

EMPLOYMENT AND EDUCATION

2021 – present	Associate Professor Research Scientist Faculty member	Department of Psychology, University of Pittsburgh Learning Research and Development Center Department of Neuroscience (secondary) Center for the Neural Basis of Cognition Medical Scientist (MD/PhD) Training Program
2015 – 2021	Assistant Professor	Department of Psychology, University of Pittsburgh
2014 – 2015	Postdoctoral Fellow	Yale University [advisor: Marvin Chun]
2013 – 2014	Postdoctoral Fellow	University of Pennsylvania [advisor: Sharon Thompson-Schill]
2008 – 2013	Ph.D., M.A., Psychology	University of Pennsylvania [advisor: Sharon Thompson-Schill]
2007 – 2008	Research Psychologist	Oxford University [PI: Anthony Bailey]
2005 – 2007	Public-Sector Consultant	iMPower Consulting Ltd
2002 – 2005	B.A. (Hons)	Experimental Psychology, Oxford University

RESEARCH INTERESTS

Broad: cognitive neuroscience, memory, learning, perception, brain imaging

Specific: neural basis of semantic memory, episodic memory, human ventral stream, fMRI, high-level vision, multivariate pattern analysis, informational connectivity

HONORS AND AWARDS

Elected as member of Memory Disorders Research Society (MDRS)	2020
NIH Early Career Reviewer Program	2020
Rising Star Award, Association for Psychological Science	2019
Appointed to University of Pittsburgh Graduate Faculty	2017
Faculty Honoree, 40 th Annual Honors Convocation, University of Pittsburgh	2016
Krieg Cortical Scholar, Cajal Club (awarded at SfN Annual Meeting) - for <i>conducting exemplary research on the structure and/or connections of the cerebral cortex</i>	2015
Elected Fellow, Psychonomic Society	2013
Anne Anastasi General Psychology Graduate Student Research Recognition Award, APA	2013
Concepts, Actions and Objects Workshop Abstract Award (Rovereto, Italy)	2013
Routledge Cognitive Neuropsychology Student Travel Prize	2013
Research Student Travel Prize, University of Pennsylvania	2013
Research Travel Subvention, University of Pennsylvania	2013
Ruth Roemer Award for outstanding contributions to the UPenn Psychology Community	2011

GRANTS**Extra-mural**

National Institutes of Health (R01) 2020 - 2025
Cognitive and Affective Mechanisms Underlying an Olfactory Approach to Modify \$2,717,943
Cigarette Craving: A Neurobehavioral Investigation

Multiple Principal Investigator (with Michael Sayette; Consultants: Rachel Herz, Michael Hufford)

National Science Foundation 2020 - 2023
The Influence of Semantic Granularity in the Neural Reactivation of Memory \$480,113
 Principal Investigator (Faculty Associate: Natasha Tokowicz)

Australian Research Council (Discovery Project) 2020 - 2022
Tracking the Flow of Perceptual Information Through Decision Networks \$476,198
 Co-Investigator [10%] (PI: Thomas Carlson; Co-Is: Radoslaw Cichy, James Shine)

National Science Foundation 2017 - 2023
Neurobehavioral Integration of Visual and Semantic Number Knowledge and its \$963,164
Role for Individual Variation in the Math Ability of Children and Adults
 Co-Principal Investigator (PI: Melissa Libertus; Co-PI: Julie Fiez)

National Institutes of Health (via UL1TR001857) 2020 - 2021
 Clinical and Translational Science Institute Research Initiative for Special Populations \$25,000
Memory Success and Failure in the Older Brain
 Principal Investigator

National Institutes of Health (R01) 2019 - 2024
Investigating the Role of the Cerebellum in Reading \$3,456,618
 Co-Investigator [1 month] (PI: Julie Fiez; Co-Is: Beatriz Luna, Susan Shaiman, George Wittenberg)

National Institutes of Health (R21) 2014
Spontaneous Code Switching \$440,000
 Key personnel [20%] (PIs: Sharon Thompson-Schill, John Trueswell)

American Psychological Foundation (F.J. McGuigan Dissertation Award) 2012
A Systematic Investigation of Hippocampus-Independent Learning \$1,950
 Principal Investigator

Intra-mural

BRIDGE Center Developmental Fund Seed Grant 2021 - 2022
Investigating the neural basis of monitoring and inhibitory control in language production \$25,960
 Co-Principal Investigator (with Nazbanou Nozari)

BRIDGE Center Developmental Fund Seed Grant 2019 - 2020
A Role for Schema and Reward in Establishing Relational Memory Associations \$23,200
 Principal Investigator

Learning Research and Development Center Internal Award Program 2017 - 2019
Integrating fMRI and EEG to Examine Learning and Memory Consolidation \$49,515

Co-Principal Investigator (with Natasha Tokowicz)

University Research Council Central Research Development Fund 2016 - 2019
Individual Differences in the Memory Systems Employed in Learning and Retrieval \$15,042
 Principal Investigator

Fellowships

National Institutes of Health 2014 - 2015
 Postdoctoral National Research Service Award (max. score); sponsor: Marvin Chun

Howard Hughes Medical Institute 2011 - 2013
 International Student Research Fellowship

University of Pennsylvania 2008 - 2011
 Benjamin Franklin Fellowship

MANUSCRIPTS UNDER REVIEW (* = student or trainee)

Coutanche, M.N., Sauter, J.*, Akpan, E.*, Buckser, R.*, Vincent, A.* (under revision). Identifying lateralized multi-voxel information through brain surface fingerprints.

Bruett, H.*, & **Coutanche, M.N.** (under revision). Cognitive variation in conceptual combination by younger and older adults.

Bruett, H.*, & **Coutanche, M.N.** (under revision). Combining ambiguous concepts in the brain.

Liu, R.*, Tremel, J.*, Fiez, J.A., Durisko, C., Schunn, C., **Coutanche, M.N.**, & Libertus, M.E. (submitted). The integration of symbolic and non-symbolic number representations in the human brain.

PEER-REVIEWED PUBLICATIONS (* = student or trainee)

Koch, G.E.*, Libertus, M.E., Fiez, J.A., & **Coutanche, M.N.** (2023). Representations within the Intraparietal Sulcus Distinguish Numerical Tasks and Formats. *Journal of Cognitive Neuroscience*, 35(2), 226–240.

Ren, X.*, Liu, R.*, **Coutanche, M.N.**, Fiez, J.A., & Libertus, M.E. (2022). Numerical Estrangement and Integration between Symbolic and Non-symbolic Numerical Information: Task-Dependence and Its Link to Math Abilities in Adults. *Cognition*, 224.

Hallion, L.S., Wright, A.G.C., **Coutanche, M.N.**, Joormann, J., & Kusmierski, S.N.* (2022). A Five Factor Model of Perseverative Thought. *Journal of Psychopathology and Clinical Science*, 131(3), 235-252.

Ren, X.*, & **Coutanche, M.N.** (2021). Sleep reduces the semantic coherence of memory recall: An application of latent semantic analysis to investigate memory reconstruction. *Psychonomic Bulletin & Review*, 28(4), 1336-1343.

Koch, G.E.*, Akpan, E.*, & **Coutanche, M.N.** (2020). Image memorability is predicted by discriminability and similarity in different stages of a convolutional neural network. *Learning & Memory*, 27(12), 503-509.

Bruett, H.*, Calloway, R.C.*, Tokowicz, N., & **Coutanche, M.N.** (2020). Neural pattern similarity across concept exemplars predicts memory after a long delay. *NeuroImage*, 219, 1–9.

Coutanche, M.N., Koch, G.E.*, & Paulus, J.P.* (2020). Influences on memory for naturalistic visual episodes: Sleep, familiarity, and traits differentially affect forms of recall. *Learning & Memory*, 27, 284–291. [selected for cover]

Koch, G.E.*, Paulus, J.P.*, & **Coutanche, M.N.** (2020). Neural patterns are more similar across individuals during successful memory encoding than during failed memory encoding. *Cerebral Cortex*, 30(7), 3872–3883.

Popov, V.*, Zhang, Q.*, Koch, G.E.*, Calloway, R.C.*, & **Coutanche, M.N.** (2019). Semantic knowledge influences whether novel episodic associations are represented symmetrically or asymmetrically. *Memory & Cognition*, 47(8), 1567–1581.

– pre-registered: <https://osf.io/rdsw5>; materials, data & code: <https://osf.io/72amw>

Coutanche, M.N. (2019). Addressing misconceptions of Fast Mapping in adults. Invited commentary. *Cognitive Neuroscience*, 10(4), 226–228.

Carlos, B.J.*, Hirshorn, E.A., Durisko, C., Fiez, J.A., & **Coutanche, M.N.** (2019). Word inversion sensitivity as a marker of visual word form area lateralization: An application of a novel multivariate measure of laterality. *NeuroImage*, 191, 493–502.

Martin, L.*, Durisko, C., Moore, M.W., **Coutanche, M.N.**, Chen, D., & Fiez, J.A. (2019). The VWFA is the home of orthographic learning when house images are used as letters. *eNeuro*, 6(1), ENEURO.0425-17.2019.

Coutanche, M.N., & Thompson-Schill, S.L. (2019). Neural activity in human visual cortex is transformed by learning real world size. *NeuroImage*, 186, 570–576.

Coutanche, M.N., & Paulus, J.P.* (2018). An empirical analysis of popular press claims regarding linguistic change in President Donald J. Trump. *Frontiers in Psychology*, 9.

Bruett, H.*, Fang, X.*, Kamaraj, D.C.*, Haley, E.*, & **Coutanche, M.N.** (2018). Expertise moderates incidentally learned associations between words and images. *Frontiers in Psychology*, 9.

Coutanche, M.N., & Koch, G.E.* (2018). Creatures great and small: Real-world size of animals predicts visual cortex representations beyond taxonomic category. *NeuroImage*, 183, 627–634.

Anzellotti, S.[†], & **Coutanche, M.N.**[†] (2018). Beyond Functional Connectivity: Investigating networks of multivariate representations. *Trends in Cognitive Sciences*, 22(3), 258–269. [†] **equal contributions**

Coutanche, M.N., & Koch, G.E.* (2017). Variation across individuals and items determine learning outcomes from fast mapping. *Neuropsychologia*, 106, 187–193.

Coutanche, M.N., Solomon, S.H.*, & Thompson-Schill, S.L. (2016). A meta-analysis of fMRI decoding: Quantifying influences on human visual population codes. *Neuropsychologia*, 82, 134–141.

Coutanche, M.N., & Thompson-Schill, S.L. (2015). Rapid consolidation of new knowledge in adulthood via fast mapping. *Trends in Cognitive Sciences*, 19(9), 486–488.

Coutanche, M.N., & Thompson-Schill, S.L. (2015). Creating concepts from converging features in human cortex. *Cerebral Cortex*, 25(9), 2584–2593.

Coutanche, M.N., & Thompson-Schill, S.L. (2014). Fast mapping rapidly integrates information into existing memory networks. *Journal of Experimental Psychology: General*, 143(6), 2296–2303.

Coutanche, M.N., & Thompson-Schill, S.L. (2014). Using informational connectivity to measure the synchronous emergence of fMRI multi-voxel information across time. *Journal of Visualized Experiments* (89), e51226.

Coutanche, M.N. (2013). Distinguishing multi-voxel patterns and mean activation: Why, how, and what does it tell us? *Cognitive, Affective and Behavioral Neuroscience (CABN)*, 13(3), 667–673.

Coutanche, M.N., Gianessi, C.A.*, Chanales, A.J.H.*, Willison, K.W.*, & Thompson-Schill, S.L. (2013). The role of sleep in forming a memory representation of a two-dimensional space. *Hippocampus*, 23(12), 1189–1197.

Coutanche, M.N., & Thompson-Schill, S.L. (2013). Informational Connectivity: Identifying synchronized discriminability of multi-voxel patterns across the brain. *Frontiers in Human Neuroscience*, 7:15, 1–14.

Coutanche, M.N., & Thompson-Schill, S.L. (2012). The advantage of brief fMRI acquisition runs for multi-voxel pattern detection across runs. *NeuroImage*, 61(4), 1113–1119.

Coutanche, M.N., & Thompson-Schill, S.L. (2012). Reversal without remapping: What we can (and cannot) conclude about learned associations from training-induced behavior changes. *Perspectives on Psychological Science*, 7(2), 118–134.

Kylliäinen, A., Wallace, S., **Coutanche, M.N.**, Leppänen, J.M., Cusack, J., Bailey, A.J., & Hietanen, J. (2012). Affective-motivational brain responses to direct gaze in children with autism spectrum disorder. *Journal of Child Psychology and Psychiatry*, 53(7), 790–797.

Coutanche, M.N., Thompson-Schill, S.L., & Schultz, R.T. (2011). Multi-voxel pattern analysis of fMRI data predicts clinical symptom severity. *NeuroImage*, 57(1), 113–123.

Casey, J.P., Magalhaes, T., Conroy, J.M., Regan, R., Shah, N., Anney, R., Shields, D.C., et al. (2012). A novel approach of homozygous haplotype sharing identifies candidate genes in autism spectrum disorder. *Human Genetics*, 131(4), 565–579.

BOOK CHAPTERS

Coutanche, M.N. (2022). The link between conceptual and perceptual information in memory. In W.A. Bainbridge and T.F. Brady (Eds.), *Visual Memory*. Routledge.

Coutanche, M.N., & Hallion, L.S. (2020). Machine learning for clinical psychology and clinical neuroscience. In A.G.C. Wright and M.N. Hallquist (Eds.), *The Cambridge Handbook of Research Methods in Clinical Psychology*. Cambridge University Press.

Coutanche, M.N., Solomon, S.H., & Thompson-Schill, S.L. (2020). Conceptual Combination. In D. Poeppel, G.R. Mangun and M.S. Gazzaniga (Eds.), *The Cognitive Neurosciences, 6th edition*. MIT Press.

EDITORSHIPS

Cooper, H. (Ed.-in-Chief), **Coutanche, M.N.**, McMullen, L.M., Panter, A.T., Rindskopf, D., & Sher, K.J. (Assoc. Eds.). (2023). *APA handbook of research methods in psychology* (2nd ed., Vols. 1-3). American Psychological Association.

Lee, S.-H., Liu, X.L., & **Coutanche, M.N.** (2021). Editorial: Neural Mechanisms of Memory Retrieval and its Links to Other Cognitive Processes. *Frontiers in Human Neuroscience*, 15.

PEER-REVIEWED CONFERENCE PAPERS (* = student or trainee)

Koch, G.E. * & **Coutanche, M.N.** (accepted). Unpacking how Context Reinstatement aids Memory using Virtual Reality. *Proceedings of the 45th Annual Conference of the Cognitive Science Society*.

Popov, V.*, Zhang, Q.*, Koch, G.E.*, Calloway, R.C.*, & **Coutanche, M.N.** (2019). The effect of semantic relatedness on associative asymmetry in memory. Oral presentation. In A.K. Goel, C.M. Seifert, & C. Freksa (Eds.), *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (pp. 944–945).

Zhang, Q.*, Popov, V.*, Koch, G.E.*, Calloway, R.C.*, & **Coutanche, M.N.** (2018). Fast memory integration facilitated by schema consistency. Poster presentation and inclusion in proceedings. In C. Kalish, M. Rau, J. Zhu, & T.T. Rogers (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 2777–2782).

CONFERENCE PRESENTATIONS (* = student or trainee)

Qi, X.* & **Coutanche, M.N.** (submitted). Retrieving Concepts through Different Semantic Granularities Influences their Subsequent Neural Reactivation.

Koch, G.E. * & **Coutanche, M.N.** (accepted). Unpacking how Context Reinstatement aids Memory using Virtual Reality. Poster to be presented at the Annual Meeting of the Cognitive Science Society, Sydney, Australia.

Ren, X.*, **Coutanche, M.N.**, Fiez, J.A., & Libertus, M.E. (March, 2023). Integration of Symbolic and Non-symbolic Numerical Information in Children: Task-Dependence and its Link to Math Abilities. Poster presented at the Society for Research in Child Development, Salt Lake City, UT.

Amirkhani, N.*, Salem, T.*, Zoroufi, A.*, & **Coutanche, M.N.** (March, 2023). Cortical Correlates of Discounted Cumulative Reward. Oral presentation and poster at Sharif Neuroscience Symposium 2023 [Best Poster Presentation Award].

Coutanche, M.N. & Bruett, H.* (October, 2022). Neural processes and consequences of generating novel concepts from known objects in the human brain. Talk at the Memory Disorders Research Society Annual Meeting 2022, Philadelphia, PA.

Coutanche, M.N. & Bruett, H.* (July, 2022). Neural processes and consequences of generating novel concepts from known objects in the human brain. Talk at the Australasian Brain & Psychological Sciences Meeting 2022, Brisbane, Australia.

Ren, X.*, **Coutanche, M.N.**, Fiez, J.A., & Libertus, M.E. (June, 2022). Integration of Symbolic and Non-symbolic Numerical Information in Children: Task-Dependence and its Link to Math Abilities. Poster presented at the 8th BRAIN Initiative Investigators Meeting, Virtual.

Ren, X.*, **Coutanche, M.N.**, Fiez, J., & Libertus, M.E. (June, 2022). Integration of Symbolic and Non-symbolic Numerical Information in Children: Task-Dependence and its Link to Math Abilities. Poster presented at the Mathematical Cognition and Learning Society Annual Conference, Antwerp, Belgium.

Ren, X.*, **Coutanche, M.N.**, Fiez, J., & Libertus, M.E. (November, 2021). The Neural Basis for Number Processing and its Relation to Individual Differences in Adults' Mathematical Skills. Poster presented at the Society for Neuroscience Annual Meeting, Virtual.

Ren, X.*, Liu, R., **Coutanche, M.N.**, Fiez, J., & Libertus, M.E. (June, 2021). Numerical Integration between the Exact and Approximate Number Systems: Evidence for Task-Dependence and its Link to Math Abilities in Adults. Poster presented at the BRAIN Initiative Investigators Meeting, Virtual.

Ren, X.*, Bruett, H.*, & **Coutanche, M.N.** (March, 2021). An Application of Wavelet Transform to Identify the Spatial Scale of Multivariate Activity Patterns in Functional MRI data. Poster presented at Annual Meeting of the Cognitive Neuroscience Society, Virtual.

Ren, X.*, & **Coutanche, M.N.** (November, 2020). Sleep Reduces the Semantic Coherence of Memory Recall: An Application of Latent Semantic Analysis to Investigate Memory Reconstruction. Poster presented at the Psychonomic Society Annual Meeting, Virtual.

Ren, X.*, Bruett, H.*, & **Coutanche, M.N.** (October, 2020). An Application of Wavelet Transforms to Identify the Spatial Scale of Multivariate Activity Patterns in Functional MRI data. Presentation at Neuromatch 3.0, Virtual.

Coutanche, M.N. (August, 2020). Recalling the when, where and what of naturalistic episodes. Presentation given at the Context and Episodic Memory Symposium, Virtual.

Koch, G.E.*, Durisko, C., Liu, R.*, Libertus, M.E., Fiez, J.A., & **Coutanche, M.N.** (June, 2020). Neural representations of number across semantic, phonological, visual, and manual formats. Poster presented at the BRAIN Initiative Investigators Meeting, Virtual.

Coutanche, M.N. (May, 2020). Roles of perceptual and conceptual hierarchies in the formation of memories. Symposium presentation at the Annual Meeting of the Cognitive Neuroscience Society, Virtual.

Akpan, E.*, Buckser, R.*, & **Coutanche, M.N.** (May, 2020). Identifying networks with common changes in representational similarity over time using jackknife resampling. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, Virtual.

Koch, G.E.*, Akpan, E.*, & **Coutanche, M.N.** (May, 2020). Image memorability is predicted by activity across stages of convolutional neural networks and the human ventral stream. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, Virtual.

Ren, X.*, & **Coutanche, M.N.** (May, 2020). Information can be extracted from ventral stream multi-voxel patterns across spatial scales using the wavelet transform. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, Virtual.

Colvin, M.*, Koch, G.*, Dresang, H.*, Warren, T., Dickey, M.W., & **Coutanche, M.N.** (March 2020). fMRI evidence for the existence and function of animacy predictions. Poster presented at the Annual CUNY Human Sentence Processing Conference, Amherst, MA.

Coutanche, M.N. (March, 2020). Applications of Informational Connectivity. Presentation at the Organization of Human Brain Mapping Equinox Twitter Conference. <https://ohbmx.org/>

Hallion, L.S., Wright, A.G.C., **Coutanche, M.N.**, Kusmierski, S.N.*, & Caulfield, M.K. (November 2019). Toward a dimensional taxonomy of perseverative thought. Spotlight Research Presentation at the Annual Meeting of the Association of Behavioral and Cognitive Therapies, Atlanta, GA.

Bruett, H.*, Calloway, R.C.*, Tokowicz, N., & **Coutanche, M.N.** (November 2019). Neural reactivation after a month-long delay for word-concept associations. Poster presented at the Annual Meeting of the Psychonomic Society, Montréal, Canada.

Coutanche, M.N., & Paulus, J.P.* (November 2019). A role for schema in establishing relational memory associations in the human brain. Talk at the Annual Meeting of the Psychonomic Society, Montréal, Canada.

Akpan, E.*, Koch, G.E.*, & **Coutanche, M.N.** (November 2019). A novel method that integrates open MRI resources to track the gray matter footprints of cognitive functions. Poster presented at the CMU Open Science Symposium 2019, Pittsburgh, PA.

Akpan, E.*, Koch, G.E.*, & **Coutanche, M.N.** (October 2019). Distributed gray matter footprints predict cognitive abilities: Successful prediction of memory recall in older adults. Poster presented at the University of Pittsburgh Computational Medicine Conference, Pittsburgh, PA.

Paulus, J.P.*, & **Coutanche, M.N.** (October 2019). A role for schema in establishing rapid relational memory associations in the human brain. Poster presented at the Society for Neuroscience Annual Meeting, Chicago, IL.

- Koch, G.E.*, Liu, R.*, Libertus, M.E., Fiez, J.A., & **Coutanche, M.N.** (October 2019). Neural representations of number across semantic, phonological, visual, and manual formats. Poster presented at the Society for Neuroscience Annual Meeting, Chicago, IL.
- Akpan, E.*, Koch, G.E.*, & **Coutanche, M.N.** (October 2019). Tracking gray matter footprints of neurally distributed cognitive functions. Poster presented at the Society for Neuroscience Annual Meeting, Chicago, IL.
- Popov, V.*, Zhang, Q.*, Koch, G.E.*, Calloway, R.C.*, & **Coutanche, M.N.** (July 2019). The effect of semantic relatedness on associative asymmetry in memory. Oral presentation at the Annual Meeting of the Cognitive Science Society, Montreal, Canada.
- Liu, R.*, Koch, G.E.*, **Coutanche, M.N.**, Fiez, J.A., & Libertus, M.E. (June 2019). Representing numerical information across different formats in the adult brain. Poster presented at the Annual Meeting of the Mathematical Cognition and Learning Society. Ottawa, Canada.
- Colvin, M.*, Dresang, H.*, Koch, G.*, Warren, T., Dickey, M.W., & **Coutanche, M.N.** (June 2019). fMRI evidence for the existence and function of animacy predictions. Talk at Psycholinguistics in Iceland - Parsing and Prediction meeting, Reykjavík, Iceland.
- Akpan, E.*, Sauter, J.*, & **Coutanche, M.N.** (May 2019). A multi-dimensional surface-based method for determining brain lateralization. Poster presented at the Ninth International Workshop on the Statistical Analysis of Neuronal Data (SAND), Pittsburgh, PA
- Coutanche, M.N.**, Koch, G.E.*, & Paulus, J.P.* (May 2019). Using neural representations during encoding to predict subsequent retrieval of dynamic events. Poster presented at the Context and Episodic Memory Symposium, Philadelphia, PA.
- Coutanche, M.N.**, Koch, G.E.*, & Paulus, J.P.* (May 2019). A common neural signature for encoding success and failure for dynamic episodes. Poster presented at the Concepts, Actions, and Objects Symposium, Rovereto, Italy.
- Libertus, M.E., **Coutanche, M.N.**, Fiez, J.A., Koch, G.E.*, & Liu, R*. (April 2019). Neural integration of visual and semantic number knowledge in 4th graders and adults. Poster presented at the BRAIN Initiative Investigators Meeting, Bethesda, MD.
- Koch, G.E.*, Paulus, J.P.*, & **Coutanche, M.N.** (March 2019). How neural representations during encoding predict recall success and failure for dynamic episodes. Poster presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
- Koch, G.E.*, Paulus, J.P.*, & **Coutanche, M.N.** (March 2019). How neural representations during encoding predict recall success and failure for dynamic episodes. Poster presented at the 19th Annual University of Pittsburgh Kenneth P. Dietrich School of Arts and Sciences Grad Expo, Pittsburgh, PA.
- Paulus, J.P.*, Koch, G.E.*, & **Coutanche, M.N.** (November 2018). A role of sleep in the consolidation of dynamic episodes. Poster presented at the Annual Meeting of the Psychonomic Society, New Orleans, LA.

Bruett, H.*, Fang, X. *, Kamaraj, D.C. *, Haley, E. *, & **Coutanche, M.N.** (November 2018). Expertise moderates incidentally learned associations between words and images. Poster presented at the Annual Meeting of the Psychonomic Society, New Orleans, LA.

Koch, G.E.*, Paulus, J.P.*, & **Coutanche, M.N.** (November 2018). A role of sleep in the consolidation of dynamic episodes. Poster presented at the University of Pittsburgh Center for Sleep and Circadian Science Research Day, Pittsburgh, PA.

Koch, G.E.*, Paulus, J.P.*, & **Coutanche, M.N.** (October 2018). Investigating how neural representations during encoding predict later memory retrieval. Poster presented at the University of Pittsburgh Brain Day, Pittsburgh, PA.

Hirshorn, E.A., Carlos, B.J.*, Durisko, C., Perfetti C., Fiez, J.A., & **Coutanche, M.N.** (August 2018). Word inversion sensitivity as a marker of word identification style and visual word form area lateralization. Poster presented at the Annual Meeting of the Society for the Neurobiology of Language, Quebec City, Canada.

Coutanche, M.N. (June 2018). Word learning and semantic memory: Individual differences in semantic memory predict temporal pole volume and degree of lexical integration. Symposium talk at the International Workshop on Advanced Learning Sciences, Pittsburgh, PA.

Paulus, J.P.*, Koch, G.E.*, & **Coutanche, M.N.** (June 2018). The role of sleep in consolidation of dynamic episodes. Poster presented at the International Workshop on Advanced Learning Sciences, Pittsburgh, PA.

Koch, G.E.*, & **Coutanche, M.N.** (June 2018). Neural correlates for trait memory differences. Poster presented at the International Workshop on Advanced Learning Sciences, Pittsburgh, PA.

Coutanche, M.N. (May 2018). Using existing knowledge to promote the integration of new memories. Talk at the 2018 Context and Episodic Memory Symposium, Philadelphia, PA.

Coutanche, M.N. (April 2018). Incorporating new knowledge into existing perceptual and conceptual dimensions through interacting regions of the human brain. Talk at the International Conference on Learning and Memory, Huntington Beach, CA.

Coutanche, M.N., Fiez, J.A., & Libertus, M.E. (April 2018). Neurobehavioral integration of visual and semantic number knowledge and its role for individual variation in math ability. Poster presented at the BRAIN Initiative Investigators Meeting, Bethesda, MD.

Bruett, H.*, & **Coutanche, M.N.** (March 2018). The role of inter-region information synchrony in processing visual stimuli. Data blitz and poster presented at the Cognitive Neuroscience Society Annual Meeting, Boston, MA.

Koch, G.E.*, & **Coutanche, M.N.** (March 2018). Perceptual and conceptual dimensions impacting animate items in the human ventral stream. Poster presented at the Cognitive Neuroscience Society Annual Meeting, Boston, MA.

Coutanche, M.N. (November 2017). Incorporating new knowledge into perceptual and conceptual dimensions through interacting regions of the human brain. Talk at the Annual Meeting of the Psychonomic Society, Vancouver, Canada.

Bruett, H.*, & **Coutanche, M.N.** (November 2017). The role of inter-region information synchrony in processing visual stimuli. Poster presented at the Annual Meeting of the Psychonomic Society, Vancouver, Canada.

Carlos, B.J.*, Hirshorn, E.A., Durisko, C., Fiez, J.A., & **Coutanche, M.N.** (November 2017). Multivariate laterality as a novel measure of laterality and marker for word inversion sensitivity in the visual word form area. Poster presented at the Annual Meeting of the Psychonomic Society, Vancouver, Canada.

Coutanche, M.N., & Koch, G.E.* (October 2017). Neural correlates for trait memory differences. Poster presented at the University of Pittsburgh Brain Day Meeting, Pittsburgh, PA.

Carlos, B.J.*, & **Coutanche, M.N.** (June 2017). Testing a new method for assessing lateralization using multi-voxel pattern analysis. Poster presented at the Eighth International Workshop on the Statistical Analysis of Neuronal Data (SAND), Pittsburgh, PA.

Bruett, H.*, & **Coutanche, M.N.** (June 2017). Informational connectivity as a method for measuring synchrony in the processing of visual information. Poster presented at the Eighth International Workshop on the Statistical Analysis of Neuronal Data (SAND), Pittsburgh, PA.

Coutanche, M.N., & Koch, G.E.* (May 2017). The interaction of conceptual dimensions for animate items in the human ventral stream. Poster presented at the Workshop on Concepts, Actions and Objects: Functional and Neural Perspectives, Rovereto, Italy.

Coutanche, M.N., & Koch, G.E.* (March 2017). Neural correlates for trait memory differences. Poster presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Coutanche, M.N., & Thompson-Schill, S.L. (November 2016). The influence of recent semantic learning on human visual cortex. Poster presented at the Society for Neuroscience Annual Meeting, San Diego, CA.

Coutanche, M.N., & Koch, G.E.* (November 2016). The neural basis for trait memory differences. Poster presented at the University of Pittsburgh Brain Day 2016, Pittsburgh, PA.

Coutanche, M.N., & Thompson-Schill, S.L. (November 2016). The influence of recent semantic learning on human visual cortex. Poster presented at the University of Pittsburgh Brain Day 2016, Pittsburgh, PA.

Coutanche, M.N., & Chun, M.M. (July 2016). Exploring the nature of fast mapped knowledge through divided attention. Symposium presentation at the International Conference on Memory, Budapest, Hungary.

Herholz, P., Schuster, V., **Coutanche, M.N.**, & Jansen, A. (June, 2016). fMRI as a new fertility monitor? Influences of sex hormones on brain organization revealed by MVPA. Poster presented at the Annual Meeting of the Organization for Human Brain Mapping, Geneva, Switzerland.

Coutanche, M.N. (May 2016). The rapid consolidation of new knowledge into cortical networks through fast mapping. Talk at the Context and Episodic Memory Symposium, Philadelphia, PA.

Ruscio, A.M., Hallion, L.S., **Coutanche, M.N.**, Wu, H., Thompson-Schill, S.L., & Rauch, S.L. (April 2016). Neural substrates of worry and rumination in generalized anxiety disorder and major depressive disorder. Talk at the Anxiety and Depression Association of America Annual Meeting, Philadelphia, PA.

Tamez, E.R., Trueswell, J.C., **Coutanche, M.N.**, & Thompson-Schill, S.L. (October 2015). fMRI activity during a spontaneous dialogue task. Poster presented at the Society for the Neurobiology of Language Annual Meeting, Chicago, IL.

Parma, V. †, **Coutanche, M.N.** † [† equal contributions], Seubert, J., Fondberg, R., Hackl, L., Åhs, F., & Lundström, J.N. (April 2015). Anxiety-dependent modulation of olfactory fear conditioning: A multidimensional approach. Talk at the Association for Chemoreception Sciences Annual Meeting, FL.

Coutanche, M.N., & Thompson-Schill, S.L. (November 2014). Fast mapping rapidly integrates information into existing memory networks. Symposium speaker (“Memory, Sleep and Dreams”), Psychonomic Society Annual Meeting, Long Beach, CA.

Parma, V. †, **Coutanche, M.N.** † [† equal contributions], Seubert, J., Fondberg, R., Hackl, L., Åhs, F., & Lundström, J.N. (November 2014). Multidimensional approach to the study of olfactory fear conditioning in individuals with low and high trait anxiety vulnerability. Poster presented at the Clinical Chemosensation Annual Meeting, Dresden, Germany.

Coutanche, M.N., Solomon, S.H. *, & Thompson-Schill, S.L. (May 2014). A meta-analysis of multi-voxel patterns in the ventral stream. Poster presented at the Vision Sciences Society Annual Meeting, St. Pete Beach, FL.

Coutanche, M.N., & Thompson-Schill, S.L. (May 2014). Fast mapping rapidly integrates information into existing memory networks. Talk at the Context and Episodic Memory Symposium, Philadelphia, PA.

Coutanche, M.N., & Thompson-Schill, S.L. (April 2014). Fast mapping rapidly integrates information into existing memory networks. Poster presented at the Cognitive Neuroscience Society Annual Meeting, Boston, MA.

Coutanche, M.N., & Thompson-Schill, S.L. (May 2013). Converging on a convergence zone: concurrent feature decoding predicts identity decoding for anticipated objects. Talk at the Workshop on Concepts, Actions, and Objects: Functional and Neural Perspectives, Rovereto, Italy.

Coutanche, M.N., & Thompson-Schill, S.L. (May 2013). Functional activity patterns encoding the identity of anticipated objects are marked by converging shape and color decoding in early visual areas during preparatory visual attention. Talk at the Vision Sciences Society, Naples, FL.

Coutanche, M.N., Gianessi, C.A.*, Chanales, A.J.H.*, Willison, K.W.*, & Thompson-Schill, S.L. (November 2012). Sleep aids the consolidation of spatial relational memories. Poster presented at the Psychonomic Society Annual Meeting, Minneapolis, MN.

Coutanche, M.N., & Thompson-Schill, S.L. (April 2012). The advantage of brief functional magnetic resonance imaging acquisition runs for multi-voxel pattern detection. Poster presented at the Cognitive Neuroscience Society Annual Meeting, Chicago, IL.

Coutanche, M.N., & Thompson-Schill, S.L. (April 2011). Informational Connectivity: A novel fMRI analysis method for identifying brain areas that share distributed encoding principles. Poster presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Coutanche, M.N., Thompson-Schill, S.L., & Schultz, R.T. (October 2009). An application of multi-voxel pattern analysis to investigating patient groups: Face classification in the autism fusiform face area. Poster presented at the Society for Neuroscience Annual Meeting, Chicago, IL.

Coutanche, M.N., Wallace, S., White, K.B., Foley, S., Bailey, A., & I.M.G.S.A.C. (May 2008). Face and gaze processing in the broader autism phenotype: Independent differences in ASD relatives. Poster presented at the International Meeting for Autism Research, London, UK.

White, K.B., Wallace, S., Parr, J., **Coutanche, M.N.**, Foley, S., Bailey, A., & I.M.G.S.A.C. (May 2008). Social cognition in the broader autism phenotype. Poster presented at the International Meeting for Autism Research, London, UK.

TALKS

July, 2022. Tracking Information across the Brain. Brain and Mind Center, University of Sydney, Sydney, Australia.

November, 2021. From Perception to Memory: The Integration and Influence of Knowledge in the Human Brain. Colloquium, Institute of Cognitive Science, University of Colorado Boulder, Boulder, CO.

February 2021. Open Science Practices: Preprints, Preregistration and Data Sharing. Cognitive Program Talk Series, University of Pittsburgh, Pittsburgh, PA.

February 2021. Words and Concepts in the Brain. Department of Communication Science and Disorders Research Roundtable Speaker Series, University of Pittsburgh, Pittsburgh, PA.

October 2020. Using Open Textbooks in Psychology. Teaching Program Talk Series, University of Pittsburgh, Pittsburgh, PA.

November 2019. Machine Learning for Psychology: Why, when, and (a bit of) how. Cognitive Program Talk Series, University of Pittsburgh, Pittsburgh, PA.

October 2018. The Rapid Integration of New Words and Concepts into the Memory System. Duolingo, Pittsburgh, PA.

July 2018. Conceptual Combination. Kavli Summer Institute in Cognitive Neuroscience, Tahoe, CA.

March 2018. Keynote talk, Psi Chi Induction Ceremony. Department of Psychology, University of Pittsburgh, PA.

March 2018. The Integration of Learned Associations into Memory in the Human Brain. Invited Colloquium speaker. Department of Psychology, West Virginia University, Morgantown, WV.

October, 2017. The Shift from Perception to Meaning in the Human Brain. Department of Communication Science and Disorders, University of Pittsburgh, Pittsburgh, PA.

November, 2016. Adding Meaning to Perception: Forming Integrated Knowledge in Human Cortex. Carnegie Mellon University Cognitive Psychology Symposium, Pittsburgh, PA.

October 2016. The Employment of Neural Systems in Human Learning: Determinants and Implications for Memory. Center for the Neural Basis of Cognition Annual Retreat, Seven Springs, PA.

January 2016. Sleep and Memories. Panther Psychology Club, University of Pittsburgh, Pittsburgh, PA.

September 2015. Adding Meaning to Perception: The Impact of Learning in Distributed Activity Patterns in Human Sensory Cortex. Cognitive Program Talk Series, University of Pittsburgh, Pittsburgh, PA.

December 2014. Decoding Conceptual and Perceptual Representations across Networks of the Human Brain. fMRI Brown Bag Symposium Series, Dartmouth College, Hanover, NH.

September 2014. The Integration of Knowledge into Cortical Memory Networks. Current Works in Cognitive Psychology Series, Yale University, New Haven, CT.

May 2014. Talk discussant at the Context and Episodic Memory Symposium, Philadelphia, PA.

December 2013. Decoding Perceptual and Conceptual Object Processing in Information Networks of the Human Brain. Duke University, Durham, NC.

May 2013. The Role of Sleep in Forming a Memory Representation of a Two-dimensional Space. Cognitive Science Guest Lecture, ETH Zürich, Switzerland.

January 2013. Synchronous Decoding of Multi-voxel Patterns in Visual Object Processing. Center for Cognitive Neuroscience Talk Series, University of Pennsylvania, Philadelphia, PA.

May 2011. Decoding Patterns in the Active Human Brain. Art of Research Graduate Symposium, University of Pennsylvania, Philadelphia, PA.

April 2008. The Broader Autism Phenotype. International Molecular Genetics Study of Autism Consortium Annual Conference, Oxford, UK.

TEACHING

Graduate Courses (s = Spring; F = Fall)

Cognitive Neuroscience of Learning and Memory (University of Pittsburgh)

2017s, 2021s

Marc N. Coutanche**Curriculum Vitae****Undergraduate Courses (s = Spring; F = Fall)**

The Learning Sciences (University of Pittsburgh)	2023s
Introduction to Psychology (University of Pittsburgh)	2017 _F , 2018 _{SF} , 2019 _F , 2020 _{SF} , 2022 _F
Cognition and the Brain (University of Pittsburgh)	2016 _{SF} , 2018 _S , 2019 _S , 2020 _S
Memory, Pre-Freshman Program for at-risk students (University of Pennsylvania)	2011 - 2013
Cognitive Neuroscience (University of Pennsylvania)	2010

3-day workshop: *Theory and Application of MVPA* 2013 (x2), 2014

Teaching Assistant Trainer (University of Pennsylvania) 2014

Teaching Assistant

Cognitive Neuroscience (Instructor: Sharon Thompson-Schill)	2010
Learning (Instructor: Robert Rescorla)	2009

English-language Teacher (Shenzhen, China) 2004

MENTORING**Graduate Student Advisees**

Angela Griffio (Psychology)	2022 - present
Griffin Koch (Psychology)	2017 - present
Received NIH Behavioral Brain Research Training Program Fellowship, 2019 Society for Neuroscience Trainee Professional Development Award, 2020 LRDC Tim Post Award for Research Excellence	
Xueying Ren (Psychology)	2019 - 2022
Rae Buckser (Psychology)	2019 - 2021
Heather Bruett (Psychology)	2016 - 2021

Advisor in programs to broaden representation in science

Hot Metal Bridge 1-year Post-Bac Program [Juan Carlos Angel Rojas]	2021 - 2022
Learning Research and Development Center Summer Internship [Téah Segura]	2019
Hot Metal Bridge 1-year Post-Bac Program [Brandon Carlos]	2016 - 2017
Summer Undergraduate Research Program, Yale University [Ariel Rosario]	2015

Supervised Undergraduate Students

Psychology Directed Research students	2016 - present
Neuroscience Directed Research students	2016 - present
Senior Thesis, Psychology Major [Xiaoxi Qi]	2021 - 2023
Senior Thesis, Neuroscience Major [Carlo Vignali]	2018 - 2020
CNBC Summer Undergraduate Research Program in Neural Computation [Jake Sauter]	2018
Senior Thesis, University of Pennsylvania [Avi Chanales]	2011 - 2012
Senior Thesis, University of Pennsylvania [Carol Gianessi]	2010 - 2011

Graduate Student Milestone Committees (non-advisees)

Xueying Ren, Psychology Ph.D. dissertation	2023 - present
Haley Dresang, Communication Sciences & Disorders Ph.D. dissertation	2018 - present
Thomas Kraynak, Psychology Ph.D. dissertation	2020 - 2021
Yiwen Zhang, Psychology Master's thesis	2020 - 2021
Ciara Willett, Psychology Specialty Exam	2020 - 2021
Robert Vargas, CMU Psychology committee	2017 - 2021
Ven Popov, CMU Psychology committee (all stages)	2015 - 2020

Marc N. Coutanche**Curriculum Vitae**

Brett Bankson, Psychology Master's thesis	2019
Xiaoping Fang, Psychology Ph.D. dissertation	2018 - 2019
Lea Martin, Psychology Ph.D. dissertation	2018 - 2019
Lin Zhou, Psychology Master's thesis	2018 - 2019
Travis Alvarez, Psychology Ph.D. dissertation	2017 - 2019
Ciara Willett, Psychology Master's thesis	2018
Gabriela Terrazas, Psychology Master's thesis	2017 - 2018
Joshua Tremel, Psychology Ph.D. dissertation	2015 - 2018
Xiaoping Fang, Psychology Specialty Exam	2017
Brian Knox, Accounting Ph.D. dissertation	2017

External Examiner:

PhD thesis in Clinical Neuropsychology, York University, Canada	2021
PhD thesis in Psychology, Carnegie Mellon University, US	2020

Graduate Student Mentoring Committees (non-advisees)

Diya Goyal, Psychology Ph.D. program (chair)	2022 - present
Douglas Getty, Psychology Ph.D. program	2018 - present
August Vincent, Psychology Ph.D. program	2019 - 2022
Zachary Caddick, Psychology Ph.D. program	2017 - 2022
Kole Norberg, Psychology Ph.D. program (chair)	2017 - 2022
Peipei Li, Psychology Ph.D. program (chair)	2018 - 2020
Joshua Tremel, Psychology Ph.D. program	2016 - 2018

Undergraduate Honors Thesis Committees (non-advisees)

Anisha Venkatesh, Psychology Honors Thesis	2019 - 2020
Eleanna Melcher, Psychology Honors Thesis	2018 - 2019

PROFESSIONAL SERVICE

Editorial Board, <i>Neurons, Behavior, Data Analysis and Theory</i>	2022 - present
Editorial Board, <i>Neuroanatomy and Behaviour</i>	2022 - present
Editorial Board, <i>Psychonomic Bulletin & Review</i>	2020 - present
Editorial Board, <i>NeuroImage</i>	2019 - 2023
Mentor, Neuromatch Academy	2022
Reviewer, Psychonomic Society Graduate Conference Awards	2020
Program Committee, 42nd Annual Meeting of the Cognitive Science Society (CogSci)	2020
Symposium Organizer & Chair, Annual Meeting of the Cognitive Neuroscience Society	2020
Symposium Chair, 60 th Annual Meeting of the Psychonomic Society	2019
Reviewer, Annual Meeting of the Cognitive Science Society (CogSci)	2019
Review Committee, Psychonomic Society J. Frank Yates Student Travel Award	2018, 2019
Chair, Talk Session at 6 th International Workshop on Advanced Learning Sciences	2018
Organizing Committee, 6 th International Workshop on Advanced Learning Sciences	2018
Symposium Chair, 58 th Annual Meeting of the Psychonomic Society	2017

Author of textbook practice questions and lecture slides

<i>Psychological Science</i> 7 th ed. (W.W. Norton)	2022
<i>Psychological Science</i> 6 th ed. (W.W. Norton)	2017
<i>Cognition</i> 6 th ed. (W.W. Norton)	2015
<i>Psychological Science</i> 5 th ed. (W.W. Norton)	2014
<i>Cognitive Neuroscience</i> 4 th ed. (W.W. Norton)	2013

Symposium Co-organizer & Chair, International Conference of Memory, Budapest, Hungary 2016

Grant reviewing

Alzheimer's Society
 American Institute of Biological Sciences
 Autistica
 Fund for Scientific Research (Belgium)
 NIH Cognition and Perception Study Section (NIH Early Career Reviewer Program)
 NSF

Peer-reviewing for journals

Advances in Cognitive Psychology
Autism Research
Brain Connectivity
Brain Structure & Function
Cerebral Cortex
Cognition
Cognitive Neuropsychology
Computational Brain & Behavior
Cortex
eLife
eNeuro
Eye and Vision
Frontiers in Human Neuroscience
Frontiers in Psychology
Human Brain Mapping
Hippocampus
IEEE Journal of Biomedical and Health Informatics
IEEE Transactions on Medical Imaging
Journal of Cognitive Neuroscience
Journal of Cognitive Psychology
Journal of Experimental Child Psychology
Journal of Experimental Psychology: General
Journal of Experimental Psychology: Learning, Memory, and Cognition
Journal of Memory and Language
Journal of Neurophysiology
Journal of Neuroscience
Journal of Psycholinguistic Research
Language, Cognition and Neuroscience
Learning & Memory
Memory
Memory & Cognition
Nature Neuroscience
Nature Scientific Reports
Neurobiology of Language
Neurobiology of Learning and Memory
NeuroImage
NeuroImage: Clinical
Neuron
Neuropsychologia ("Outstanding Reviewer")
Neuroscience

PLOS Biology
PLOS ONE
Proceedings of the National Academy of Sciences
Psychological Review
Psychonomic Bulletin & Review
Royal Society Open Science
Science Advances

DEPARTMENTAL AND INSTITUTIONAL SERVICE

Data Science in Graduate Studies Working Group, University of Pittsburgh	2022 - present
Chair of Brain Imaging Center (BRIDGE) Steering Committee	2022 - present
Chair of LRDC Executive Committee	2022 - present
Chair of Cognitive Program, Department of Psychology	2021 - present
Department of Psychology Executive Committee	2021 - present
Department of Psychology Graduate Education Committee	2021 - present
Transcript Distinction in The Learning Sciences Committee	2020 - present
BRain Imaging Data Generation & Education (BRIDGE) Center Steering Committee	2020 - 2022
Faculty Onboarding Peer Buddy, Dietrich School of Arts & Sciences	2022
Reviewer, 2022 CNBC Strick Prize for Outstanding Paper	2022
Reviewer, Dr. John Knox Hall, Jr. Scholarship of the Pittsburgh Foundation	2021
Technical production for virtual psychology graduation ceremonies	2020, 2021
Department of Psychology Undergraduate Education Committee	2020 - 2021
LRDC Pandemic Safety Ambassador	2020 - 2021
LRDC Communications Committee	2019 - 2021
BRain Imaging Data Generation & Education (BRIDGE) Center Safety Committee	2018 - 2021
Introduction to Psychology Recitation Improvement Project ('Intro 360')	2020 - 2021
Cognitive Psychology Graduate Student Recruitment Committee	2015, 2016, 2019, 2020
Department of Psychology Teaching Evaluation Project	2018 - 2020
Immersive Media @ Pitt Working Group	2020
Dietrich School Faculty Ambassador Program	2019
Grant reviewer, University of Pittsburgh Competitive Medical Research Fund	2019
Reviewer, LRDC Tim Post Award for Research Excellence	2017, 2018
Department of Psychology Colloquium Committee	2016 - 2017
Department of Psychology Faculty Search Committee	2015 - 2016
Organizer, University of Pennsylvania Psychology graduate student recruitment weekend	2012

PROFESSIONAL DEVELOPMENT

Marc N. Coutanche**Curriculum Vitae**

Medical Scientist Training Program Mentoring Best Practice workshop	2023
Life with Gender Dysphoria course	2022
How to Truly Listen course	2022
DEI in Teaching, Learning, Assessment dbSERC Faculty Retreat	2022
Data Science in Graduate & Professional Programs at Pitt Summit	2022
Question. Persuade. Refer. Gatekeeper Certificate for Suicide Prevention	2022
Department of Psychology Mentoring workshop	2021
Pitt Career Center ‘Career Champion’ program	2021
Department of Psychology Empathy Training	2021
Supporting Transgender and Non-Binary Community Members workshop	2020
New to School: Supporting First-Generation Students workshop	2020
Discipline-Based Science Education Research Center Faculty Retreat on remote learning	2020
Faculty Success Program, National Center for Faculty Development & Diversity	2020
University of Pittsburgh Diversity Retreat	2019
Diversity Inclusive Classroom workshops	2017 - 2018
Provost’s Diversity Institute for Faculty Development	2016
An Inclusive Classroom: Practical Lessons and Techniques for Constructing a Truly Open Learning Environment for LGBTQIA Students (2-day retreat)	2016

SOFTWARE

Team Neuroscientist in developing augmented reality application to encourage eye contact in children with Autism Spectrum Disorder	
Creator, Informational Connectivity MATLAB Toolbox	
Contributor, Princeton Multi-Voxel Pattern Analysis MATLAB Toolkit	

SCIENCE OUTREACH

Panelist, Science Revealed: A Public Lecture Series. <i>UFOs and the Stories We Tell About Them</i>	2022
Featured researcher, Pitt Communication Science and Disorders Podcast	2021
Judge, International Youth Neuroscience Association’s ‘Neuroscience Exploration Under Review of Neuroscientists’ (NEURON)	2020
Published quantitative analysis of claims in popular media (Coutanche & Paulus, 2018)	2018
Talk on word learning and consolidation at Duolingo	2018
Team Neuroscientist in 3-day XR Brain Jam - applying virtual & augmented reality to problems in neuroscience	2018
Judge, Linden Elementary School Science Fair	2017
Featured Scientist, Cerebella Design’s ‘Celebrating Brains’ Initiative	2015 - 2017

Public library talk series, Yale “Science Diplomats” series	2015
Lecturer, Yale “Pathways to Science” program for high school students	2015
Howard Hughes Medical Institute ‘Ask a Scientist’ online service	2012

MEDIA CONTRIBUTIONS AND COVERAGE

Faina, N., & Jones, J.P. (2022, April 18). Ace finals using these memory tricks. *Pittwire*.
<https://www.pitt.edu/pittwire/features-articles/memory-tips-finals>.

Linder, C. (2021, October 17). Your Conscious Mind Is Terrible at Multitasking. Here’s Why. *Popular Mechanic*.

Donohue, C., & Welch, B. (Hosts). (2021). Dr. Marc Coutanche – Expertise Moderates Incidentally Learned Associations Between Words and Images (No. 10) [Audio podcast episode]. In *Communication Science and Disorders Podcast*. Department of Communication Science and Disorders at the University of Pittsburgh. <https://csdpodcast.pitt.edu/episode-10-dr-marc-coutanche>.

Johnson, K. (2021, May 27). What’s Out There? *Pittwire*. <https://www.pittwire.pitt.edu/news/what-s-out-there>.

Curley, T. (2020, February 25). Why We Don’t Serve “Cheese and Macaroni”: Investigating Directionality of Relationships Between Words. *The Psychonomic Society Featured Content*.
<https://featuredcontent.psychonomic.org/why-we-dont-serve-cheese-and-macaroni-investigating-directionality-of-relationships-between-words/>

Nicholas, P. (2019, October 18). The unraveling of Donald Trump. *The Atlantic*.
<https://www.theatlantic.com/politics/archive/2019/10/trump-impeachment-mental-health/600292/>

Templeton, D. (2017, July 11). Using brain patterns may be first step to reading the mind, CMU study shows. *Pittsburgh Post-Gazette*. <http://www.post-gazette.com/news/health/2017/07/11/Computer-program-can-interpret-brain-patterns-Carnegie-Mellon-University-study/stories/201706270128>

Dague, T. (2016, July 6). We go inside the escape-room phenomenon. *Pittsburgh City Paper*.
<http://www.pghcitypaper.com/pittsburgh/we-go-inside-the-escape-room-phenomenon/Content?oid=1934005>

Carroll, L. (2016, March 26). How did I get here!?! What to do when your brain goes on autopilot. *Today*. <http://www.today.com/health/how-unconscious-memory-trips-us-t66431>

Carroll, L. (2015, December 30). What’s your memory style? Why we recall every detail or just the facts. *Today*. <http://www.today.com/health/what-your-memory-style-brain-wiring-may-control-how-we-t62226>

Coutanche, M.N. (2014, September 4). Using Fruits and Veggies to Break Down How We Remember and Identify Objects. *Cognitive Neuroscience Society Blog*.
https://www.cogneurosociety.org/decoding_fruit_coutanche/

The Perils of Trying to Unlearn. (2012, May). *Observer*, 25(5).

<http://www.psychologicalscience.org/index.php/publications/observer/2012/may-june-12/the-perils-of-trying-to-unlearn-2.html>

PROFESSIONAL AFFILIATIONS

Cognitive Neuroscience Society

Cognitive Science Society

Memory Disorders Research Society (elected)

Psychonomic Society (Fellow)

Society for Neuroscience