Curriculum Vitae

Christopher B. Martin, Ph.D.

March 2022

Assistant Professor
Department of Psychology
Florida State University
1107 W. Call Street, Tallahassee, FL 32306

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PROFESSIONAL APPOINTMENTS

2020 – present Assistant Professor
Florida State University, Department of Psychology

2015 – 2020 Postdoctoral Fellow
The University of Toronto, Department of Psychology

EDUCATION

2011 – 2015 Ph.D., The University of Western Ontario
Department of Psychology (Behavioural and Cognitive Neuroscience)
Advisor: Stefan Köhler

2009 – 2011 M.Sc., The University of Western Ontario
Department of Psychology (Behavioural and Cognitive Neuroscience)
Advisor: Stefan Köhler

2002 – 2006 B.A. (Honours), The University of Windsor
Graduated with Great Distinction (summa cum laude)
Major: Psychology

RESEARCH GRANTS

2020 *FSU First-Year Assistant Professor Award ($20,000 USD)*
Title: The neural basis of task-relevant memory retrieval
Role: PI

2020 *Canadian Institute for Health Research Project Grant ($634,950 CAD)*
Title: An autobiographical memory prosthetic to treat memory loss
Role: Co-Applicant (PI: Morgan Barense)

2017 *Canadian Institute for Health Research Project Grant ($306,000 CAD)*
Title: A novel memory prosthetic: from neuroscience to rehabilitation
Role: Co-Applicant (PI: Morgan Barense)

2013 *Rotman Institute Catalyst Fund ($10,000)*
Title: The epistemic status of fMRI technology and data analysis techniques
Role: Co-PI

FELLOWSHIPS AND SCHOLARSHIPS

2017	NSERC Postdoctoral Fellowship	$90,000
2017	Alzheimer's Society Postdoctoral Fellowship (declined)	$83,000
2013	Ontario Graduate Scholarship	$15,000
2012	Ontario Graduate Scholarship	$15,000
2011	Ontario Graduate Scholarship	$15,000
2010	Western Graduate Research Scholarship	$ 9,600
2009	Ontario Graduate Scholarship	$15,000
2008	Ontario Graduate Scholarship	$15,000
2005	University of Windsor Internal Scholarship	$ 8,000
2004	University of Windsor Internal Scholarship	$ 8,000
2003	University of Windsor Internal Scholarship	$ 6,000
2002	University of Windsor Entrance Scholarship	$10,000

AWARDS

2019 Rovereto Concepts, Objects, and Actions Workshop: Best abstract award
2018 Toronto Area Memory Group: Ebbinghaus Award for most outstanding talk
2014 Southern Ontario Neuroscience Association: Most outstanding poster
2014 Graduate Teaching Assistant of the Year (Statistics)
2010 Graduate Teaching Assistant of the Year (Statistics)

PRE-PRINTS

Martin, C.B., Hong, B., Newsome, R.N., Savel, K., Meade, M., Xia, A., Honey, C.J. & Barense, M.D. A smartphone intervention that enhances real-world memory and promotes differentiation of hippocampal activity in older adults.

Douglas, D.M., Man, L.Y., Newsome, R.N., Park, H., Aslam, H.M., Barense, M.D. & **Martin, C.B.** Resolving visual and conceptual interference among object concepts requires medial temporal lobe cortex.

PUBLICATIONS

2022 Ferko, K.M., Blumenthal, A., **Martin, C.B.**, Proklova, D., Saksida, L.M., Bussey, T.J., Khan, A.R., & Köhler, S. (2022). Activity in perirhinal and entorhinal cortex predicts observer-specific perceived visual similarities between objects. *eLife.*

2021 **Martin, C.B.**, & Huckins, S. (2021). Connecting the dots in memory. *Current Biology, 31*(22). R1485-R1487.

Martin, C.B., Mirsattari, S.M., Pruessner, J.C., Burneo, J.G., Hayman-Abello, B., & Köhler, S. (2021). Relationship between déjà vu experiences and recognition-memory impairments in temporal-lobe epilepsy. *Memory, 29*(7), 884-894.

2020 Köhler, S., & **Martin, C.B.** (2020). Familiarity impairments after anterior temporal-lobe resection with hippocampal sparing: Lessons learned from case NB. *Neuropsychologia, 138,* 107339.

2019 Inhoff, M.C., Heusser, A.C., Tambini, A., **Martin, C.B.**, O'Neil, E.O., Köhler, S., Meager, M., Blackmon, K., Vazquez, B., Devinsky, O., & Davachi, L. (2019). Understanding perirhinal contributions to perception and memory: evidence through the lens of selective perirhinal damage. *Neuropsychologia, 124*(9-18).

Anderson, N.D., **Martin, C.B.**, Czyzo, J., & Köhler, S. (2018). When gist and familiarity collide: evidence from false recognition in younger and older adults. *Journal of Gerontology: Series B*, *74*(6), 927-932.

2018 **Martin, C.B.**, Douglas, D., Newsome, R.N., Man, L.L.Y., & Barense, M.D. (2018). Integrative and distinctive coding of visual and conceptual object features in the ventral visual stream. *eLife 7*, e31873.

Martin, C.B., Sullivan, J., Wright, J., & Köhler, S. (2018). How landmark suitability shapes recognition memory signals for objects in the medial temporal lobes. *NeuroImage, 166,* 425-436.

Blumenthal, A., Stojanoski, B., **Martin, C.B.**, Cusack, R., & Köhler, S. (2018). Animacy and real-world size shape object representations in the human medial temporal lobes. *Human Brain Mapping, 39*(9), 3779-3792.

2017 Lacot, E., Vautier, S., Köhler, S., Pariente, J., **Martin, C.B.**, Puel, M., Lotterie, J-A., & Barbeau, E.J. (2017). Familiarity and recollection vs. representational

models of medial temporal lobe structures: a single-case study. *Neuropsychologia, 104,* 76-91.

Martin, C.B., Fidalgo, C., & Barense, M.D. (2017). Knowing what we see. *Frontiers for Young Minds,* 5:15, doi:10.3389/frym.2017.00015

Duke, D.S., **Martin, C.B.**, Bowles, B., McRae, K., & Köhler, S. (2017). Role of left perirhinal cortex in assessing the cumulative long-term exposure to object concepts. *Cortex, 89,* 61-70.

2016 Fidalgo, C., & **Martin, C.B.** (2016). The hippocampus contributes to allocentric spatial memory through coherent scene representations. *Journal of Neuroscience, 36*(9), 2555-2557.

Martin, C.B., Cowell, R.A., Gribble, P.L., Wright, J., & Köhler, S. (2016). Distributed category-specific recognition memory signals in perirhinal cortex. *Hippocampus, 26*(4), 423-436.

2015 **Martin, C.B.**, Fiacconi, C.M., & Köhler, S. (2015). *Déjà vu: A window into understanding the cognitive neuroscience of familiarity*. In Duarte, A., Barense, M.D., & Addis, D.R. (Eds.), Handbook on the Cognitive Neuroscience of Memory. Wiley-Blackwell.

2013 **Martin, C.B.**, McLean, D.A., O'Neil, E.O., & Köhler, S. (2013). Distinct familiarity-based response patterns for faces and buildings in perirhinal and parahippocampal cortex. *Journal of Neuroscience, 33*(26), 10915-10923.

2012 **Martin, C.B.**, Mirsattari, S.M., Pruessner, J.C., Pietrantonio, S., Burneo, J.G., Hayman-Abello, B., & Köhler, S. (2012). Déjà vu in unilateral temporal-lobe epilepsy is associated with selective familiarity impairments on experimental tasks of recognition memory. *Neuropsychologia, 50*(13), 2981-2991.

2011 **Martin, C.B.**, Bowles, B., Mirsattari, S.M., & Köhler, S. (2011). Selective familiarity deficits after left anterior temporal-lobe removal with hippocampal sparing are material specific. *Neuropsychologia, 49*(7), 1870-1878.

SUBMITTED AND/OR IN PREPARATION

Martin, C.B., Newsome, R.N., Honey, C.J., & Barense, M.D. Replaying naturalistic stimuli immediately prior to sleep differentially enhances subsequent retrieval.

Martin, C.B., Cowell, R.A., & Barense, M.D. Visual memory. (*by invitation, Annual Review of Vision Science*).

Martin, C.B., Delmore, T., & Barense, M.D. Separating visual and conceptual similarity: A visual object stimulus set with normative data.

Martin, C.B., Blumenthal A., Cowell, R.A., Sullivan, J., & Köhler, S. Perirhinal cortex representations that support item-based recognition decisions are shaped by temporal encoding context.

PATENTS

Barense, M.D., Honey, C.J., Hong, B., **Martin, C.B.,** & Xia, A. 2018. System, method, and computer program for digital hippocampal simulation. U.K. Patent Application 1818322.8, filed November 2018. UK Patent Application. Patent Pending.

SELECTED POSTER PRESENTATIONS

2019 **Martin, C.B.,** Cheng, Z., Pang, J., Barense, M.D. (2019). Conceptual similarities between targets and distractors influence visually-guided reaching. Society for Neuroscience, Chicago, IL, USA.

Martin, C.B., Mirsattari, S.M., Pruessner, J.C., Burneo, J.G., Hayman-Abello, B., Köhler, S. (2019). Déjà vu in temporal lobe epilepsy as a window into understanding metamemory. Association for the Scientific Study of Consciousness, London, ON, CAN.

Martin, C.B., Cheng, Z., Barense (2019). Conceptual similarities between targets and distractors influence visually-guided reaching. Rovereto Workshop on Concepts, Objects, and Action, Rovereto, Italy.

Martin, C.B., Hong, B., Newsome, R.N., Xia, A., Honey, C.J., Barense, M.D. (2019). Reviewing autobiographical memory cues promotes distinctive neural coding in older adults. Cognitive Neuroscience Society, San Francisco, CA, USA.

Newsome, R.N., **Martin, C.B.**, Barense, M.D. (2019). How do we optimize learning of episodes. Cognitive Neuroscience Society, San Francisco, CA, USA.

2018 **Martin, C.B.**, Hong, B., Newsome, R.N., Xia, A., Honey, C.J., Barense, M.D. (2018) Digital memory augmentation in older adults promotes distinctive hippocampal coding of autobiographical memory. Society for Neuroscience, San Diego, California, USA.

Hong, B., **Martin, C.B.**, Newsome, R.N., Xia, A, Honey, C.J., Barense, M.D. (2018) Using a novel digital memory augmentation device to improve episodic detail recall for autobiographical memory in older adults. Society for Neuroscience, San Diego, California, USA.

Newsome, R.N., **Martin, C.B.**, Barense, M.D. (2018) Temporal context effects of digital memory augmentation on episodic free recall. Society for Neuroscience, San Diego, California, USA.

*Blumenthal, A., ***Martin, C.B.**, Köhler, S. (2018) Similarities in perirhinal cortex response patterns related to decision outcome in recognition-memory judgments. Society for Neuroscience, San Diego, California, USA.

Martin, C.B., Hong, B., Newsome, R.N., Rahbarnia, A., Tran, M-T., Xia, A., Honey, C.J., & Barense, M.D. (2018) The neurocognitive effects of digital memory augmentation. Cognitive Neuroscience Society, Boston MA, USA.

Hong, B., **Martin, C.B.**, Newsome, R, Xia, A., Honey, C.J., & Barense, M.D. (2018) Improving episodic autobiographical memory in older adults with a novel digital memory augmentation device. Cognitive Neuroscience Society, Boston MA, USA.

2017 Hong, B., **Martin, C.B.**, Xia, A., Honey, C.J., & Barense, M.D. (2017). Hippocamera: a novel device to improve autobiographical memory based on cognitive neuroscience. Lake Ontario Visionary Establishment, Niagara Falls, ON, Canada.

Nasseri, M., Olsen, R.K., **Martin, C.B.**, Rabin, J.S., Gao, F.Q., Honjo, K., Palombo, D., Newsome, R.N., Black, S.E., Ryan, J.D., Barense, M.D., & Rosenbaum, R.S. (2017). Impaired face discrimination following early mediodorsal thalamic damage. International Neuropsychological Society, New Orleans, LA, USA.

2016 **Martin, C.B.**, Man, L., Douglas, D., Newsome, R.N., Barense, M.D. (2016). Perceptual and conceptual object information is integrated in perirhinal cortex. Society for Neuroscience, San Diego, California, USA.

Martin, C.B., Man, L., Newsome, R.N., Douglas, D., Barense, M.D. (2016). Feature-based integration of conceptual and perceptual object information in ventral temporal cortex. Cognitive Neuroscience Society, New York, NY, USA.

Blumenthal, A., Stojanoski, B., **Martin, C.B.**, Cusack, R., Köhler, S. (2016). Representational similarity analysis of category-related recognition-memory

signals in the human medial temporal lobe. Vision Science Society, St. Pete Beach, FL, USA.

Crombie, D., **Martin, C.B.**, Honey, C.J., Barense, M.D. (2016). Spaced rapid replay enhances memory for events. Lake Ontario Visionary Establishment, Niagara Falls, ON, Canada.

2015 **Martin, C.B.**, Köhler, S. (2015). Category-specific patterns of recognition memory signals in perirhinal and parahippocampal cortex. Cognitive Neuroscience Society, San Francisco, CA, USA.

Duke, D.S., Bowles, B., **Martin, C.B.**, McRae, K., Köhler, S. (2015). Human perirhinal cortex supports judgements of recent frequency and cumulative long-term exposure to concepts. Brain and Mind Institute Symposium, London, ON, Canada.

2014 **Martin, C.B.**, Cowell, R.A., Gribble, P.L., Köhler, S. (2014). Are Familiarity-Based Memory Representations in Human Perirhinal Cortex Distributed? Society for Neuroscience, Washington, D.C., USA.

Duke, D.S., Bowles, B., **Martin, C.B.**, Rosenbaum, S.R., McRae, K., Köhler, S. (2014). Human perirhinal cortex supports frequency judgments as well as judgments of cumulative lifetime familiarity. Society for Neuroscience, Washington, D.C., USA.

Martin, C.B., Köhler, S. (2014). Distributed nature of familiarity-based memory representations in perirhinal cortex. Southern Ontario Neuroscience Association, London, ON, Canada.

Martin, C.B., Köhler, S. (2014). Distributed nature of familiarity-based memory representations in perirhinal cortex. Rotman Research Institute Conference, Toronto, ON, Canada.

2013 **Martin, C.B.**, McLean, D.A., O'Neil, E.B., Köhler, S. (2013). Content specificity of recognition-memory signals in the human medial temporal lobe. Brenda Milner Symposium, Montreal, QC, Canada.

Martin, C.B., McLean, D.A., O'Neil, E.B., Köhler, S. (2013). Multi-voxel pattern analysis reveals content specific familiarity-based recognition responses in perirhinal and parahippocampal cortex. Canadian – Israel Symposium on Brain Plasticity, Learning, and Education, London, ON, Canada.

Martin, C.B., McLean, D.A., O'Neil, E.B., Köhler, S. (2013). Multi-voxel pattern analysis reveals content specific familiarity-based recognition response patterns in perirhinal and parahippocampal cortex. Canadian Association for Neuroscience, Toronto, ON, Canada.

Martin, C.B., McLean, D.A., O'Neil, E.B., Köhler, S. (2013). Distinct familiarity-based response patterns for faces and buildings in perirhinal and parahippocampal cortex. Cognitive Neuroscience Society, San Francisco, CA, USA.

Martin, C.B., McLean, D.A., O'Neil, E.B., Köhler, S. (2013). Familiarity-based recognition response patterns for faces, buildings, and chairs in perirhinal and parahippocampal cortex. Lake Ontario Visionary Establishment, Niagara Falls, ON, Canada.

2012 **Martin, C.B.**, O'Neil, E.B., Barkley, V., & Köhler, S. (2012). Familiarity-based responses to different visual stimulus categories in the medial temporal lobe. Cognitive Neuroscience Society, Chicago, IL, USA.

Martin, C.B., Mirsattari, S.M., Pruessner, J.C., Pietrantonio, S., Burneo, J.G., Hayman-Abello, B., & Köhler, S. (2012). Déjà vu in unilateral temporal-lobe epilepsy is associated with selective familiarity impairments on experimental tasks of recognition memory. Lake Ontario Visionary Establishment, Niagara Falls, ON, Canada.

2010 **Martin, C.B.**, Mirsattari, S., Hayman-Abello, B., Burneo, J., & Köhler, S. (2010). Selective familiarity impairments in temporal-lobe epilepsy with déjà vu. Cognitive Neuroscience Society, San Francisco, CA, USA.

TALKS AND PRESENTATIONS

2020 Rethinking cognitive taxonomy and the brain: Object recognition as a case in point. *University of Wisconsin - Milwaukee,* Milwaukee, WI, USA.

2019 Rethinking cognitive taxonomy and the brain: Object recognition as a case in point. *Florida State University,* Tallahassee, FL, USA.

Rethinking cognitive taxonomy and the brain: Object recognition as a case in point. *University of Arkansas,* Fayetteville, AR, USA.

The neural basis of flexible semantic cognition: Integration of perceptual and conceptual object features. *University of Calgary,* Calgary, AB, CAN.

Constructing meaningful memories: Using cognitive neuroscience to strengthen memory and understand its content. *York University,* Toronto, ON, CAN.

Conceptual similarities between targets and distractors influence visually-guided reaching. *Concepts, Actions, and Objects Workshop*, Rovereto, Italy.

Conceptual similarities between targets and distractors influence visually-guided reaching. *Canadian Society for Brain, Behaviour, and Cognitive Science,* Waterloo, ON, CAN.

Reviewing autobiographical memory cues promotes distinctive neural coding in older adults. *Toronto Area Memory Group*, Toronto, ON, CAN.

Reviewing autobiographical memory cues promotes distinctive neural coding in older adults. *Cognitive Neuroscience Society*, San Francisco, CA, USA.

2018 Constructing meaningful memories: Using cognitive neuroscience to strengthen memory and understand its content. *Queen's University,* Kingston, ON, CAN.

The neurocognitive effects of digital memory augmentation. *The International Conference on Learning and Memory*, Huntington Beach, CA, USA.

2017 Neural integration of visual and conceptual object features. *Canadian Society for Brain, Behaviour, and Cognitive Science*, Regina, SK, CAN.

Putting the "memory" in digital memory augmentation. *Toronto Area Memory Group,* Toronto, ON, CAN.

2016 From perception to conception: feature-based integration in the anterior temporal lobes. *University of Toronto, Ebbinghaus Empire Series,* Toronto, ON, CAN.

2015 Category-specific item recognition signals in the medial temporal lobe. *University of Toronto, Ebbinghaus Empire Series,* Toronto, ON, CAN.

2014 Distributed category-specific recognition memory signals in perirhinal cortex. *University of Pennsylvania*, Philadelphia, PA, USA.

Distributed category-specific recognition memory signals in perirhinal cortex. *Duke University*, Durham, NC, USA.

Content specificity of recognition-memory signals in the human medial temporal lobe. *London Health Sciences Centre*, London, ON, CAN.

2010 Selective familiarity impairments in temporal-lobe epilepsy with déjà vu. *London Health Sciences Centre*, *Epilepsy Research Day,* London, ON, CAN.

2008 Déjà vu and temporal lobe epilepsy. *London Health Sciences Centre*, *Epilepsy Research Day,* London, ON, CAN.

TEACHING AND MENTORSHIP

Undergraduate Courses

2021 – Spring: EXP 4404, Human Memory and Learning
2021 – Fall: EXP 4404, Human Memory and Learning

Graduate Courses

2022 – Spring: EXP 6609, Language and Memory

Mentorship

Graduate Supervisor

Stephen Huckins

Honors Thesis Supervisor

Maia Inman
Sheldon Hill

Research Assistants

Nigel Hervey, Kaitlyn Donahue, Heather Wilson, Regan Nattiel, Rainy Ellis, Jessica Moser, Brandon Merrill, Saige Whitaker, Kalie Yaffe, Sophie Allen, Victoria Barkley, Denise Bowman, Ziming Cheng, Davide Crombie, Julia Czyzo, Tyler Delmore, Michelle Devereaux, Tanaz Javan, Haleema Khan, Ji-Yoon Lee, Louisa Mann, Jiayu Pang, Arya Rahbarnia, Jordan Rozario, Marawan Sadek, Katarina Savel, My-An Tran, Shamini Vijayakumar, Andrew Xia, Jiaqian Xu

SERVICE

Doctoral Committee Member

Joshua Brown, Neuroscience (FSU), 2020 –
McKinney Pitts, Psychology (FSU), 2020 –
Parker Sorenson, Psychology (FSU), 2020 –
Heather Rawlinson, Psychology (FSU), 2020 –
Jessica Wood, Psychology (FSU), 2021 –
Michael Prevratil, Psychology (FSU), 2021 –

Departmental Committees

- *Elections Committee, Psychology (FSU), 2020-2022*
- *Library Committee, Psychology (FSU), 2021-2023*
- *Diversity Committee, Psychology (FSU), 2021-2023*
- *Cognitive Neuroscience Search Committee, Psychology (FSU), 2020*
- *Cognitive Neuroscience Search Committee, Psychology (FSU), 2021*

Reviewing

Consulting Editor, *Journal of Cognitive Neuroscience*

Ad Hoc: **Recent: Current Biology; Brain and Behavior;** *Journal of Neuroscience, Cerebral Cortex, Journal of Cognitive Neuroscience, Neuroimage, Human Brain Mapping, Neuropsychologia, Hippocampus, Psychonomic Bulletin & Review, Neuropsychology, Acta Psychologica, PLoS One, Frontiers in Cognition, Frontiers in Human Neuroscience, Journal of Neuroscience Methods, Experimental Brain Research, JSM Brain Science, eNeuro, Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring; Memory and Cognition, Memory and Cognition, Brain and Behavior, Learning and Memory*

MEDIA APPEARANCES AND INTERVIEWS

2019 *"The HippoCamera App"*, Live From Studio 5, AMI-TV, Toronto, Canada
"What is Déjà Vu?", Tai Asks Why, CBC Podcasts, Toronto, Canada
2012 "*Le Déjà Vu, un Imparfait du Present"*, Le Monde, Newspaper, Paris, France.
2012 "*Déjà Vu Explained, But You Knew That"*, London Free Press, London, Canada
2012 "*What is Déjà Vu?"*, The Biggs Show, 1290 CJBK, London, Canada
2012 "*What is Déjà Vu?"*, Wake-Up Western, 94.9 CHRW Radio, London, Canada

MEMBERSHIP

Society for Neuroscience
Cognitive Neuroscience Society
Canadian Society for Brain, Behaviour, and Cognitive Science
Association for the Scientific Study of Consciousness