

Stephen Aichele

Academic Curriculum Vitae (February, 2016)

University of Geneva
Psychology & Educational Sciences
40, bd du Pont d'Arve
1205 Genève, Switzerland
stephen.aichele@unige.ch

Education

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| 2013 | Ph.D. Quantitative Psychology
University of California at Davis
Advisors: Emilio Ferrer & Phillip Shaver |
| 2010 | M.A. (Highest Honors). Quantitative Psychology
University of California at Davis |
| 1994 | B.Sci. Biopsychology
University of California at Santa Barbara |

Academic Appointments - Research

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| 2014– <i>Present</i> | Research Scientist. University of Geneva, Switzerland. |
| 2008–2013 | Graduate Research Assistant. University of California at Davis.
<i>Principal Investigator:</i> Dr. Clifford Saron.
<i>Study:</i> The Shamatha Project |
| 2010–2013 | Graduate Research Assistant. University of California at Davis.
<i>Principal Investigator:</i> Dr. Monique Borgerhoff Mulder.
<i>Study:</i> Savannas Forever Tanzania HIV Research Initiative |
| 2006–2008 | Research Specialist. University of California at Davis. Computer programming (20 cognitive tasks time-locked to neuro-physiological and video recording systems), remote laboratory construction, intensive data acquisition (behavioral, physiological including EEG, video, & blood), management of participant pool, and analysis of facial expressions of emotion (FACS). |

Academic Appointments - Instruction

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| 2011–2013 | Laboratory Instructor, Teaching Assistant. University of California at Davis.
<i>Courses:</i> Advanced Statistical Inference (Graduate Level), Causal Modeling of Correlation Data (Graduate Level), Statistical Analysis of Psychological Data, Research Methods in Psychology. |
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Other Related Employment

- 2004–2006 Website and software developer. Self-employed.
- 2001–2004 Program Director, Facilities Manager. The Ojai Foundation & Center for Council. Educational training center in Ojai, California.

Awards, Fellowships & Grantsmanship

- 2013 John Templeton Foundation Research Grant (\$2.3 million)
Co-Author of Grant Proposal (Section on Quantitative Methods)
- 2013 University of California Graduate Student Travel Award
- 2012 Society for Multivariate Experimental Psychology Annual Conference
Award for Graduate Student Presenters ~ Honorable Mention
- 2010 National Science Foundation of the United States
Graduate Research Fellowship ~ Honorable Mention
- 2009 National Science Foundation of the United States
Graduate Research Fellowship ~ Honorable Mention
- 2008 Yoga Research and Education Foundation
Graduate Research Stipend
- 2008 Mind and Life Summer Research Institute ~ Fellow

Research Interests & Expertise

Multivariate statistical methods in the behavioral sciences
Cognitive aging and epidemiology
Human vulnerability and risk across the lifespan
Attentional training and performance
Longitudinal data analysis

Journal Reviews

AIDS and Behavior, American Journal of Epidemiology, British Medical Journal, Health and Quality of Life Outcomes, Journal of Aging Research, Merrill-Palmer Quarterly, Oxford Journal of Gerontology, Polish Psychological Bulletin, Psychological Medicine, Psychology and Aging

Publications - Peer Reviewed

- Aichele, S.**, Rabbitt, P., & Ghisletta, P. (2016). Think fast, feel fine, live long: A 29-year study of cognition, health, and survival in middle-aged and older adults. *Psychological Science*, 27 (4), 518–529.
- Zanesco, A. P., King, B. G., MacLean, K. A., Jacobs, T. L., **Aichele, S. R.**, Wallace, A. B., Smallwood, J., Schooler, J. W., & Saron, C. D. (2016). Meditation training influences mind wandering and mindless reading. *Psychology of Consciousness: Theory, Research, and Practice*, 3 (1), 12–33.
- Rosenberg, E. R., Zanesco, A. P. King, B. G., **Aichele, S. R.**, Jacobs, T. L., Bridwell, D. A., MacLean, K. A., Shaver, P. R., Ferrer, E., Sahdra, B. K., Lavy, S., Wallace, B. A., & Saron, C. D. (2015). Intensive meditation training influences emotional responses to suffering. *Emotion*, 15 (6), 775–790.
- Aichele, S.**, Rabbitt, P., & Ghisletta, P. (2015). Lifespan decrements in fluid intelligence and processing speed predict mortality risk. *Psychology and Aging*, 30, 598–612.
- Saggar, M., Zanesco, A. P., King, B. K., Bridwell, D. A., MacLean, K. A., **Aichele, S. R.**, Jacobs, T. L., Saron, C. D., and Miikkulainen, R. (2015). Longitudinal mean-field modeling of thalamocortical interactions associated with intensive meditation training based on changes in scalp-recorded EEG. *Neuroimage*, 114, 88–104.
- Aichele, S. R.**, Borgerhoff Mulder, M., James, S., & Grimm, K. (2014). Attitudinal and behavioral characteristics predict high risk sexual activity in rural Tanzanian youth. *PLoS ONE*, 9 (6), e99986.
- Jacobs, T. L., Shaver, P. R., Epel, E. S., Zanesco, A. P., **Aichele, S. R.**, Bridwell, D.A., Rosenberg, E.L., King, B.G., Maclean, K.A., Sahdra, B.K., Kemeny, M. E., Ferrer, E., Wallace, B. A., & Saron, C.D. (2013). Self-reported mindfulness and cortisol dynamics during a Shamatha meditation retreat. *Health Psychology*, 32, 1104–1109.
- Saggar, M., King, B. G., Zanesco, A. P., MacLean, K. A., **Aichele, S. R.**, Jacobs, T. L., Bridwell, D. A., Shaver, P. R., Rosenberg, E. L., Sahdra, B. K., Ferrer, E., Tang, Akaysha, T. C., Mangun, G. R., Wallace, B. A., Miikkulainen, R., & Saron, C. D. (2012). Intensive training induces longitudinal changes in meditation state-related EEG oscillatory activity. *Frontiers in Human Neuroscience*, 6 (256). DOI: 10.3389/fnhum.2012.00256
- Sahdra, B. K., MacLean, K. A., Ferrer, E., Shaver, P. R., Rosenberg, E. L., Jacobs, T. L., Zanesco, A. P., King, B. G., **Aichele, S. R.**, Bridwell, D. A., Mangun, G. R., Lavy, S., Wallace, B. A., & Saron, C. D. (2011). Response inhibition enhanced by intensive meditation training predicts improved adaptive socio-emotional functioning. *Emotion*, 11, 299–312.
- Jacobs, T. L., Epel, E. S., Lin, J. Blackburn, E. H., Wolkowitz, O. M., Bridwell, D. A., Zanesco, A. P., **Aichele, S. R.**, Sahdra, B. K., Maclean, K. A, King, B. G., Shaver, P. R., Rosenberg, E. L., Ferrer, E., Wallace, B. A. & Saron, C. D. (2011). Intensive meditation training, immune cell telomerase activity, and psychological mediators. *Psychoneuroendocrinology*, 36, 664–681.

MacLean, K. A., Ferrer, E., **Aichele, S. R.**, Bridwell, D. A., Zanesco, A. P., Jacobs, T. L., King, B. G., Rosenberg, E. L., Sahdra, B. K., Shaver, P. R., Wallace, A. B., Mangun, G. R., & Saron, C. D. (2010). Intensive meditation training leads to improvements in perceptual discrimination and sustained attention. *Psychological Science*, *21*, 829–839.

MacLean, K.A., **Aichele, S. R.**, Bridwell, D. A., Mangun, G. R., Wojciulik, E., & Saron, C. D. (2009). Interactions between endogenous and exogenous attention during vigilance. *Attention, Perception, & Psychophysics*, *71*, 1042–1058.

Publications – In Review or in Revision

Ghisletta, P., & **Aichele, S.** (*in revision*). Quantitative methods in psychological aging research.

Aichele, S., Rabbitt, P., & Ghisletta, P. (*revised, in review*). Illness, intelligence point to individual differences in patterns of depressive symptoms in later life.

Aichele, S., Rabbitt, P., & Ghisletta, P. (*in review*). Cardiovascular symptoms and processing speed declines are differentially associated with cerebral white matter lesions in older adults.

Conference Proceedings & Book Chapters

Ghisletta, P., **Aichele, S.**, & Rabbitt, P. (August, 2014). Longitudinal data mining to predict survival in a large sample of adults. In Gilli, M., González-Rodríguez, G., & Nieto-Reyes, A. (Eds.), *Proceedings of COMPSTAT 2014: 21st International Conference on Computational Statistics* (pp. 167-175). <http://www.compstat2014.org/auxil/Proceedings-COMPSTAT2014.pdf>

Workshops & Seminars

LIVES: Swiss National Centre for Competence in Research. *Doctoriales*. (February, 2017). University of Geneva. (Invited panel expert).

Aichele, S., & Ghisletta, P. (2016, November). *A data mining approach to longitudinal risk assessment*. Annual Scientific Meeting of the Gerontological Society of America, New Orleans, LA.

LIVES: Swiss National Centre for Competence in Research. *Doctoriales*. (February, 2016). University of Lausanne. (Invited panel expert).

American Psychology Association Advanced Training Institute: Structural Equation Modeling (2012, Spring). (Training assistant).

American Psychology Association Advanced Training Institute: Structural Equation Modeling (2011, Spring). (Training assistant).

Oral Presentations

- Aichele, S., Rabbitt, P., & Ghisletta, P.** (2016, November). *Cognitive performance predicts mortality risk & individual differences in depressive symptoms in middle-aged and older adults*. Annual Scientific Meeting of the Gerontological Society of America, New Orleans, LA.
- Aichele, S., Rabbitt, P., & Ghisletta, P.** (2016, June). *Think fast, feel fine, live long: A 29-year study of cognition, health, and survival in middle-aged and older adults*. International Conference on Sequence Analysis and Related Methods, Lausanne, Switzerland.
- Aichele, S., Rabbitt, P., & Ghisletta, P.** (2016, April). *Think fast, feel fine, live long: A 29-year study of cognition, health, and survival in middle-aged and older adults*. Cognitive Aging Conference, Atlanta, Georgia.
- Rabbitt, P., **Aichele, S.**, & Ghisletta, P. (2015, November). *Death, intelligence, fun, and contentment in old age*. St. Andrew's Day Invited Lecture, University of Edinburgh, United Kingdom.
- King, B. G., Zanesco, A. P., Shaver, P. R., Jacobs, T. L., **Aichele, S. R.**, Bridwell, D. A., MacLean, K. A., Wallace, B. A. & Saron, C. D. (2015, June). *Remote emotional memory for depictions of human suffering following an intensive meditation intervention*. Mindfulness and Compassion: The Art and Science of Contemplative Practice, a meeting of the Consciousness, Mindfulness & Compassion International Association, San Francisco, CA.
- Aichele, S., Rabbitt, P., & Ghisletta, P.** (2015, June). Longitudinal models of cognitive decline and mortality risk. University of Oslo, Norway: Department of Psychology.
- Aichele, S., Rabbitt, P., & Ghisletta, P.** (2014, November). *Age-related declines in specific domains of cognitive performance predict time of death*. Annual Scientific Meeting of the Gerontological Society of America, Washington, DC.
- Ghisletta, P., **Aichele, S.**, & Rabbitt, P. (2014, August). *Longitudinal data mining to predict survival in a large sample of adults*. International Conference on Computational Statistics, Geneva, Switzerland.
- Aichele, S. R.**, Ferrer, E., MacLean, K. A., Shaver, P. R., Zanesco, A. P., Rosenberg, E. L., Sahdra, B. K., Jacobs, T. L., Bridwell, D. A., King, B. G., Wallace, B. A., Mangun, G. R., & Saron, C. D. (2013, July). *Intraindividual attentional coherence across scales of time and methods of measurement*. International Meeting of the Psychometric Society, Arnhem, Netherlands.
- Aichele, S. R.**, Ferrer, E., MacLean, K. A., Grimm, K., Zanesco, A. P., Shaver, P. R., Rosenberg, E. L., Sahdra, B. K., Jacobs, T. L., Bridwell, D. A., King, B. G., Wallace, B. A., Mangun, G. R., & Saron, C. D. (2012, April). *Modeling longitudinal changes in attentiveness and relaxation as outcomes of meditation practice*. Spring Psychology Departmental Conference, University of California at Davis, CA.
- Rosenberg, E. L., Zanesco, A. P., King, B. G., **Aichele, S. R.**, Jacobs, T. L., Bridwell, D. A., MacLean, K. A., Shaver, P. R., Ferrer, E., Sahdra, B. K., Wallace, B. A., and Saron, C. D. (2012, May). *Meditation and the plasticity of emotion: Facial expression and the unfolding of emotional responses to suffering*. American Psychological Society Annual Meeting, Chicago, IL.

- Rosenberg, E., Zanesco, A. P., King, B. G., **Aichele, S. R.**, Jacobs, T. L., Maclean, K. A., Bridwell, D. A., Sahdra, B. K., Ferrer, E., Shaver, P. R., Wallace, B. A., & Saron, C. D. (2011, January). *Intensive meditation training influences emotional responses to scenes of human suffering*. Society for Personality and Social Psychology, San Antonio, TX.
- Saron, C. D., Sahdra, B. K., Maclean, K. A., Jacobs, T. L., Ferrer, E., Epel, E., Blackburn, L., Shaver, P. R., Lin, J., **Aichele, S. R.**, Bridwell, D. A., Zanesco, A. P., & King, B. G. (2011, January). *Intensive meditation training enhances response inhibition, adaptive socio-emotional functioning, and markers of cellular aging*. Society for Personality and Social Psychology, San Antonio, TX.
- Saggar, M., **Aichele, S.R.**, Jacobs, T.L., Zanesco, A. P., Bridwell, D. A., MacLean, K. A., King, B. G., Sahdra, B. K., Rosenberg, E. L., Shaver, P. R., Ferrer, E., Wallace, B. A., Manugn, G. R., Saron, C. D. & Miikkulainen, R. (2010, July). *A computational approach to understanding the longitudinal changes in cortical activity associated with intensive meditation training*. Computational Neuroscience Society Annual Meeting, San Antonio, TX.
- Saggar, M., **Aichele, S. R.**, Jacobs, T. L., Zanesco, A. P., Bridwell, D. A., MacLean, K. A., King, B. G., Sahdra, B. K., Rosenberg, E. L., Shaver, P. R., Ferrer, E., Tang, A. C., Wallace, B. A., Mangun, G. R., Miikkulainen R., & Saron, C. D. (2010, January). *Training attention: longitudinal changes in cortical activity associated with intensive meditation*. SPIE Human Vision and Electronic Imaging Conference, San Jose, CA.
- Rosenberg, E. L., Zanesco, A., King, B., **Aichele, S.**, Jacobs, T. L., MacLean, K. A., Bridwell, D., Wallace, B. A., and Saron, C. D. (2009, May). *Intensive meditative training changes facial responses to scenes of human suffering*. Annual Meeting of the Association for Psychological Science, San Francisco, CA.
- Jacobs, T. L., Epel, E. S., Jue, L., Blackburn, E. H., Wolkowitz, O. M., Bridwell, D. A., Zanesco, A. P., **Aichele, S. R.**, King, B. G., Sahdra, B. K., Maclean, K. A., Lavy, S., Shaver, P. R. Ferrer, E., Rosenberg, E. L., Wallace, B. A., & Saron, C. D. (2009, July). *The relation between telomerase activity and intensive meditation training is mediated by changes in psychological well-being*. International Society for Psychoneuroendocrinology Annual Conference, San Francisco, CA.
- MacLean, K. A., Saron, C. D., **Aichele, S.**, Bridwell, D., Jacobs, T. L., Zanesco, A., & Mangun, G. R. (2008, April). *Improvements in perceptual threshold with intensive attention training through concentration meditation*. Annual Meeting of the Society for Cognitive Neuroscience, San Francisco, CA.

Poster Presentations

- Pokorny, J.J., King, B.G., Fukushima, H., Zanesco, A.P., **Aichele, S.R.**, Jacobs, T.L., Bridwell, D.A., MacLean, K.A., Sahdra, B. K., Shaver, P.R., Wallace, B.A., & Saron, C.D. (2015, June). *Meditation training modulates empathic physiological resonance while maintaining the ability to correctly identify the emotional state of others*. Poster presented at Mindfulness and

Compassion: The Art and Science of Contemplative Practice, a meeting of the
Consciousness, Mindfulness & Compassion International Association, San Francisco, CA.

- Aichele, S. R.**, Borgerhoff Mulder, M., James, S., Hartwig, K., Silisyene, M. K. (2012, February). *Conventional demographic and previously uninvestigated psychographic characteristics predict high risk sexual activity in rural Tanzanian youth*. Poster presented at the University of California Global Health Day, Berkeley, CA.
- Conklin, Q. A., King, B. G., Zanesco, A. P., Jacobs, T. L., Pokorny, J. J., **Aichele, S. R.**, Bridwell, D. A., Maclean, K. A. Bales, K. L. Shaver, P. R., Rosenberg, E. L., Wallace, B. A., Ferrer, E., Sahdra, B. K., and Saron, C. D. (2014, November). *The effects of intensive meditation training on oxytocin, vasopressin, and attachment style*. Annual meeting of the Society for Neuroscience, Washington, DC.
- Zanesco, A. Z., King, B. G., MacLean, K. A., Jacobs, T. L., **Aichele, S. R.**, Wallace, B. A., Smallwood, J., Schooler, J. W., & Saron, C. D. (2014, October). *The impact of meditation training on mind wandering while reading*. International Symposium of Contemplative Studies, Boston, MA.
- Jacobs T. L., Zanesco, A. P., **Aichele, S. R.**, Bridwell, D. A., King, B. G., MacLean, K. A., Shaver, P. R., Epel, E. E., Kemeny, M. M., Sahdra, B. K., Rosenberg, E. L., Ferrer E., Wallace, B. A. and Saron, C. D. (2012, April). *Effects of a shamatha meditation retreat on working memory span, dehydroepiandrosterone-sulfate (DHEAS), and their association*. First International Symposium on Contemplative Studies, Denver, CO.
- Bauer-Wu, S., Sahdra, B. K., Whitworth, R., MacLean, K. A., **Aichele, S. R.**, Jacobs, T. L., Zanesco, A. P., Bridwell, D. A., King, B. G., Rosenberg, E. L., Shaver, P. R., Ferrer, E., Mangun, G. R., Wallace, B. A., & Saron, C. D. (2012, April). *The first-person experience of intensive meditation training and associations with third-person socio-emotional-cognitive data*. First International Symposium on Contemplative Studies, Denver, CO.
- Zanesco, A. P., King, B. K., MacLean, K. A., Jacobs, T. L., **Aichele, S. R.**, and Saron, C. D. (2012, April). *Executive control and felt concentrative engagement after intensive vipassana meditation training*. First International Symposium on Contemplative Studies, Denver, CO.
- Saggar, M., B. G., Sahdra, MacLean, K. A., **Aichele, S. R.**, Jacobs, T.L., Zanesco, A. P., Bridwell, D. A., King, B. K., Rosenberg, E. L, Shaver, P. R., Ferrer, E.,Wallace, B. A., Manugn, G. R., Saron, C. D., & Miikkulainen, R. (2011, November). *A computational model to understand longitudinal changes in EEG associated with intensive meditation training*. Society for Neuroscience Annual Meeting, Washington, DC.
- Jacobs, T. L., Epel, E. S., Zanesco, A. P., **Aichele, S. R.**, Bridwell, D. A., King, B. G., MacLean, K. A., Shaver, P. R., Rosenberg, E. L., Sahdra, B. K., Ferrer, E., Kemeny, M. M., Wallace, B. A., and Saron, C. D. (2011, May). *Mindfulness reduces cortisol reactivity to separation related sadness and attenuates day-to-day variability of the cortisol awakening response*. Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA.

- Saggar, M., Maclean, K. A., **Aichele, S. R.**, Jacobs, T. L., Zanesco, A. P., Bridwell, D. A., King B. G., Sahdra, B. K., Rosenberg, E. L., Shaver, P. R., Ferrer, E., Wallace, B. A., Mangun, G. R., Miikkulainen, R. & Saron, C. D. (2011, April). *Cortical activation changes associated with intensive meditation training are related to vigilance performance*. Society for Cognitive Neuroscience annual meeting, San Francisco, CA.
- King, B. G., Zanesco, A. P., Rosenberg, E. L., Bridwell, D. A., Jacobs, T. L., **Aichele, S. R.**, MacLean, K. A., Shaver, P. R., Sahdra, B. K., Ferrer, E., Wallace, B. A., & Saron, C. D. (2011, April). Differential responses to images of threat and human suffering after intensive meditation training. Poster presented at the Society for Cognitive Neuroscience Annual Meeting, San Francisco, CA.
- Sahdra, B.K., MacLean, K. A., Ferrer, E., Shaver, P. R., Rosenberge, E. L., Jacobs, T. L., Zanesco, A. P., King, B. G., **Aichele, S. R.**, Bridwell, D. A., Mangun, G. R., Lavy, S., Wallace, B. A., & Saron, C. D. (2010, August). *Response inhibition enhanced by meditation training predicts improved adaptive functioning*. Poster presented at the meeting of the American Psychological Association, San Diego, CA.
- King, B. G., Zanesco A. P., Bridwell, D. A., Jacobs, T. L., **Aichele, S. R.**, MacLean, K. A., Shaver, P. R., Rosenberg, E. L., Sahdra, B. K., Ferrer, E., Wallace, B. A., and Saron, C. D. (2010, April). *Accentuate the positive: Longitudinal effects of intensive meditation training on modulation of the emotion potentiated startle reflex*. Poster presentation at the annual meeting of the Cognitive Neuroscience Society, Montreal, CA.
- MacLean, K. A., **Aichele, S. R.**, Bridwell, D. A., Zanesco, A. P., Jacobs, T. L., King, B. G., Saggar, M., Mazaheri, A., Ferrer, E., Rosenberg, E., Sahdra, B. K., Shaver, P. R., Wallace, B. A., Mangun, G. R., & Saron, C. D. (2009, October). *Effects of intensive meditation training on sustained attention: changes in visual event-related potentials, ongoing EEG and behavioral performance*. Annual Meeting of the Society for Neuroscience, Chicago, IL.
- Saggar, M., **Aichele, S. R.**, Jacobs, T. L., Zanesco, A. P., Bridwell, D. A., Maclean, K. A., King, B. G., Sahdra, B. K., Rosenberg, E. L., Shaver, P. R., Ferrer, E., Tang, A. C., Wallace, B. A., Mangun, G. R., Miikkulainen, R., & Saron, C. D. (2009, October). *Longitudinal changes in brain activity associated with intensive meditation training*. Annual Meeting of the Society for Neuroscience, Chicago, IL.
- Maclean, K. A., **Aichele, S. R.**, Bridwell, D. A., Jacobs, T. L., Zanesco, A. P., King, B. G., Ferrer, E., Mangun, G. R., & Saron, C. D. (2008, November). *Intensive attention training in concentration meditation leads to improvements in visual sustained attention and response inhibition*. Annual Meeting of the Society for Neuroscience, Washington, DC.

Appearances in Popular Media

The Student Doctor Network. Interview with Juliet Farmer. (2016, May 2). Online at:
<http://www.studentdoctor.net/2016/05/qa-stephen-aichele-phd-quantitative-psychologist/>

BBC Radio Leeds. Interview with Martin Kelner. (2016, March 2). Radio. Online at:
<http://www.bbc.co.uk/programmes/p03j7493>

Daily Mail UK. Interview with Fiona Macrae. (2016, February 29). Want to live longer? Think positively! People who believe they are healthy tend to outlive those who worry about how they feel. Print. Online at: <http://www.dailymail.co.uk/sciencetech/article-3469728/The-sign-live-longer-Positive-thinking-People-believe-healthy-tend-outlive-worry-feel.html>