

*Curriculum Vitae*

**Wendy Hasenkamp, PhD**

Science Director

Mind & Life Institute

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PROFESSIONAL PROFILE

Integrating cognitive science with contemplative, humanistic, and clinical perspectives, I try to understand how subjective experiences such as emotion and thought arise, and how deeply held patterns of mind might be changed. My long-term goal is to learn about mechanisms of transformation. How can we leverage the brain's amazing capacity for neuroplasticity to create healthier minds, and a more connected society?

I'm also passionate about communicating science to the public in a way that's accessible without being overly simplified. Whether it's through podcasting, teaching, workshops, public talks, or writing, I try to share our latest insights while still appreciating the nuance and complexity of scientific research.

EMPLOYMENT

**2012–present**

**Science Director**

*Mind & Life Institute, Charlottesville, VA*

- host, edit, and executive produce the Mind & Life Podcast to share the work of contemplative science with the public
- serve as primary subject matter expert on neuroscience and meditation, integrating between multiple departments and initiatives
- write blogs and essays to communicate latest findings in contemplative neuroscience to public audience
- establish and maintain network of collaborative and working relationships with over 70 academic researchers in the field
- deliver guest lectures and public talks

*Previous responsibilities in this role:*

- managed multiple grants programs that fund basic and clinical scientific research on contemplative practice and mind body interventions
- organized and conducted workshops, programs, and conferences that promote dialogue between science and contemplative practice
- developed, managed, and promoted an online open archive for contemplative science, MindRxiv ([mindrxiv.org](http://mindrxiv.org))
- served as co-PI on collaborative research project; managed team to develop experience sampling app to measure desire in daily life and evaluate well-being outcomes
- served as lead editor for book chronicling dialogue between scientists and the Dalai Lama

**2011–2012**

**Neuroscience Education Coordinator**

*Emory-Tibet Science Initiative, Atlanta, GA*

- developed curriculum for a program that teaches science to Buddhist monks and nuns in India
- taught Tibetan monastics in India, distilling high-level scientific data and theory for an intellectually advanced audience with little to no scientific background
- wrote and edited textbooks/primers to convey this curriculum, provide content expertise for program translation into Tibetan

**POSTDOCTORAL TRAINING**

**2011–2012**

**Emory University**, Atlanta, GA

*Department of Psychology*

**Postdoctoral Fellow**

Advisor: Larry Barsalou, PhD

Neuroimaging studies examining cognitive mechanisms of stress, mindful attention, focused attention meditation and emotion.

*Department of Psychiatry and Behavioral Sciences*

**Postdoctoral Fellow**

Advisor: Helen Mayberg, MD

Resting state neuroimaging of large-scale brain networks in major depression, and their relationship to cognitive dynamics in meditation.

**2009–2011**

**Emory University**, Atlanta, GA

*Department of Psychology*

**Neuroscience Initiative Postdoctoral Scholar**

Advisor: Larry Barsalou, PhD

Co-mentors: Charles Raison, MD, John Dunne, PhD

Studies on cognitive dynamics that occur between focused attention and mind-wandering during meditation, using first-person input to drive analyses.

Methodologies include behavioral, psychophysiological and neuroimaging techniques.

**2005–2010**

**Atlanta Veterans Affairs Medical Center**, Decatur, Georgia

*Mental Health Service*

**Emory University School of Medicine**, Atlanta, Georgia

*Department of Psychiatry and Behavioral Sciences*

**Postdoctoral Fellow**

Advisor: Erica Duncan, MD

Research projects investigating alterations in prepulse inhibition of the acoustic startle reflex in schizophrenia patients and their family members, as well as neuroimaging of reward systems in schizophrenia. Skills learned include clinical interview and diagnosis, neuropsychological evaluations, psychophysiological measurements and fMRI analysis.

## EDUCATION

**1999–2005**

**Emory University**, Atlanta, GA

*Program in Neuroscience/Department of Psychiatry*

Doctor of Philosophy in Neuroscience, November 2005

Advisor: Scott E. Hemby, PhD

Dissertation research examined single-cell gene expression profiles in post-mortem brain tissue of schizophrenia, bipolar disorder and control subjects, and identified disease-related gene expression alterations that were specific to individual cell groups within the entorhinal cortex.

Skills learned include single-cell laser capture microdissection, RNA amplification, real-time quantitative PCR, immunohistochemistry, Western blot and microarray analysis.

**1993–1997**

**Wake Forest University**, Winston-Salem, North Carolina

Bachelor of Science in Biology and Psychology

Summa Cum Laude, May 1997

## TEACHING EXPERIENCE

### FULL SEMESTER COURSES

Visiting Assistant Professor, *Mindfulness and Compassion*, University of Virginia, Spring 2019

Visiting Assistant Professor, *Meditation, Brain, and Body*, University of Virginia, Spring 2018

Adjunct Professor, *Introduction to Contemplative Neuroscience*, Lesley University, 2015–2017

Co-instructor, *Cognitive Mechanisms of Stress*, Emory University, Fall 2011

Instructor and Organizer, *Meditation Research Seminar*, Emory University, 2008–2011

Co-instructor, *Basic Mechanisms of Neurological Disease*, Emory University, Spring 2010

### GUEST LECTURES

*Buddhism and Science: A Critical Introduction to the Encounter*, Stanford University, Fall 2020

*Neuroscience Lecture*, Southern California University of Health Sciences, Spring 2018

*Tibetan Buddhism Introduction*, University of Virginia, Spring 2018

*Buddhism in America*, Smith College, Fall 2015

*Buddhism in North America*, Mt. Holyoke College, Fall 2015, Fall 2014

*Cognitive Neuroscience of Meditation*, Brown University, Spring 2015

*Buddhist philosophy: Madhyamaka and Yogacara*, Smith College, Spring 2013

*Brain Imaging in Schizophrenia*, Emory School of Medicine, Spring 2011

*Neuroscience for Non-Majors*, Emory University, Fall 2010

### PUBLIC/OTHER

Inward Bound Mindfulness Education (iBme)

- Contemplative Scientist/Consultant, Teacher Training Program, Summer 2016-present
- Lecturer, various retreats for teens, 2014-present

Barre Center for Buddhist Studies

- Lecturer/Workshop Co-leader, Fall 2017

- Lecturer/Workshop Leader, Fall 2015

Emory-Tibet Science Initiative, Emory University

- Lecturer, Dharamsala, India, Summer 2011, Summer 2012
- Curriculum and Textbook Development, Fall 2008–Summer 2012

Program Assistant, Vet Heal (MBSR for returning Iraq war veterans), Spring 2007  
 Presenter, McKendree Elementary School Science Night, Winter 2007  
 Co-creator of BrainGame software for teaching neuroscience to grades 6–12, © 2005  
 PRISM Fellow (problem-based learning initiative for K–12 teaching), Summer 2004  
 SciTrek Museum, Atlanta, GA

- Neuroscience workshop co-director, Spring 2004
- Guest lecturer/program judge, BioTrek Program, Fall 2003

Teaching Assistant, Cellular Neuroscience, Emory University, Fall 2000  
 Volunteer, Brain Awareness (High School Education) Outreach Program, 1999–2008

## FELLOWSHIPS, GRANTS AND HONORS

Mind & Life Fellow, 2018  
 Turkeyland Cove Foundation Grantee, Writing Residency, 2015, 2017  
 Emory Scholars Program in Interdisciplinary Neuroscience Research, Postdoctoral Fellow, 2009–2011  
 Francisco J. Varela Research Award Recipient, 2009  
 Mind & Life Summer Research Institute New Investigator, 2008, 2009  
 Ruth L. Kirschstein NRSA Recipient, Individual Pre-doctoral Award, 2002–2005  
 George W. Woodruff Fellow, Woodruff Foundation/Emory University, 1999–2004  
 NIH Neuroscience Training Grant Recipient, 1999–2002  
 Phi Beta Kappa, Wake Forest University, 1997

## SERVICE AND LEADERSHIP

Board Member and Scientific Advisor, Courage of Care, 2015–present  
 Volunteer Staff, Inward Bound Mindfulness Education (iBme), 2014–present  
 Administrative Coordinator, Emory Collaborative for Contemplative Studies, 2009–2012  
 President and Founder, Poncey-Highland Community Garden, 2008–2012  
 President, 608 Seminole Avenue Homeowners Association, 2006–2012  
 Alumni Network Coordinator, Emory University Neuroscience Program, 2002–2003  
 Director of Website Design, Emory University Neuroscience Program, 2001–2004  
 Student Representative, Emory University Neuroscience Executive Committee, 2001–2003

## AD HOC REVIEWER

Frontiers in Human Neuroscience  
 Frontiers in Psychology  
 Mindfulness  
 NeuroImage  
 Neuroscience and Biobehavioral Reviews  
 Neuroscience Research  
 Oxford University Press  
 Psychonomic Bulletin and Review  
 Psychophysiology  
 Schizophrenia Research

## PUBLICATIONS

### BOOKS & EDITED VOLUMES

**Hasenkamp, W** with White, JR (2017). *The Monastery and the Microscope: Conversations with the Dalai Lama on Mind, Mindfulness, and the Nature of Reality*. A book recounting a historic dialogue between scientists and His Holiness the Dalai Lama to inaugurate the introduction of science into the Tibetan monastic curriculum. Yale University Press.

**Hasenkamp, W** & Thompson, E (eds.) (2013). *Examining Subjective Experience: Advances in Neurophenomenology*. Special issue of *Frontiers in Human Neuroscience*. (18 manuscripts) <http://journal.frontiersin.org/ResearchTopic/1163>

**Hasenkamp, W**, Eisen, A, Mascaro, JS, Worthman, CM (2013). *Neuroscience Primer 2. Basic Processes of Transmission, Integration, and Response*. Dharamsala, India: Library of Tibetan Works and Archives. (English and Tibetan; Geshe Dadul, translator)

Eisen, A, **Hasenkamp, W**, Worthman, CM (2012). *Neuroscience Primer 1. Perception and Vision*. Dharamsala, India: Library of Tibetan Works and Archives. (English and Tibetan; Geshe Dadul, translator)

### ESSAYS

**Hasenkamp, W** (2022). *Transforming Minds*. Insights Project, Mind & Life Institute. <https://www.mindandlife.org/insight/transforming-minds/>

**Hasenkamp, W** (2021). *We're All Biased. Here's How Meditation May Help*. Mindful Magazine. <https://www.mindful.org/were-all-biased-heres-how-meditaiton-may-help/>

**Hasenkamp, W** (2018). *Pain relief without opioids?* Mind & Life Blog. <https://www.mindandlife.org/pain-relief-without-opioids/>

**Hasenkamp, W** (2017). *Promoting openness and transparency in the contemplative sciences* Mind & Life Blog. <https://www.mindandlife.org/promoting-openness-transparency-contemplative-sciences/>

**Hasenkamp, W** (2016). *Can we change racial bias?* Courage of Care Blog. <http://courageofcare.org/uncategorized/can-we-change-racial-bias/>

**Hasenkamp, W** (2015). *The contemplative path: How do we learn?* Mind & Life Blog. <https://www.mindandlife.org/the-contemplative-path-how-do-we-learn/>

**Hasenkamp, W** (2014). *Brain karma: Is delusion hardwired?* Tricycle Magazine, Fall 2014. <http://www.tricycle.com/new-buddhism/karma/brain-karma>

Pagnoni, G & **Hasenkamp, W** (2014). *Remembrance of things to come: The predictive nature of the mind and contemplative practices*. Mind & Life Blog. <http://www.mindandlife.org/remembrance-things-come-predictive-nature-mind-contemplative-practices/>

**Hasenkamp, W** (2014). *Grey matters: Examining subjective experience*. Mind & Life Newsletter, Spring 2014.

<http://www.mindandlife.org/examining-subjective-experience/>

**Hasenkamp, W** (2014). *Theory of Mind: Contemplative science begins to unpack the critical elements of caring*. Mind & Life Newsletter, Spring 2014.

<http://www.mindandlife.org/theory-mind/>

**Hasenkamp, W** (2013). *How to focus a wandering mind*. Greater Good Science Center, University of California, Berkeley. [http://greatergood.berkeley.edu/article/item/how\\_to\\_focus\\_a\\_wandering\\_mind](http://greatergood.berkeley.edu/article/item/how_to_focus_a_wandering_mind)

**Hasenkamp, W** (2013). *Managing the modern world: The science of compassion meditation*. You've Got Some Science on You.

<http://gotsomescienceonyou.com/2013/09/03/the-science-of-compassion-meditation/>

**Hasenkamp, W** (2013). *Meditation: It's not what you think*. Mind & Life Blog. <http://www.mindandlife.org/meditation-its-not-what-you-think/>

**Hasenkamp, W** (2013). *Can meditation change compassionate behavior?* Mind & Life Blog. <http://www.mindandlife.org/can-meditation-change-compassionate-behavior/>

**Hasenkamp, W** (2013). *Grey Matters: A response to Obama's brain mapping initiative*. Mind & Life Newsletter, Fall 2013.

<http://www.mindandlife.org/grey-matters/>

## BOOK CHAPTERS

**Hasenkamp, W** (2018). *Catching the wandering mind: Studying meditation to understand spontaneous thought and meta-awareness*. In: Oxford Handbook of Spontaneous Thought. Editors: K.C.R. Fox and K. Christoff. New York: Oxford University Press.

**Hasenkamp, W** (2014). *Using first-person reports during meditation to investigate basic cognitive experience*. In: Meditation – Neuroscientific Approaches and Philosophical Implications (Studies in Neuroscience, Consciousness and Spirituality Vol. 2). Editors: S. Schmidt & H. Walach. Heidelberg: Springer.

Barsalou, LW, Wilson, C, **Hasenkamp, W** (2010). *On the vices of nominalization and the virtues of contextualizing*. In: The Mind in Context. Editors: L. Feldman Barrett, B. Mesquita & E. Smith. New York: Guilford Press.

Norrholm, SD, Jovanovic, T, Rothbaum, BO, Davis, M, **Hasenkamp, W**, Crowe, C, Duncan, E, Leimbach, L, Skelton, K, & Bradley, B (2010). *The optimization of research and clinical applications for combat-related Posttraumatic Stress Disorder (PTSD): Progress through modern translational methodologies*. In: Military Medicine: New Developments. Hauppauge, NY: Nova Science Publishers, Inc.

**Hasenkamp W**, Hemby SE (2004). *Signal Transduction Abnormalities in Schizophrenia: New Treatment Options*. In: Current and Future Developments in Psychopharmacology. Editors: JA den Boer, GJ ter Horst & M. George. Amsterdam: Benecke.

**Hasenkamp WM, Hemby SE (2002).** *Functional Genomics and Psychiatric Illness*. In: Progress in Brain Research, Vol. 138: Plasticity in the Adult Brain. Amsterdam: Elsevier.

## PEER-REVIEWED ARTICLES

### NEUROIMAGING & COGNITIVE SCIENCE

**Hasenkamp, W. (2018).** *Fruits of the Buddhism-Science Dialogue in Contemplative Research*. Current Opinion in Psychology 28: Special Issue on Mindfulness.  
doi: 10.1016/j.copsyc.2018.12.003.

**Hasenkamp, W, Barsalou, L (2012).** *Effects of meditation experience on functional connectivity of distributed brain networks*. Frontiers in Human Neuroscience 6: 38,  
doi: 10.3389/fnhum.2012.00038.

**Hasenkamp, W, Wilson-Mendenhall, C, Duncan, E, Barsalou, L (2012).** *Mind-wandering and attention during focused meditation: A fine-grained temporal analysis of fluctuating cognitive states*. NeuroImage 59(1): 750–60.

**Hasenkamp, W, James, GA, Boshoven, W, Duncan, E (2011).** *Altered engagement of attention and default networks during target detection in schizophrenia*. Schizophrenia Research 125(2): 169–73.

Majeed, W, Magnuson, M, Schwarb, H, **Hasenkamp, W**, Schumacher, E, Barsalou, L, Keilholz, S (2011). *Spatiotemporal dynamics of low frequency BOLD fluctuations in rats and humans*. NeuroImage 54(2): 1140–50.

Egan, GJ, **Hasenkamp, W**, Wilcox, L, Green, A, Hsu, N, Boshoven, W, Lewison, B, Keyes, M, Duncan, E (2011). *Declarative memory and WCST-64 performance in subjects with schizophrenia and healthy controls*. Psychiatry Research 188(2): 191–6.

### PSYCHOPHYSIOLOGY

Pearce, BD, Hubbard, S, Rivera, HN, Wilkins, PP, Fisch, MC, Hopkins, MH, **Hasenkamp, W**, Gross, R, Bliwise, N, Jones, JL, Duncan, E (2013). *Toxoplasma gondii exposure affects neural processing speed as measured by acoustic startle latency in schizophrenia and controls*. Schizophrenia Research 150(1): 258–61.

**Hasenkamp, W, Kelley, M, Egan, G, Green, A, Wilcox, L, Boshoven, W, Duncan, E (2011).** *Lack of relationship between acoustic startle and cognitive variables in schizophrenia and control subjects*. Psychiatry Research 187(3): 324–8.

**Hasenkamp, W, Epstein, M, Green, A, Wilcox, L, Boshoven, W, Duncan, E (2010).** *Heritability of acoustic startle magnitude, prepulse inhibition and startle latency in schizophrenia and control families*. Psychiatry Research 178(2): 236–43.

**Hasenkamp, W, Norrholm, S, Green, A, Lewison, B, Boshoven, W, Keyes, M, Duncan, E (2008).** *Differences in startle reflex and prepulse inhibition in European-Americans and African-Americans*. Psychophysiology 45(5): 876–882.

Mittal, VA, **Hasenkamp, W**, Sanfilippo, M, Wieland, S, Angrist, B, Rotrosen, J, Duncan, EJ (2007). *Relation of neurological soft signs to psychiatric symptoms in schizophrenia*. Schizophrenia Research 94: 37–44.

MOLECULAR BIOLOGY/NEUROSCIENCE

Acosta, G, **Hasenkamp, W**, Daunais, JB, Friedman, DP, Grant, KA, Hemby, SE (2010). *Ethanol self-administration modulation of NMDA receptor subunit and related synaptic protein mRNA expression in prefrontal cortical fields in cynomolgus monkeys*. Brain Research 1318: 144–54.

O'Connor, JA, **Hasenkamp, W**, Horman, BM., Muly, EC, Hemby, SE (2006). *Region-specific regulation of NRI in rhesus monkeys following chronic antipsychotic drug administration*. Biology Psychiatry 60: 659–662.

**Fasulo, WH**, Hemby, SE (2003). *Time-dependent changes in gene expression profiles of midbrain dopamine neurons following haloperidol administration*. Journal of Neurochemistry 87: 205–219.

Tang, W.-X., **Fasulo, WH**, Mash, D, Hemby, SE (2003). *Molecular profiling of midbrain dopamine regions in cocaine overdose victims*. Journal of Neurochemistry 85: 911–24.

Laybutt DR, Kaneto H, **Hasenkamp W**, Grey S, Jonas JC, Sgroi DC, Groff A, Ferran C, Bonner-Weir S, Sharma A, Weir GC (2002). *Increased expression of antioxidant and antiapoptotic genes in islets that may contribute to beta-cell survival during chronic hyperglycemia*. Diabetes 51(2): 413–23.

Laybutt R, **Hasenkamp W**, Groff A, Grey S, Jonas JC, Kaneto H, Sharma A, Bonner-Weir S, Weir G (2001). *Beta-cell adaptation to hyperglycemia*. Diabetes 50 Suppl. 1: S180–1.

Vasir B, Jonas JC, Steil GM, Hollister-Lock J, **Hasenkamp W**, Sharma A, Bonner-Weir S, Weir GC (2001). *Gene expression of VEGF and its receptors Flk-1/KDR and Flt-1 in cultured and transplanted rat islets*. Transplantation 71(7): 924–35.

Steil GM, Trivedi N, Jonas JC, **Hasenkamp WM**, Sharma A, Bonner-Weir S, Weir GC (2001). *Adaptation of beta-cell mass to substrate oversupply: enhanced function with normal gene expression*. American Journal of Physiology Endocrinology Metabolism 280(5): E788–96.

Trivedi N, Keegan M, Steil GM, Hollister-Lock J, **Hasenkamp WM**, Colton CK, Bonner-Weir S, Weir GC (2001). *Islets in alginate macrobeads reverse diabetes despite minimal acute insulin secretory responses*. Transplantation 71(2): 203–11.

Jonas JC, Sharma A, **Hasenkamp W**, Ilkova H, Patane G, Laybutt R, Bonner-Weir S, Weir GC (1999). *Chronic hyperglycemia triggers loss of pancreatic beta cell differentiation in an animal model of diabetes*. Journal of Biological Chemistry 274(20): 14112–21.

Grey ST, Arvelo MB, **Hasenkamp W**, Bach FH, Ferran C (1999). *A20 inhibits cytokine-induced apoptosis and nuclear factor kappaB-dependent gene activation in islets*. Journal of Experimental Medicine 190(8): 1135–46.



## PRESENTATIONS

### SELECTED INVITED LECTURES/WORKSHOPS

**Hasenkamp, W** (2019–2022). *Mind, Brain, and Transformation*. Teacher Training Program, Mindful Awareness Research Center, UCLA, Los Angeles, CA.

**Hasenkamp, W** (2020). *The Science of Meditation: Overview of Contemplative Science*. Ho Center for Buddhist Studies, Stanford University, Stanford, CA.

**Hasenkamp, W** (2018). *The Science of Meditation: Overview of Contemplative Science*. Dalai Lama Fellows Program, Contemplative Sciences Center, University of Virginia, Charlottesville, VA.

**Hasenkamp, W** (2018). *Clinical applications of Mindfulness*. Psychology Department, University of Virginia, Charlottesville, VA.

**Hasenkamp, W** (2015). *Karma and delusion: Transformation and the brain*. Barre Center for Buddhist Studies, One-day workshop/retreat, Barre, MA.

**Hasenkamp, W** (2014). *Catching the wandering mind: Using meditation to investigate neural shifts between attention and distraction*. Contemplative Sciences Center, University of Virginia, Charlottesville, VA.

**Hasenkamp, W** (2014). *Is there a neural basis of delusion?* Foundation for Active Compassion, Fall retreat. Putney, VT.

**Hasenkamp, W** (2014). *Investigating mind-wandering and attention during focused meditation*. Metro-Area Research Group on Awareness & Meditation, New York, NY.

**Hasenkamp, W** (2014). *Investigating mind-wandering and attention during focused meditation*. Panelist for *Classical Mindfulness Conference*. UCLA Center for Buddhist Studies, Los Angeles, CA.

**Hasenkamp, W** (2013). *Investigating mind-wandering and attention during focused meditation*. Panelist for *Neural Mechanisms of Mindfulness: Emerging Models*. John and Tussi Kluge Research Symposium, 11<sup>th</sup> Annual International Scientific Conference of the Center for Mindfulness in Medicine, Healthcare and Society, Norwood, MA.

**Hasenkamp, W** (2013). *Neuroscience: Investigating the Brain and Mind*. Mind and Life XXVI: Mind, Brain and Matter: Critical Conversations Between Buddhist Thought and Science, Drepung Monastery, Mundgod, India. (presented to His Holiness the Dalai Lama)

### SELECTED ABSTRACTS

Ting, LH, Bauer-Wu, SM, Desbordes, G, **Hasenkamp, W**, Hue, GE, Iuvone, D, Jaeger, CM, Worthman, CM (2011). *Use of a personal response system enhances teaching of neuroscience to Buddhist monks*. 41<sup>st</sup> Annual Meeting of the Society for Neuroscience, Washington, DC.

**Hasenkamp, W** (2010). *Current Research in Contemplative Science*. Panelist for “*What’s at Stake in Contemplative Science?*” *Reductionism, Embodiment, and Other Key Issues in the Secularization and*

*Scientific Study of Contemplative Practices*. Annual Meeting of American Academy of Religion, Atlanta, GA.

**Hasenkamp, W** (2010). *Current Research in Contemplative Science: Progress and Pitfalls*. Panelist for *Contemplative Science: A Panel Discussion on Current Research, Methodological Concerns and the Development of Cross-Disciplinary Discourse*. Annual Meeting of The Southeastern Commission for the Study of Religion, Atlanta, GA.

**Hasenkamp, W**, Wilson-Mendenhall, C, Duncan, E, Barsalou, L (2010). *Investigating mind-wandering and attention during focused meditation using first-person subjective information*. Annual Meeting of the Cognitive Neuroscience Society, Montreal, Canada.

Anderson, LR, **Hasenkamp, WM**, Offe, K (2005). *Interactive curriculum for middle-school outreach: The BrainGame*. 35<sup>th</sup> Annual Meeting of the Society for Neuroscience, Washington, DC.