comparative Religious Studies)
1992-1994	Collège Ste. Croix, Fribourg, Switzerland (Baccalaureate 1994).
1992	Scuola Leonardo da Vinci, Firenze, Italy
1989-1990	Ecole Polyvalente Laval, Québec, Canada
1980-1992	Rudolf Steiner (Waldorf) School, Ittigen, Switzerland

Professional Experience

June 2012	Visiting Professor, University of Padova, Italy
2012-	Assistant Professor in Psychology, University of Maryland, College Park, USA
2007-2011	Post-doctoral fellow, University of Michigan, USA Cognition and Cognitive Neuroscience Prof. John Jonides, Cognitive Neuroscience Lab, University of Michigan Prof. Priti Shah, Basic and Applied Cognition Lab, University of Michigan
2002-2007	Assistant and doctoral student, University of Bern, Switzerland Prof. Walter J. Perrig

Advanced Training

2003 Swiss Summer School on Advanced Methods in the Social Sciences. Structural Equation Modeling (Instructor: Dr. Peter Schmidt)

2003 Postgraduate Course ‚Functional brain imagery of cognitive processes: methods and statistical analyses' (Instructors: Dr. Anthony R. McIntosh, Dr. Nancy Lobaugh, Dr. Rainer Goebel, Dr. Patrick Vuilleumier)

2002 Postgraduate Course ‚Cognitive Neuroscience' (Instructors: Dr. Roberto Cabeza, Dr. Georg J. Wolford).

Internships

2000 Clinical internship at the ‚Psychiatrische Kriseninterventionsstation' Bern (KIZ Ambulanz; Advisor: Dr. med. Patrick Schwengeler)

1998-1999 Clinical internship at the ‚Psychotherapeutische Praxisstelle' Bern (Advisors: Dr. Simon Itten, Dr. Klaus Grawe)

1994-1995 Internship at the ‚Sozialtherapeutische Lebensgemeinschaft Thanhalten'; Hinterfultigen, Bern (therapeutic work and teaching young adults with special needs; Camphill Institution; Advisors: Schutter Family); regular work on a freelance basis until 2001

Grants

Active

2009-2012 National Center for Special Education Research (NCSER) in the Institute of Education Sciences (IES), U.S. Department of Education; Training Working Memory and Executive Control in ADHD Children (R324A090164) ($917,317; Role: Co-PI; PI: Priti Shah).
The goal of this study is to evaluate the efficacy of a specifically developed working memory training intervention in typically developing children as well as children with ADHD.

(no-cost extension until July 2013)

2009-2012 National Science Foundation (NSF); Improving Fluid Intelligence by Training Working Memory – Investigating its neural correlates by means of fMRI (BCS-084 3446) ($312.317; Role: Co-PI; PI: John Jonides).
The goal of this study is to investigate the neural correlates of working memory training and transfer.

(no-cost extension until June 2013)

2009-2012 Office of Naval Research (ONR) / Dept. of Defense; Improving Fluid Intelligence by Training Executive Control and Working Memory – Behavioral Investigation (N00014-09-0213) ($1,049,737; Role: Co-PI; PI: John Jonides).
The goal of this study is to investigate the effects of working memory training on measures of fluid intelligence.
(no-cost extension until January 2014)

Submitted (pending)

ONR – *Improving Fluid Intelligence by Training Executive Control and Working Memory*
Role: PI (together with Dr. Martin Buschkuehl); Total proposed direct costs: $1.000.000.
Note: This is an investigator initiated proposal; proposed start date: 11/01/2012

NCER/IES (Cognition and Student Learning Program of the Education Research) - *Working Memory Training and Transfer in Typically Developing Children - Investigation of Underlying Mechanisms*
Role: PI. Total proposed direct costs: $1.600.000.
Note: the submission is a revised submission (the panel 'strongly encourages a revision').

NCSER/IES (Cognition and Student Learning Program of the Special Education Research)
Training WM in ADHD Children: Exploration of Individual Differences
Role: Co-I (PI: Priti Shah, University of Michigan). Total proposed direct costs: $1.600.000.
Note: the submission is a revised submission (the panel 'strongly encourages a revision').

Czech – American cooperation (Bilateral project) - *Neuroplasticity and cognitive performance after working memory training in the elderly with mild cognitive impairment*
Role: Co-I (PI: Hana Stepankova, Prag University). Total proposed direct costs: $205.700.

Completed

2009-2010 Michigan Center for Advancing Safe Transportation throughout the Lifespan (MCASTL); Cognitive Training as an Intervention to Improve Driving Ability in the Older Adult (# DTRT07-G-0058) ($286,810; Role: Co-PI; PI: Rachael Seidler).
The goal of this study was to train old adults on working memory and investigate the effects on measures of daily living, for example driving performance.

2007-2009 Swiss National Science Foundation (SNF); Capacity Limitations in Working Memory: The Role of (Inter- and Intra-) Individual Differences and Training (PA001-117473) ($73'000; *personal fellowship for advanced researchers to investigate individual differences in working memory*).

2003-2005 Swiss National Science Foundation (SNF); Working Memory & Executive Functions: Theory and Neural Correlates (Grant Nr. 15-640) (79'038 CHF; Role: Doctoral Student; PI: Walter Perrig)
This project aimed at investigating working memory capacity limits and their neural correlates.

Awards

2011 Haller Medal for "Scientific Excellency", University of Bern, Switzerland

2009 Pfizer Research Award (Neurosciences)

2008 Ypsomed Innovation Award (Training Software "BrainTwister")

2006 Fellow at ESCOP (European Society of Cognitive Psychology) Summer School on Human Memory, Bubión-La Alpujarra, Granada (Spain).

2006 EPOS Poster Award ('Certificate of Merit') of the ESNR 06/ICS 06 (European Society of Neuroradiology/International Intracranial Stent), Geneva, Switzerland.

2005	Dissertation Award by the Humanities Faculty, University of Bern, Switzerland.
2005	Travel Award of the Swiss Society for Neuroscience (SSN) for the Annual meeting of the Organization for Human Brain Mapping (OHBM), Toronto, Canada.
2004	Fellow at the McDonnell Summer Institute for Cognitive Neuroscience, Dartmouth College, Hanover, NH (USA).
2003	Young Researcher Award; Swiss Society for Psychology.
2003	Publication Award for Young Researchers; German Society for Psychology – Section Biopsychology and Neuropsychology.

Current and past collaborations

University of Michigan: Prof. John Jonides, Prof. Priti Shah, Dr. Martin Buschkuehl, Prof. Rachael Seidler, Prof. Luis Hernandez-Garcia, Prof. Scott Peltier, Prof. Patricia Deldin, Prof. Ethan Kross, Prof. Patricia Reuter-Lorenz, Dr. Emre Demiralp, Dr. Jessica Bernard, Kim Craig, Ben Katz

Stanford University: Prof. Ian Gotlib, Dr. Renee Thompson, Dr. Jutta Mata (now University of Basel, Switzerland)

University of Chicago: Prof. John List, Prof. Sally Sadoff, Dr. Susanne Neckermann

City University of New York: Prof. Jennifer Mangels

University of Rochester/University of Geneva, Switzerland: Prof. Daphne Bavelier

University of Toronto, Canada: Dr. Marc Berman

Baylor College of Medicine, Houston, Texas: Prof. Ari Kalechstein

Indiana University, Indianapolis: Dr. Leslie Hulvershorn, Dr. Yang Wang

University of California, San Francisco: Dr. Joaquin Anguera

University of Maryland, Center for the Advanced Study of Language: Dr. Jared Novick, Dr. Isaiah Harbison, Dr. Nina Hsu

Therapeutic Rehabilitation Center, Livonia, Michigan: Betsy S. Green, M.A., CCC

National Taiwan Normal University, Taipei: Prof. Yi-Fen Su

Prague Psychiatric Center, Charles University in Prague, Czech Republic: Dr. Hana Stepankova, Dr. Jiri Lukavsky, Dr. Jaroslav Tintera

Universidad Autonoma de Madrid, Spain: Prof. Roberto Colom

University of Padova, Italy: Dr. Erika Borella, Dr. Barbara Carretti

Babes-Bolyai University, Cluj-Napoca, Romania: Dr. Eva Kallay

University of Linköping, Sweden: Dr. Henrik Danielsson

Ruhr Universität Bochum, Germany: Dr. Marc-Andreas Edel

Universität Freiburg, Germany: lic. phil. Sandra Loosli

Universität Bern, Switzerland: Prof. Walter Perrig, Dr. Barbara Studer

EPFL Lausanne, Switzerland: Dr. Mirjam Münch

ETH Zurich, Switzerland: Dr. Bert Anrich, Burcu Cinaz

MindResarch Institute, Santa Ana, CA: Dr. Matthew Peterson, Ted Smith (Chairman and CEO)

Brain-X; Camarillo, CA: Bruce Lewolt

Lumosity.com; San Francisco, CA: Michael Scanlon

Publications

Peer reviewed:

Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Shah, P. (in press). Cogmed and Working Memory Training – Current Challenges and the Search for Underlying Mechanisms. *Journal of Applied Research in Memory and Cognition*.

Shah, P., Buschkuehl, M., Jaeggi, S. M., & Jonides, J. (in press). Cognitive Training for ADHD: The Importance of Individual Differences. *Journal of Applied Research in Memory and Cognition*.

Bernard, J. A., Seidler, R. D., Hassevoort, K. M., Benson, B. L., Welsh, R. C., Wiggins, J. L., Jaeggi, S. M.,. . . Peltier, S. J. (in press.). Resting state cortico-cerebellar functional connectivity networks: A comparison of anatomical and self-organizing map approaches. *Frontiers in Neuroanatomy*.

Demiralp, E., Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuehl, M., Feldman Barrett, L., . . . Jonides, J. (in press.). Feeling blue or turquoise? Emotional differentiation in major depressive disorder. *Psychological Science*.

Studer-Luethi, B.[§], Jaeggi, S. M., Buschkuehl, M., & Perrig, W. J. (in press). The effects of neuroticism and conscientousness on working memory training outcome. *Personality and Individual Differences*.

[§]graduate student

Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (in press). The everyday emotional experience of individuals with Major Depressive Disorder: Examining instability, inertia and reactivity. *Journal of Abnormal Psychology*.

Anguera, J. A., Bernard, J. A., Jaeggi, S. M., Buschkuehl, M., Benson, B., L., Jennett, S., M., L., et al. (2012). The effects of working memory resource depletion and training on sensorimotor adaptation. *Behavioral Brain Research, 228*(1), 107-115.

Buschkuehl, M., Jaeggi, S. M., & Jonides, J. (2012). Neuronal effects following working memory training. *Developmental Cognitive Neuroscience, 2*(Supplement 1), S167-179.

Münch, M., Linhart, F., Borisuit, A., Jaeggi, S. M., & Scartezzini, J.-L. (2012). Effects of light exposure during the afternoon on cognitive performance, subjective alertness and hormonal secretion in the evening. *Behavioral Neuroscience, 126*(1), 196-203.

Loosli, S. V.[§], Buschkuehl, M., Perrig, W. J., & Jaeggi, S. M. (2012). Working memory training improves reading processes in typically developing children. *Child Neuropsychology, 18*(1), 62-78.

[§]graduate student

Mata, J., Thompson, R. J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2012). Walk on the Bright Side: The Effect of Physical Activity on Affect in Major Depressive Disorder. *Journal of Abnormal Psychology*. *121*(2), 297-308.

Jaeggi, S. M.*, Buschkuehl, M.*, Jonides, J., & Shah, P. (2011). Short- and long-term benefits of cognitive training. *Proceedings of the National Academy of Sciences of the United States of America, 108*(25), 10081-10086. (direct submission)
*contributed equally

Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2011). Concurrent and Prospective Relations between Attention to Emotion and Affect Intensity: An Experience Sampling Study. *Emotion, 11*(6), 1489–1494.

Kalechstein, A. D., Yoon, J. H., Croft, D. E., Jaeggi, S., Mahoney III, J. J., & De La Garza II, R. (2011). Low dose, short-term rivastigmine administration does not affect neurocognition in methamphetamine dependent individuals. *Pharmacology, Biochemistry and Behavior, 99*, 423-427.

Jaeggi, S. M., Studer, B., Buschkuehl, M., Su, Y.-F., Jonides, J., & Perrig, W. J. (2010). On The Relationship Between N-back Performance and Matrix Reasoning - Implications for Training and Transfer. *Intelligence, 38*(6), 625-635.

Jaeggi, S. M., Buschkuehl, M., Perrig, W. J., & Meier, B. (2010). The concurrent validity of the N-back task as a working memory measure. *Memory, 18*(4), 394-412.

Buschkuehl, M., & Jaeggi, S. M. (2010). Improving intelligence: a literature review. *Swiss Medical Weekly, 140*(19-20), 266-272.

Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2010). Maladaptive coping, adaptive coping, and depressive symptoms: Variations across age and depressive state. *Behaviour Research and Therapy, 48*(6), 459-466.

Jaeggi, S. M., Berman, M. G., & Jonides, J. (2009). Training attentional processes. *Trends in Cognitive Sciences, 13*(5), 191-192.

Jaeggi, S. M., Schmid, C., Buschkuehl, M., & Perrig, W. J. (2009). Differential Age Effects in Load-Dependent Memory Processing. *Aging, Neuropsychology, and Cognition, 16*(1), 80-102.

Perrig-Chiello, P., Jaeggi, S. M., Buschkuehl, M., Stähelin, H. B., & Perrig, W. J. (2009). Personality and health in middle age as predictors for well-being and health in old age. *European Journal of Aging, 6*(1), 27-37.

Buschkuehl, M., Jaeggi, S. M., Hutchison, S., Perrig-Chiello, P., Dapp, C., Muller, M., et al. (2008). Impact of working memory training on memory performance in old-old adults. *Psychology and Aging, 23*(4), 743-753.

Jaeggi, S. M.*, Buschkuehl, M.*, Jonides, J., & Perrig, W. J. (2008). Improving fluid intelligence with training on working memory. *Proceedings of the National Academy of Sciences of the United States of America, 105*(19), 6829-6833. (direct submission)

Commented by: Sternberg, R. J. (2008). Increasing fluid intelligence is possible after all. *Proc Natl Acad Sci U S A*, 105(19), 6791-6792.

Contributed equally;* ***received Pfizer Research Award 2009*

Jaeggi, S. M., Buschkuehl, M., Etienne, A., Ozdoba, C., Perrig, W. J., & Nirkko, A. C. (2007). On how high performers keep cool brains in situations of cognitive overload. *Cognitive, Affective, and Behavioral Neuroscience, 7*(2), 75-89.

Jaeggi, S. M.*, Seewer, R., Nirkko, A. C., Eckstein, D., Schroth, G., Groner, R., & Gutbrod, K. (2003). Does excessive memory load attenuate activation in the prefrontal cortex? Load-dependent processing in single and dual tasks: functional magnetic resonance imaging study. *Neuroimage, 19*(2), 210-225.

****Received Young Researcher Award as well as Publication Award 2003***

Submitted/under review:

Bernard, J. A., Peltier, S., Wiggins, J. L., Jaeggi, S. M., Buschkuehl, M., Jonides, J., et al. (revised and resubmitted). Dissociable functional networks of the human dentate nucleus.

Bernard, J. A., Peltier, S. J., Wiggins, J. L., Jaeggi, S. M., Buschkuehl, M., Fling, B. W., . . . Seidler, R. D. (submitted). Disrupted cortico-cerebellar connectivity in older adults.

Jaeggi, S.M., Buschkuehl, M., Shah, P., & Jonides, J. (submitted). The role of individual differences in cognitive training and transfer.

Stepankova, H., Lukavsky, J., Buschkuehl, M., Kopecek, M., Ripova, D. & Jaeggi, S. M., (under review). Dose-response relationship of working memory training and improvements in fluid intelligence: A randomized controlled study in old adults.

Thompson, R. J., Mata, J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (submitted). The role of attention to emotion in recovery from major depressive disorder.

Book chapters and non-peer reviewed papers:

Jonides, J., Jaeggi, S. M., Buschkuehl, M., & Shah, P. (in press). Building better brains. *Scientific American*.

Jaeggi, S. M., & Buschkuehl, M. (in press). Training Working Memory. In T. P. Alloway (Ed.), *Working Memory: The New Intelligence*. New York, NY: Psychology Press.

Buschkuehl, M., Jaeggi, S. M., Shah, P., & Jonides, J. (2012). Working Memory Training and Transfer. In R. Subotnik, A. Robinson, C. Callahan & E. J. Gubbins (Eds.), *Malleable Minds: Translating Insights from Psychology and Neuroscience to Gifted Education* (pp. 101-115). University of Connecticut, Storrs, CT: The National Center for Research on Giftedness and Talent.

Baumgartner, S., & Jaeggi, S. (2001). Jugendliche und Internet. Einstellung und Nutzungshaeufigkeit. In R. Groner & M. Dubi (Eds.), *Das Internet und die Schule. Bisherige Erfahrungen und Perspektiven für die Zukunft* (pp. 187-204). Bern: Hans Huber.

Theses/Monographies:

Doctoral Thesis (2007): Kapazitätsgrenzen des Arbeitsgedächtnis: Neuronale Korrelate und die Rolle der Inter- und Intraindividuellen Unterschiede [Capacity limits in working memory – Neural correlates and the role of inter- and intraindividual differences]; Advisors: Prof. René Müri & PD Dr. Arto Nirkko.

Doctoral Thesis (2005): Capacity Limitations in Human Cognition – Behavioural and Biological Contributions; Advisor: Prof. Walter Perrig.

Master Thesis (2002): Does Excessive Memory Load Attenuate Activation in the Prefrontal Cortex? Load-Dependent Processing in Single and Dual Tasks: an fMRI Study; Advisors: Dr. Klemens Gutbrod & Dr. Rudolf Groner.

Computer Applications

Buschkuehl, M., Jaeggi, S. M., Jonides, J., & Shah, P. (2010). SmartBrain (Version 0.1.5). Ann Arbor: The University of Michigan.

Buschkuehl, M. & Jaeggi, S. M. (2009). N-Back Trainer Classic (Version 1.0). Ann Arbor: University of Michigan.

Buschkuehl, M., Jaeggi, S. M., Kobel, A., & Perrig, W. J. (2007). BrainTwister - Aufgabensammlung für kognitives Training (Version 1.0). Bern: Universität Bern.

Received Ypsomed Innovation Award 2008

Perrig, W. J., Etienne, A., Jaeggi, S. M., Blaser, D., Meier, B., Hofer, D., Kling, V., Perrig-Chiello, P., Serafin, D., Ruch, M., & Buschkuehl, M. (2006). Computerunterstützter Gedächtnis-Funktion-Test (C-GFT) (Version 3.1). Bern: Universität Bern.

Etienne, A., Nirkko, A., & Jaeggi, S. M. (2005). ROI Analyzer (Version 1.0). Bern: Universität Bern.

Presentations & Posters at Scientific Conferences (selection)

Berman, M. G., Nee, D. E., Deldin, P. J., Casement, M., Kim, H. S., Jaeggi, S. M., et al. (2009, March 21-24). *A chronometric analysis of cognition in depression.* Paper presented at the 16th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Bernard, J., Buschkuehl, M., Jaeggi, S. M., Humfleet, J., Jonides, J., & Seidler, R. D. (2010). *Does Cognitive Training Improve Dual Task Walking in Older Adults.* Paper presented at the University of Michigan Geriatrics Symposium, Ann Arbor, MI.

Buschkuehl, M., & Jaeggi, S. (2005). *The impact of working memory training on selected cognitive measures.* Paper presented at the Proceedings of the XIVth Meeting of the European Society for Cognitive Psychology ESCoP, Leiden, The Netherlands.

Buschkuehl, M., Jaeggi, S. M., & Perrig, W. J. (2006). *Working Memory Training in the Elderly Suggests a Modulation of the Focus of Attention* Paper presented at the 3rd European Working Memory Symposium (EWOMS-3), Genova, Italy.

Buschkuehl, M., Jaeggi, S. M., & Shah, P. (2010, June 28-30). *Transfer Effects of Working Memory Training on School-Relevant Measures.* Paper presented at the Fifth Annual IES Research Conference, National Harbor, MD.

Buschkuehl, M., Jaeggi, S. M., Berman, M. G., Thummala, K., Behnke, C. E., & Jonides, J. (2009, March 21-24). *Investigating the Underlying Cognitive Processes of the N-Back Task: a Regression Study.* Paper presented at the 16th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.

Buschkuehl, M., Jaeggi, S. M., Jonides, J., & Shah, P. (2010, Nov 19-21). *Working Memory Training in Typically Developing Children: Interindividual Differences and Transfer*. Paper presented at the 51st Annual Meeting of the Psychonomic Society.

Buschkuehl, M., Jaeggi, S. M., Wyler, H., & Perrig, W. J. (2007, November 15-18). *Encoding during Retrieval: Effects in Recognition but not in Free Recall.* Paper presented at the 48th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Demiralp, E., Jaeggi, S. M., Buschkuehl, M., Feldman Barrett, L., Gonzalez, R., Kross, E., et al. (2011, Jan 13-14). *Emotional granularity and rumination in major depressive disorder.* Paper presented at the How do Executive Function and Emotion Interact?

NIMH Interdisciplinary Behavioral Science Center, University of Colorado at Boulder, CO.

Demiralp, E., Kim, H., Adams, K., Jaeggi, S. M., Buschkuehl, M., Berman, M. G., et al. (2010, Nov 19-21). *Differences in the Organization and Free Recall of Self-Related Information in People with Depression.* Paper presented at the Presented at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.

Hernandez-Garcia, L., Buschkuehl, M., Jaeggi, S. M., & Jonides, J. (2010, June, 6-10). *Longitudinal, pseudo-continuous ASL imaging of perfusion during a working memory task: How does training change the activation pattern?* Paper presented at the 16th Annual Meeting of the Organization for Human Brain Mapping, Barcelona, Spain.

Jaeggi, S. M., Buschkuehl, M., & Perrig, W. J. (2007, November 15-18). *Differential Effects of Emotional Content in Working Memory and Recognition.* Paper presented at the 48th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Jaeggi, S. M., Buschkuehl, M., Blaser, D., & Perrig, W. J. (2006). *Transfer Effects Following Working Memory Capacity Training: Improvements in Free Recall and Fluid Intelligence.* Paper presented at the 3rd European Working Memory Symposium (EWOMS-3), Genova, Italy.

Jaeggi, S. M., Buschkuehl, M., Blaser, D., & Perrig, W. J. (2006). *Working Memory Training Enhances Free Recall and Intelligence.* Paper presented at the Joint meeting of the Swiss Society for Neuroscience (SSN) and the Swiss Society for Neuroradiology, Basel, Switzerland.

Jaeggi, S. M., Buschkuehl, M., Demiralp, E., Berman, M. G., Deldin, P. J., Kross, E., et al. (2009, September 10-13). *Mind-Wandering and Ruminative Behavior in Major Depression is Mediated by Context: A Combined Laboratory and Experience Sampling Study.* Paper presented at the 23rd Annual Meeting of the Society for Research in Psychopathology, Minneapolis, MN.

Jaeggi, S. M., Buschkuehl, M., Etienne, A., Ozdoba, C., Perrig, W. J., & Nirkko, A. C. (2006). *The importance of behavioural measures in interpreting functional data: evidence from a working memory study.* Paper presented at the ESNR 06/ICS 06, Geneva, Switzerland.

Received EPOS Poster Award 2006

Jaeggi, S. M., Buschkuehl, M., Hernandez-Garcia, L., Bernard, J., & Jonides, J. (2010, April 17-20). *Neural Correlates of N-back Training – A Pseudo-Continuous Arterial Spin Labeling (pCASL) Study.* Paper presented at the Seventeenth Annual Cognitive Neuroscience Society Meeting, Montreal, Canada.

Jaeggi, S. M., Buschkuehl, M., Shah, P., & Jonides, J. (2011, November 3–6). *Working Memory Training and Transfer to Gf – Evidence for Domain Specificity?* Paper presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA.

Jaeggi, S. M., Buschkuehl, M., Markes, O., Perrig, W. J., & Koenig, T. (2008, April 12-15). *Neural Correlates of Specific Training Effects and Transfer.* Paper presented at the 15th Annual Meeting of the Cognitive Neuroscience Society. San Francisco, CA.

Jaeggi, S. M., Etienne, A., Buschkuehl, M., Ozdoba, C., Schroth, G., Perrig, W. J., et al. (2005). *The cool brains of high performers in situations of cognitive overload are even cooler: A dual-task investigation with fMRI at the edge of capacity.* Paper presented at the 11th Annual Meeting of the Organization for Human Brain Mapping, Toronto, Ontario (Canada).

Jaeggi, S. M., Meier, B., & Buschkuehl, M. (2005, Aug 31 - Sept 3). *On the Relationship Between Different Working Memory Measures.* Paper presented at the Proceedings of

the XIVth meeting of the European Society for Cognitive Psychology ESCoP, Leiden, The Netherlands.

Jaeggi, S. M., Meier, B., Buschkuehl, M., & Perrig, W. J. (2004). *Das N-back-Paradigma ist ein adäquates Mass für Arbeitsgedächtniskapazität.* Paper presented at the 46. Tagung experimentell arbeitender Psychologen (TeaP), Giessen, Germany.

Jaeggi, S. M., Nirkko, A. C., Ozdoba, C., Etienne, A., Buschkuehl, M., Schroth, G., et al. (2004). *The Impact of Processing Demand on Cortical Activation Assessed with Single- and Dual-Tasks.* Paper presented at the 10th Annual Meeting of the Organization for Human Brain Mapping, Budapest, Hungary.

Jaeggi, S. M., Seewer, R., Nirkko, A. C., Eckstein, D., Schroth, G., Groner, R., et al. (2003). *Is dual-tasking the same as simply adding two single tasks? Evidence from an fMRI-study* Paper presented at the 8. Kongress der Schweizerischen Gesellschaft für Psychologie (SGP), Bern, Switzerland.

Jaeggi, S. M., Seewer, R., Nirkko, A. C., Eckstein, D., Schroth, G., Groner, R., et al. (2004). *Does Dual-Tasking Lead to Similar Activation-Patterns as the Performance of the two Corresponding Single Tasks? Evidence from an fMRI-Study.* Paper presented at the Joint Meeting of the Swiss Society for Neuroscience (SSN) and the Swiss Society of Behavioural Neurology (SSBN), Lausanne, Switzerland.

Jaeggi, S. M., Studer, B. E., Buschkuehl, M., Su, Y.-F., Jonides, J., & Perrig, W. J. (2009). *Improving Fluid Intelligence – Single N-back Is As Effective As Dual N-back.* Paper presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA.

Jonides, J., Jaeggi, S. M., & Buschkuehl, M. (2009, June, 2-3). *Improving Fluid Intelligence by Training Working Memory.* Presented at the Office of Naval Research - Contractor's Meeting, Arlington, VA.

Loosli, S. V., Buschkuehl, M., Perrig, W. J., & Jaeggi, S. M. (2008, July 3-5). *Working memory training enhances reading in 9-11 year old healthy children.* Paper presented at the 18th Advance Course – Cognitive Development, Mechanisms and Constraints. Archives Jean Piaget, Geneva, Switzerland.

Mata, J., Thompson, R. J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2009, September 10-13). *Does physical activity help "lose the blues"?* Paper presented at the 23rd Annual Meeting of the Society for Research in Psychopathology, Minneapolis, MN.

Munch, M., Linhart, F., Borisuit, A., Jaeggi, S. M., & Scartezzini, J.-L. (2011, Nov 4-5). *Effects of daytime light exposure on early evening performance, subjective sleepiness and hormonal secretion.* Paper presented at the Schweizerische Neurologische Gesellschaft SNG und Schweizerische Gesellschaft für Schlafforschung, Schlafmedizin und Chronobiologie SGSSC, St. Gallen, Switzerland.

Studer-Luethi, B., Jaeggi, S. M., Buschkuehl, M., & Perrig, W. J. (2010). *The effects of personality on working memory training outcome.* Paper presented at the Annual Clinical Neuroscience Meeting, Bern, Switzerland.

Thompson, R. J. M., J., Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Gotlib, I. H. (2010, May 27-30). *Nuances in the emotional experiences of depressed and nondepressed individuals.* Paper presented at the 22nd Annual Convention of the Association for Psychological Science, Boston, MA.

Invited talks (selection)

Jaeggi, S. M. (2012, May 24-27). *Improving intelligence by means of cognitive training: Current challenges and potential resolutions.* Invited talk presented at Earl Hunt's symposium on "Improving Intelligence" at the 24th Annual Convention of the American Psychological Science, Chicago, IL.

Jaeggi, S. M. (2011, July 31-Aug 5). *Short and long term benefits of cognitive training.* Paper presented at the Symposium on Memory Training at the 5th International Conference on Memory, York, UK.

Jaeggi, S. M. (2010, July 8-9). *Working Memory Training and Transfer.* Invited talk presented at the Conference Brain and Cognition V - Cognitive Enhancement, CUIMPB - Centre Ernest Lluch; Barcelona, Spain.

Jaeggi, S. M. (2010, June 1). *Working Memory Training and Transfer in Normally Developing Children.* Invited talk presented at the Workshop on Working Memory in Deaf Children With Cochlear Implants, University of Indiana, Indianapolis, IN.

Jaeggi, S. M., Buschkuehl, M., & Shah, P. (2010, May 28). *Working Memory Training and Transfer.* Invited talk presented at the Eaton Academy Eastpointe, Detroit, MI.

Jaeggi, S. M. (2009, June 25-27). *Working Memory and Fluid Intelligence.* Invited talk presented at the Cognitive Conference - Mind as Machine: Advances in Cognitive Neuroscience in the 21st Century; Rehabilitation Institute of Chicago, Chicago, IL.

Jaeggi, S. M., & Buschkuehl, M. (2009, February 9). *Arbeitsgedächtnistraining – Leistungstransfer und weitere Herausforderungen.* Invited talk for the International Research Training Group "Adaptive Minds"; Universität des Saarlandes, Saarbrücken, Germany.

Jaeggi, S. M., & Buschkuehl, M. (2007, July 4). *Entwicklung - Lernen - Fördern. Erkenntnisse aus den Neurowissenschaften.* Invited talk presented at the Lehrerfortbildungsveranstaltung, Bäriswil, Switzerland.

Jaeggi, S. M. (2006, September 20). *Gedächtnis und Lernen*. Invited talk presented at the Weiterbildungsveranstaltung, Psychiatrische Dienste Aargau, Aarau, Switzerland.

Jaeggi, S. M. (2006, March 22). *Kognitives Training bei Hirnverletzten - Neue Perspektiven aus der Experimentellen Neuropsychologie.* Invited talk presented at the Kolloquium Klinik Bethesda Tschugg, Switzerland.

Jaeggi, S. M. (2005, October 29). *Kapazitätsgrenzen in der menschlichen Informationsverarbeitung.* Invited talk presented at the MTRA Weiterbildungs-veranstaltung, Inselspital Bern, Bern, Switzerland.

Jaeggi, S. M. (2005, May 17). *Load-dependent activation changes in single- and dual tasks: Evidence for differential effects in high- and low-performing subjects.* Invited talk presented at the Centre for Chronobiology, Psychiatric University Clinics Basel, Basel, Switzerland.

Jaeggi, S. M. (2004). *Die Rolle des präfrontalen Cortex bei Aufmerksamkeits- und Arbeitsgedächtnisprozessen.* Invited talk presented at the Nationaler Kongress für Psychologiestudierende (psyKo), Kandersteg, Switzerland.

Jaeggi, S. M. (2003, August 26). *Using the n-back task to manipulate working memory load and executive functions.* Invited talk presented at the Universitätsklinik und Poliklinik für Psychiatrie, Universität Bern, Bern, Switzerland.

Various talks at departmental colloquia, e.g. at the University of Michigan, Ann Arbor; Michigan State University, East Lansing; University of Maryland at College Park (Department of Psychology, College of Education); University of Bern, Switzerland; University of Basel, Switzerland; University of Zurich, Switzerland, University Hospital of Geneva, Switzerland; University of Padova, Italy; University of Glasgow, UK.

Other activities

Initiated and organized a bi-weekly interdisciplinary seminar for faculty, post-docs, graduate students and undergraduates on the topic of cognitive intervention and transfer at the University of Maryland (currently, the seminar is regularly attended by participants from the Department of Psychology, the College of Education, Kinesiology, and CASL).

Co-organized a symposium with Dr. Roberto Colom on "Improving Intelligence" to be held at the Annual Conference of the International Society for Intelligence Research (San Antonio, Tx, December 2012).

Co-organized two seminars ('Weiterbildungskurse') on Computerized Working Memory Training for the 'Schweizerischer Verband für Gedächtnistraining (SVGT), held at the University of Bern, Switzerland. Faculty: Prof. Perrig, W.J., Dr. Jaeggi, S.M., Dr. Buschkuehl, M. (July 2007, August 2008).

Organization of a lab visit with research demonstrations in collaboration with an academic enrichment program for middle-school students from at-risk neighborhoods in Washington DC (July 2012).

Memberships in Professional Organizations

Association for Psychological Science (APS)

Cognitive Neuroscience Society (CNS)

The Psychonomic Society

The European Society for Cognitive Psychology (ESCoP)

Ad-hoc Reviewer for Journals (34 total peer-reviewed journal outlets)

Aging, Neuropsychology, and Cognition, Applied Cognitive Psychology, Behavioral Brain Research, Brain Research, Cerebral Cortex, Cortex, Developmental Psychology, European Journal of Psychology and Education, Frontiers in Human Neuroscience, Human Brain Mapping, Intelligence, International Journal of Geriatric Psychiatry, Journal of Aging Research, Journal of Applied Research in Memory and Cognition, Journal of Clinical Child and Adolescent Psychology, Journal of Cognitive Neuroscience, Journal of Cognitive Psychology, Journal of Experimental Psychology: General, Journal of Experimental Psychology: Learning, Memory and Cognition, Journal of Experimental Psychology: Applied, Journal of Memory and Language, Journal of Neurophysiology, Journal of Neuroscience, Memory, Memory & Cognition, NeuroImage, Neuron, Neuropsychologia, PLOS One, Psychological Science, Psychology and Aging, Psychonomic Bulletin & Review, Proceedings of the National Academy of Sciences of the United States of America, Science, Trends in Cognitive Sciences

Ad-hoc Reviewer for Grant Agencies

National Science Foundation (USA)
Swiss National Science Foundation

Teaching Experience (Courses Taught)

University of Maryland at College Park

Psyc309 Introduction to Cognitive Neuroscience (Undergraduate course; Spring 2012 (N=16))

Psyc789V Special Research Problems: Higher Cognitive Functions (Working Memory, Attentional Control, Intelligence, Individual Differences) (Graduate seminar; Fall 2012 (N=12))

University of Bern, Switzerland (SS = summer semester, WS = winter semester)

Design and supervision of several experiments developed for the course '*Experimentelle Übungen*' [Practice of Psychological Experiments] (Bachelor level; WS0304 (N=5), WS0405 (N=22), WS0506 (N=29), WS0607 (N=27))

Introduction to Clinical Psychology (Bachelor level; Tutor/GSI; SS99 (N=20))

Neuroanatomy (Master level; SS02 (N=9), WS0203 (N=40), SS05 (N=10), WS0506 (N=15), WS0607 (N=22); SS07 (N=9))

Neuroimaging (Master level; SS03 (N=17), WS0304 (N=23), SS04 (N=22), WS0405 (N=24), SS05 (N=11), WS0506 (N=19), SS06 (N=13), WS0607 (N=16))

Language and Text Comprehension (Master level; WS0304 (N=24), WS0506 (N=36))

Learning and Memory (Master level; SS04 (N=39))

Attention, Working Memory, and Executive Functions (Master level; WS0203 (N=36), WS0405 (N=59), WS0607 (N=20))

Training, Capacity, and Exceptional Memory (Master level; SS07 (N=9))

Cognitive Changes Across the Lifespan (Master level; SS06 (N=17))

Visual Perception and Imagery (Master level; SS03 (N=15), SS05 (N=60))

Students advised/mentored

University of Maryland at College Park

Post-doctoral fellow

2012-present Nina Hsu (co-mentored with Jared Novick; CASL)

Doctoral students

2012-present: Arifi Waked (Hearing and Speech; co-advisor with Matthew Goupell; received the Dean's fellowship from HESP, as well as a travel award from HESP in 2012)

2012-present: Erika Hussey (Psychology; doctoral dissertation committee member)

Undergraduate students

2012: Meir Hauser (full-time lab manager; graduated 2012 from the University of Maryland at College Park; now a graduate student in the Chicago School of Professional Psychology; advisor: Dr. Kin Kong).

2012-present: Ally Stegman (full-time lab manager; graduated 2012 from the University of Michigan)

2012-present: Ellen Sheehan (received a CASL Language Science Summer Scholarship 2012 to work in my lab)

2012-present: Nick Davey (received a CASL Language Science Summer Scholarship 2012 to work in my lab)

2012-present: Dan Egert

2012-present: Daniel Barakh

2012-present: Rohan Ahuja

University of Michigan

Honor's Thesis: Darbor, K. (2010)

University of Bern, Switzerland

Empirical Bachelor Theses: Schönenberger, L (2007), Zurbriggen, S. (2007)

Master-Theses/"Lizentiatsarbeiten": Belser, K. (2005), Bichsel, B. (2007), Bieri B. (2005), Blaser, D. (2005), Brauchle, N. (2006), Duss, S. (2006), Fischli, F. (2007), Hofer, N. (2008), Leasi, S. (2006), Loosli, S. (2006), Markes, O. (2006), Oelhafen, S. (2008), Omlin, Y. (2007), Passani, S. (2006), Pfammatter, M. (2005), Rau, A. (2006), Roesti, A. (2005), Schachtler, F. (2006), Schmid, C. (2004), Strickler, M. (2007), Studer, B. (2010), Teuscher D. (2007)

Other theses (empirical and literature theses; Master level): ~70 students (2003-2007)

Media Attention (selection)

Hurley, D. (2012, April 18). Can You Make Yourself Smarter?* *The New York Times*. Retrieved from http://www.nytimes.com/2012/04/22/magazine/can-you-make-yourself-smarter.html

*feature article covering my work; ranked one of the most emailed articles for several days.

Begley, S. (2012, January 1). Buff Your Brain. *Newsweek Magazine*. Retrieved from http://www.thedailybeast.com/newsweek/2012/01/01/buff-your-brain.html

Thean, T. (2011, June 16). How Brain Training Can Boost Intelligence. *Time*. Retrieved from http://healthland.time.com/2011/06/16/how-brain-training-can-boost-intelligence/

Mann, D. (2011, June 15). Brain-Training Games May Give Kids an Achievement Edge. *WebMD*. Retrieved May 1, 2012, from http://children.webmd.com/news/20110613/brain-training-games-may-give-kids-acheivement-edge

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Healy, M. (2011, June 14). Brain training: Brain training improves intelligence in some children, study says. *Los Angeles Times Articles*. Retrieved from http://articles.latimes.com/2011/jun/14/health/la-he-iq-boost-20110614-1

Dotinga, R. (2011, June 13). Training via Video Game Shown to Boost Kids' Brain Power. *U.S.News*. Retrieved from http://health.usnews.com/health-news/family-health/brain-and-behavior/articles/2011/06/13/training-via-video-game-shown-to-boost-kids-brain-power

Lehrer, J. (2011a, June 11). A Simple Exercise To Boost IQ. *Wired*. Retrieved May 1, 2012, from http://www.wired.com/wiredscience/2011/06/a-simple-exercise-to-boost-iq/

Lehrer, J. (2011b, June 11). Boot Camp for Boosting IQ. *Wall Street Journal*. Retrieved from http://online.wsj.com/article/SB10001424052702304432304576371462612272884.html?KEYWORDS=lehrer

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Zahner, K. (2009, June 9). Fit im Kopf. *Migros-Zeitung*, (24).

Fernandez, A. (2009, May 13). Can Intelligence Be Trained? Martin Buschkuehl shows how. *SharpBrains*. Retrieved from http://www.sharpbrains.com/blog/2008/05/13/can-intelligence-be-trained-martin-buschkuehl-shows-how/#more-1368

Mossman, K. (2009, April 29). Brain Trainers - Put your cortex through its paces with these software games. *Scientific American Mind*, (4), 32–39.

Wang, S., & Aamodt, S. (2009, March 10). Guest Column: Can We Increase Our Intelligence? *The New York Times: Opinionator*. Retrieved from http://opinionator.blogs.nytimes.com/2009/03/10/guest-column-can-we-increase-our-intelligence/

Frei, M. (2009, February 5). Wie man mithilfe des Computers intelligenter wird. *Tages-Anzeiger*. Switzerland.

Erfolgreiche Berner Forscher. (2009, January 13).*Der Bund*. Switzerland.

Penland, J. (2008, December 31). Brain "Boot Camp" Makes You Smarter. *ScienceCentral*. Retrieved from http://www.sciencentral.com/video/2008/12/31/brain-boot-camp-makes-you-smarter/

Bosveld, J. (2008, December 11). Top 100 Stories of 2008 #56: Memory Training Can Make You Smarter*. *Discover Magazine*. Retrieved from http://discovermagazine.com/2009/jan/056

*PNAS 2008 study ranked in the top 100 best scientific discoveries of the year 2008.

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Bakalar, N. (2008, April 29). Memory Training Shown to Turn Up Brainpower*. *The New York Times*. Retrieved from http://www.nytimes.com/2008/04/29/health/research/29brai.html

*ranked one of the most emailed articles for several days

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References

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