CURRICULUM VITAE

Name/Title Laurel J. Buxbaum, Psy.D. Director of Cognition and Action Laboratory, Moss Rehabilitation Research Institute Research Professor, Department of Rehabilitation Medicine, Thomas Jefferson University

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 https://research.jefferson.edu/labs/researcher/buxbaum-research.html
 http://mrri.org/cognition-and-action-laboratory/

Education

B.A., University of Pennsylvania, Major: Biological Bases of Behavior, Minor: Anthropology
Doctorate in Psychology, Hahnemann University
Internship in Neuropsychology (APA Approved), Hahnemann University

Postgraduate Training

1992-1994 NIH National Research Service Award (NRSA) Post-Doctoral Fellowship, University of Pennsylvania and Moss Rehabilitation Research Institute

Academic Appointments

- 1996-2000 Clinical Assistant Professor, Department of Psychiatry and Behavioral Science, Temple University School of Medicine
- 2000-2012 Research Associate Professor of Rehabilitation Medicine, Thomas Jefferson University
- 2012- Research Professor of Rehabilitation Medicine, Thomas Jefferson University

Professional Appointments

1988-1990 Neuropsychologist/Coordinator of Neuropsychological Services, Northwestern Inst., Fort Washington, PA

1990-1992	Neuropsychologist, Moss Rehabilitation Hospital
1994-1996	Research Associate, Moss Rehabilitation Research Institute
1996-2016	Institute Scientist, Moss Rehabilitation Research Institute (MRRI)
2002-	Director, Cognition and Action Laboratory, MRRI
2016-2022	Associate Director, Moss Rehabilitation Research Institute

Licensure

Licensed Psychologist in Pennsylvania (PS-005471-L)

Honors and Awards

1982	Received B.A. Cum Laude
1998-1999	Invited Visiting Scientist, Institut des Sciences Cognitives, Lyon, France (Marc Jeannerod, Director)
2006	J. Stanley and Helene M. Cohen Award for Outstanding Research Contributions, Albert Einstein Medical Center of Thomas Jefferson University
2006	First Prize, Manuscript Competition, Maimonides Society of Albert Einstein Medical Center.
2008	Einstein Scientific Merit Award for Poster "Anticipatory control during lifts of familiar objects following unilateral parietal stroke".
2010	Widener University Graduate Award for Excellence in Professional Psychology.
2012	Article entitled "Left inferior parietal representations for skilled hand-object interactions: Evidence from stroke and corticobasal degeneration" by Buxbaum, Kyle, Grossman, and Coslett listed as one of "Top Ten Cited Articles Published in Last Five Years" by the journal <i>Cortex</i> .
2014	Article entitled "Critical brain regions for tool-related and imitative actions: A componential analysis" by Buxbaum, Shapiro, and Coslett, cited for excellence in Scientific Commentary in journal Brain (Goldenberg, G, Challenging Traditions in Apraxia, <i>Brain</i> 137, 1858-9, 2014).
2015	Inducted into the International Neuropsychological Symposium, an invitation-only group begun by Henry Hécaen in 1951.
2018	International Neuropsychological Society <i>Arthur Benton Mid-Career Award</i> , presented in recognition of "an individual who has made a substantive independent contribution to research in the area of brain-behavior relationships. Typically the candidate will have demonstrated an established and growing international reputation, evidenced by impact of research, as indexed by the number of citations and quality of journals as identified by journal impact factor, as well as recognition by peers (letters); consistent and significant productivity in the field."
2018	American Society of Neurorehabilitation <i>Kenneth Viste Award</i> , presented to "an individual who has supported the mission and vision of ASNR over the course of

- 2021 British Neuropsychological Society *Freda Newcombe Prize*, awarded to "a distinguished scientist who aligns with the current scientific interests/developments of the Society".
- 2023 Invited Visiting Professor, Sapienza University, Rome, Italy
- 2023 Concepts, Actions, and Objects (CAOS) Abstract Award

Other Positions at MossRehab and Albert Einstein Healthcare Network

1993-1995	Section Leader, Research Methods Conference
1993-2019	Member, Peer Review Committee
1996	Chair, Clinical/Research Integration Committee
1996-1997	Program Development Coordinator: Stroke Day Treatment Program;
	Stroke Behavior Management Project
2005-2007	Member, Research Subcommittee of Medical Staff Board
2010-2015	Director, Right Hemisphere Stroke Center
2019-present	Speaker Selection Committee, MRRI
2020-present	Newsletter Committee, MRRI
2023-present	Chair, Brain Structure and Function Core, MRRI

Editorial and Advisory Activities

1993	Program Committee, National Academy of Neuropsychology
2000	Action Editor, Cognitive Neuropsychology
2001	Program Committee, International Neuropsychology Society
2004	Invited panel member, NIH-hosted workshop: Cognitive Rehabilitation Interventions: Moving from Bench to Bedside
2004, 2005	Invited panel member, International Workshop on Ideomotor Apraxia, Movement Disorders Society
2006-2007	Invited Guest Editor, Special Issue of <i>Journal of the International</i> Neuropsychological Society: Complex Object-Related Action
2009	Invited Panel member, NIH workshop: Promoting Generalization in Stroke Rehabilitation
2010	Invited Guest Editor, Special Issue of <i>Cognitive Neuroscience</i> : The body in the brain: Bodily representations, processes, and neural mechanisms
2011-2012	Associate Editor, Cognition
2011-2015	Associate Editor, Journal of Neuropsychology

2011-2016	Associate Editor, Cortex
2010-2016	Advisory Board member, Eleanor M. Saffran Center for Cognitive Neuroscience, Temple University
2019	Invited panel member, NIH-hosted workshop: Bridging the Translational Gap in Stroke Recovery and Rehabilitation Research
2019-	Program Committee, American Society of Neurorehabilitation
2021-	Board of Directors, American Society of Neurorehabilitation

Ad-hoc reviewer, Archives of Neurology; Brain; Brain and Cognition; Brain Research; Cerebral Cortex; Cognition; Cognitive, Affective and Behavioral Neuroscience; Cognitive Brain Research; Cognitive Neuropsychology; Cognitive Neuroscience; Cortex; Human Brain Mapping; Journal of Clinical and Experimental Neuropsychology; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Human Perception and Performance; Journal of the International Neuropsychological Society; Journal of Motor Behavior; Journal of Neurology, Neurosurgery, and Psychiatry; Journal of Neurophysiology; Neurocase; Neuroimage; Neurorehabilitation and Neural Repair; Neuroreport; Neuroscience Letters; Psychological Science; Psychological Review; Visual Cognition; Nature Neuroscience.

Grant Review

1994	Internal Reviewer, Medical Research Council of Canada, Behavioral Sciences Grants Committee
2006	External Reviewer, Wellcome Trust Grant Competition
2010	Ad hoc reviewer, NIH-NINDS NSD-K Neurological Sciences and Disorders Study Section
2011	External Reviewer, National Science Foundation
2016	Panel Member, Perception, Action and Cognition review panel, National Science Foundation
2021	Panel Member, NIH ZRG1 BDCN-W (90) S Neurodevelopmental and Neurological Disorders Special Emphasis Panel
2021	Proposal Reviewer, Army Institute for Collaborative Biotechnologies (ICB)
2021	Panel Member, NIH ZRG1 BDCN-W (02) M Cognitive and Neuropathological Signatures of Alzheimer's Disease, Brain Injury and Aging Special Emphasis Panel
2022	NC NM4R (National Center for Neuromodulation) Pilot Project Grant Application Review
2023	

Professional Organization Memberships and Positions

Cognitive Neuroscience Society

International Neuropsychology Society

Society for Neuroscience Women in Cognitive Science American Society for Neurorehabilitation Psychonomic Society

Teaching, Supervision, and Curriculum Development

1989-1991	Instructor in physiological/cognitive psychology, Hahnemann University
1990-1992	Supervised doctoral interns in psychology, Temple University
1993-1994	Instructor, case conference in cognitive neuropsychology (seminar; psychology doctoral program), Hahnemann University
1996-2000	Co-supervised doctoral students, served on dissertation committees. Students supervised: Steven Moelter, Tania Giovannetti, Anna Krason, Isobel Chick
2000, 2004	Supervised Clinical-Research Fellows. Fellows supervised: Samuel Pierce, Ellen Rosenberg
1999-present	Supervise post-doctoral fellows in Cognitive Neuroscience Research. Fellows supervised: Antonella Pavese (Google) Steven Jax (Hanover Research) Laura Barde (Stanford U.) Amanda Dawson (Select Medical) Richard Palluel-Germain (U. Grenoble) Solene Kalenine (U. Charles-de-Gaulle Lille III) Erica Middleton (MRRI) Charlene Lee (National Taiwan U.) Kostas Tsagkaridis (Neapolis U.) Christine Watson (US Dept. of Transportation) Matthieu De Wit (Muhlenberg U.) Tamer Soliman (Alexa Al- Amazon) Heath Matheson (U. Northern British Columbia) Frank Garcea (U. Rochester) Marja-Liisa Mailend (U. Talinn, Estonia and MRRI) Haley Dresang (U. Wisconsin Madison) Erica Barhorst-Cates (Monterey Technologies) Cory Potts (current) Amy Lebkuecher (current) Simon Thibault (current)
2013-present	Member, Program Steering Committee, Postdoctoral Training in Translational Neurorehabilitation Research (NIH T-32 HD071844-01).
2016-2022	Supervise Ph.D. student Anna Krason, University College London
2021	Thesis Committee, PhD candidate Simon Thibault, INSERM, Lyon, France
2021-present	Thesis Committee, PhD candidate Isobel Chick, University College London

Grant Awards

NIH RO1-NS31824: "Organization and Breakdown of Routine Action Skills', Myrna F. Schwartz, P.I. (Co-Investigator). Total costs: \$1,518,915 (7/1/96-6/30/00)

James S. McDonnell Foundation: "Remediation of Attention Deficits Following Stroke and Traumatic Brain Injury", John Whyte, P.I. (Co-Investigator). Total costs: \$49,268 (11/1/96-4/30/98)

NINDS R29DC03179-01 ("FIRST" Award) "Spatial and Nonspatial Factors in Selection for Action" (Principal Investigator). Total costs: \$520,051 (2/1/97-1/31/02)

Albert Einstein Society Award: "A Longitudinal Study of a Clinical Test of Naturalistic Action" (Principal Investigator). Total costs: \$24,360 (7/1/97-6/30/98)

James S. McDonnell Foundation Award: "Effectiveness of Treatments of Hemispatial Neglect" (Principal Investigator). Total costs: \$600,000 (9/1/98-9/01/03)

NIH HD-99-006: "Northeast Cognitive Rehabilitation Research Network", John Whyte, P.I. (Co-Investigator). Total costs: \$4,556,089 (7/1/00-6/30/05)

Albert Einstein Society Award: "Cognitive Representations for Object Prehension and Use" (Principal Investigator). Total costs: \$35,000 (7/1/02-7/1/03).

NIH R01-NS36387: "Cognitive and Spatial Systems in Action" (Principal Investigator). Total Costs: \$1,329,065 (9/1/03-8/31/07).

NIDRR H133G030169: "Naturalistic Action Impairment in Left Hemisphere Stroke: Cognitive Predictors and Consequences" (Principal Investigator). Total Costs: \$449, 221 (10/1/03-9/30/06).

NIH RO1 NS048130-01A1: "Cognitive Neuroscience of Body Knowledge" (H.B., Coslett, Principal Investigator). Role: Co-Investigator and Director of subcontract to Albert Einstein Healthcare Network. Total Costs: \$400,000 (09/15/04 - 08/31/08)

Pennsylvania Department of Health Research Formula Funds: "Object Grasping and Object Use in Patients with Left Hemisphere Stroke" (Principal Investigator). Total Costs: \$32,787 (1/1/07-1/1/08)

NIH R24 HD050836: "Research Methods for Cognitive Rehabilitation" (J. Whyte, Principal Investigator). Role: Co-Investigator. Total Costs: \$4,175,000 (9/20/05-7/31/10)

NIDRR H133G060086: "Virtual Reality Assessment and Treatment of Hemispatial Neglect" (Principal Investigator). Total Costs: \$449,332 (12/1/06-11/30/09)

James S. McDonnell Foundation 21st Century Science Collaborative Research Award #220020190: "Prospective control of action: Computational principles, neural substrates, and clinical implications." (Principal Investigator, Four-site Project Director). Total costs \$1,798,835 (6/1/09-5/31/12).

Albert Einstein Society Innovative Program Project Award: "The Right Hemisphere Stroke Center at MossRehab" (Project Director). Total costs \$39,340 (7/1/09-6/30/10).

Albert Einstein Society Research Award: "Priming of Functional and Structural Action Information" (Co-Investigator). Total Costs \$35,000 (7/1/11-6/30/12)

Albert Einstein Society Research Award: "Action Proximity Effects in Neurologically-Intact and Stroke Participants" (Co-Investigator). Total Costs \$35,000 (7/1/13-6/30/14).

NIH R01 NS065049: "Understanding the Conceptual-Motor Interface" (Principal Investigator). Total Costs: \$1,797,362 (9/1/10-8/30/14; No-cost extension until 12/30/15).

NIH R01 HD068565: "Home-based mirror therapy for treating hemiparesis in stroke patients" (Co-Investigator). Total Costs: \$1,782,00 (04/01/12-03/31/17).

Albert Einstein Society Research Award: "Apraxia rehabilitation through actionlink strengthening training" (Co-Investigator). Total Costs \$35,000 (7/1/15-6/30-16).

NIH T32HD071844: "Postdoctoral training in translational neurorehabilitation research" (Co-Investigator). (05/13/13-4/30/23).

NIH R01 NS099061: "Understanding action selection in the tool use network" (Principal Investigator). Total Costs: \$2.9 million (9/1/16-8/31/21).

NIH R21 NS099645: "Virtual Reality Treatment of Phantom Leg Pain" (Co-Investigator). Total costs: \$215,369 (9/1/17-8/31/19).

RFA67-41: "Representations of the phantom limb in individuals with amputation". PA Dept of Health. Total Costs: \$49,540 (01/01/2016 – 12/31/2017)

Albert Einstein Society Research Award: "Exploring the benefits of joint action for post-stroke motor deficits" (Co-Investigator) (1/1/17-12/31/17)

Albert Einstein Society Research Award: "Pathways subserving the imitation of actions" (Co-investigator) Total costs: \$35,000 (1/1/18-12/31/18).

1R01HD092481-01A1: "Perceptual motor interaction to improve bimanual coordination after stroke" (Co-Investigator). (5/15/2018-4/30-2023)

Albert Einstein Society Research Award: "Determinants of navigation ability poststroke" (Co-Investigator) Total costs: \$35,000 (1/1/20-12/31/20)

Albert Einstein Society Research Award: "Cognitive and neurophysiologic mechanisms of arm choice after stroke" Total costs: \$35,000 (Co-Investigator) 1/1/20-12/31/20

MossRehab/MRRI Peer Review Committee Award: Virtual Reality Assessment of Arm Choice Under Cognitive Load: Initial Feasibility and Piloting. Total costs: \$11,970. (8/15/20-8/15/21)

NIH R01 NS115862: "Investigating a dual-pathway framework for praxis" (Co-Investigator). Total Costs \$2.2 million (2/15/21-2/14/26)

MossRehab/MRRI Peer Review Committee Award: "Up-regulating action semantics to facilitate naming" (Co-Investigator). Total Costs: \$14,637 (4/7/21-4/6/22)

NIH R01 HD104158: Efficacy and mechanisms of virtual reality treatment of phantom leg pain (Principal Investigator). Total Costs: \$2.8 million (9/10/21-8/31/26).

Pennsylvania Department of Health Research Formula Grant: Virtual Reality Assessment of Arm Choice under Cognitive Load: Initial Feasibility and Piloting (Principal Investigator). Total Costs: \$48,175 (6/1/2021-5/31/2023) R01HD104637: Mechanistic and neuroanatomic bases of disparity between arm capacity and use in stroke (Principal Investigator). Total Costs: \$2.8 million (8/1/2022-7/31/2027).

MossRehab/MRRI Peer Review Committee Award: Co-speech gesture and naming in aphasia (Co-Principal Investigator). \$19,950 (12/1/2022-11/30/2023).

Publications

PEER-REVIEWED PAPERS (*denotes student/post-doc author).

1. **Buxbaum LJ**, Coslett HB, Schall RS, Goldberg G, McNally B. Hemispatial factors in mirror writing. *Neuropsychologia* 31, 1417-1421, 1993

2. **Buxbaum LJ**, Coslett HB. Neglect of chimeric figures: Two halves are better than a whole. *Neuropsychologia* 32, 275-288, 1994

3. **Buxbaum LJ**, Schwartz MF, Coslett HB, Carew TG. Naturalistic action and praxis in callosal apraxia. *Neurocase* 1, 3-17, 1995

4. **Buxbaum LJ**, Coslett HB, Montgomery MW, Farah MJ. Mental rotation may underlie apparent object-based neglect. *Neuropsychologia* 34, 113-126, 1996

5. **Buxbaum LJ**, Coslett HB. Deep dyslexic phenomena in a letter-by-letter reader. *Brain and Language* 54, 136-167, 1996

6. **Buxbaum LJ**, Coslett HB, Glosser G. Relative sparing of object recognition in alexiaprosopagnosia. *Brain and Cognition* 32,202-205, 1996

7. **Buxbaum LJ**, Schwartz MF, Carew TG. The role of semantic memory in object use. *Cognitive Neuropsychology* 14(2), 219-254, 1997

8 **Buxbaum LJ**, Coslett HB. Subtypes of optic ataxia: Reframing the disconnection account. *Neurocase* 3, 159-166, 1997

9. Schwartz MF, Montgomery MW, **Buxbaum LJ**, Lee SS, Carew TG, Coslett HB, Ferraro M, Fitzpatrick-DeSalme E, Hart T, Mayer N. Naturalistic action impairment in closed head injury. *Neuropsychology*, 12(1): 13-28,1998

10. Buxbaum LJ, Coslett HB. Spatio-motor representations in reaching: Evidence for subtypes of optic ataxia. *Cognitive Neuropsychology*, 15(3): 279-312,1998

11. Buxbaum LJ, Schwartz MF, Montgomery MW. Ideational apraxia and naturalistic action. *Cognitive Neuropsychology*, 15(6-8), 617-643, 1998

12. Buxbaum LJ, Glosser G, Coslett HB. Impaired face and word recognition without object agnosia. *Neuropsychologia*, 37: 41-50,1998

13. Schwartz MF, **Buxbaum LJ**, Montgomery MW, Ferraro M, Fitzpatrick-DeSalme E, Hart T, Lee SS, Coslett HB. Naturalistic action impairment following right hemisphere stroke. *Neuropsychologia*, 37: 51-66,1998

14. **Buxbaum LJ**, Veramonti T, Schwartz MF. Function and manipulation tool knowledge in apraxia: Knowing 'what for' but not 'how'. *Neurocase*, 6, 83-97, 2000.

15. Buxbaum LJ, Giovannetti TG, Libon D. The role of the dynamic body schema in praxis: Evidence from primary progressive apraxia. *Brain and Cognition*, 44, 166-191, 2000.

16. **Buxbaum LJ.**, Coslett, HB. Specialized structural descriptions for human body parts: Evidence from autotopagnosia. *Cognitive Neuropsychology*, 18(4), 289-306, 2001

17. *Schwoebel, J., Coslett, H.B., **Buxbaum, LJ.** Compensatory coding of body-part location in autotopagnosia: Evidence for extrinsic egocentric coding. *Cognitive Neuropsychology*, 18(4), 363-381, 2001.

18. **Buxbaum, LJ,** *Permaul, P. Hand-centered attentional and motor asymmetries in unilateral neglect. *Neuropsychologia*, 39, 653-664, 2001.

19. *Pierce, S., **Buxbaum, LJ.** Treatments of neglect: A review. *Archives of Physical Medicine and Rehabilitation*, 83,256-68, 2002.

20. Giovannetti, T, Libon, D, **Buxbaum, LJ**., and Schwartz, M.F. Naturalistic action impairment in dementia. *Neuropsychologia*, 40, 1220-1232, 2002.

21. *Pavese, A., Coslett, HB, Saffran, EM, **Buxbaum, LJ**. Limitations of attentional orienting: Effects of abrupt visual onsets and offsets on naming two objects in a patient with bilateral posterior lesions. *Neuropsychologia*, 40, 1097-1103, 2002.

22. *Pavese, A., **Buxbaum, LJ.** Action matters: The role of action plans and object affordances in selection for action. *Visual Cognition*, 9(4/5), 559-550, 2002.

23. **Buxbaum LJ**, Saffran EM. The semantics of object manipulation and object function: A double dissociation. *Brain and Language* 82, 179-199, 2002

24. Schwartz, MF, Segal, M, *Veramonti, T, Ferraro, M, & **Buxbaum, LJ**. The Naturalistic Action Test. *Neuropsychological Rehabilitation*, 12(4), 311-339, 2002.

25. Buxbaum, LJ, Sirigu, A, Schwartz, MF, Klatzky, R. Cognitive representations of hand posture in ideomotor apraxia. *Neuropsychologia*, 41, 1091-1113, 2003.

26. *Schwoebel, J, **Buxbaum, LJ**, Coslett, HB. Representations of the human body in the production and imitation of complex movements. *Cognitive Neuropsychology*, 21 (2/3/4), 285-298, 2004.

27. **Buxbaum, LJ**, Ferraro, MK, *Veramonti, T, Farnè, A, Whyte, J, Ladavas, E, Frassinetti, F, Coslett, HB. Hemispatial neglect: subtypes, neuroanatomy, and disability. *Neurology*, 62, 749-756, 2004.

28. Farnè, A., **Buxbaum, LJ**., Ferraro, M., Frassinetti, F., Whyte, J., *Veramonti, T., Angeli, V., Coslett, H.B., Làdavas, E. Patterns of spontaneous recovery of neglect and associated disorders in acute right brain-damaged patients. *Journal of Neurology, Neurosurgery, and Psychiatry*, 75, 1401-1410, 2004.

29. Giovannetti, T, **Buxbaum, LJ**, Chatterjee, A., Biran, I. Reduced endogenous control in anarchic hand syndrome: Evidence from naturalistic action. *Neuropsychologia*, 43, 75-88, 2005.

30. Buxbaum, LJ, Johnson, SH, *Bartlett-Williams, M. Deficient internal models for planning handobject interactions in ideomotor apraxia. *Neuropsychologia*, 43(6), 917-929, 2005.

31. *Boronat, C., **Buxbaum, LJ**, Coslett, HB, *Tang, K, Saffran, EM, Kimberg, DY, Detre, JA. Distinctions between function and manipulation knowledge of objects: Evidence from functional magnetic resonance imaging. *Cognitive Brain Research*, 23(2-3), 361-373, 2005.

32. **Buxbaum, LJ,** *Kyle, K, *Menon R. On beyond mirror neurons: Internal representations subserving imitation and recognition of skilled object-related actions in humans. *Cognitive Brain Research*, 25(1), 226-239, 2005.

33. *Biran, I., Giovannetti, T, **Buxbaum LJ**, Chatterjee A. The alien hand syndrome: what makes the alien hand alien? *Cognitive Neuropsychology*, 23(4), 563-582, 2006.

34. Barrett, AM, **Buxbaum, LJ**, Coslett, HB, Heilman, KM, Hillis, AG, Millberg, W. Cognitive rehabilitation interventions for neglect and related disorders: moving from bench to bedside in stroke patients. *Journal of Cognitive Neuroscience*, 18(7), 1223-1236, 2006.

35. *McCrae, SM, **Buxbaum, LJ**, Coslett, HB. Illusory conjunctions in simultanagnosia: Course coding of visual feature location? *Neuropsychologia*, 44(10), 1724-36, 2006.

36. **Buxbaum, LJ,** Palermo, M, Mastrogiovanni, D, Read, MS, *Rosenberg-Pitonyak, E, Rizzo, AA, Coslett, H.B. Assessment of Spatial Neglect with a Virtual Wheelchair Navigation Task. *IEEE XPlore,* Aug, 650-660, 2006

37. *Jax, S., **Buxbaum, LJ**, Moll, A. Deficits in movement planning and intrinsic coordinate control in ideomotor apraxia. *Journal of Cognitive Neuroscience*, 18(12), 2063-2076, 2006.

38. Buxbaum, LJ, *Kyle, KM, *Tang, K, Detre, JM. Neural substrates of knowledge of hand postures for object grasping and functional object use: Evidence from fMRI. *Brain Research*, 1117(1) 175-185, 2006.

39. **Buxbaum, LJ**, *Kyle, KM, Grossman, M, Coslett, HB. Left inferior parietal representations for skilled hand-object interactions: Evidence from stroke and corticobasal degeneration. *Cortex*, 43(3), 411-23, 2007.

40. **Buxbaum, LJ**, Ferraro, M, Whyte, J, Coslett, HB, Gershkoff, A. Amantadine treatment of hemispatial neglect: a double-blind, placebo-controlled study. *American Journal of Physical Medicine and Rehabilitation*, 86(7), 527-537, 2007.

41. Giovannetti, T., Schwartz, MF, **Buxbaum, LJ**. The Coffee Challenge: A new method for the study of everyday action errors. *Journal of Clinical and Experimental Neuropsychology*, 29(7), 690-705, 2007.

42. *Barde, LHF, **Buxbaum, LJ,** *Moll, A. Abnormal reliance on object structure in apraxics' learning of novel object-related actions. *Journal of the International Neuropsychological Society*, 13(6), 997-1008, 2007.

43. **Buxbaum, LJ**, Haaland, KY, Hallett, M, Wheaton, L, Heilman, KM, Rodriguez, A, Gonzalez-Rothi, L. Treatment of limb apraxia: Moving forward to improved action. *American Journal of Physical Medicine and Rehabilitation*, 87(2), 149-161, 2008. 44. **Buxbaum, LJ**, Palermo, M, Mastrogiovanni, D, Schmidt, M, *Rosenberg-Pitonyak, E, *Jax, SA, Coslett, HB. Assessment of spatial attention and neglect with a virtual wheelchair navigation task. *Journal of Clinical and Experimental Neuropsychology*, 30(6), 650-660, 2008.

45. *Hamilton, RH, Coslett, HB, **Buxbaum, LJ**, Whyte, J, Farne, A, Frassinetti, F, Ferraro, MK. Inconsistency of performance on neglect subtype tests following acute right hemisphere stroke. *Journal of the International Neuropsychological Society*, 14(1), 23-32, 2008.

46. *Dawson, AM, **Buxbaum, LJ,** Rizzo, AA. The Virtual Reality Lateralized Attention Test: Sensitivity and validity of a new clinical tool for assessing hemispatial neglect. *IEEE XPlore*, Virtual Rehabilitation, Issue 25-27, 77 – 82, 2008.

47. Coslett, HB, *Schwoebel, J, **Buxbaum, LJ**, Accurate reaching after active but not passive movements of the hand: evidence for forward modeling. *Behavioral Neurology*, 19(3), 117-125, 2008.

48. *Jax, S, **Buxbaum, LJ.**, *Lie, E., Coslett, HB, More than (where the target) meets the eyes: Disrupted visuomotor transformations in optic ataxia. *Neuropsychologia*, 47(1), 230-238, 2009.

49. Botvinick, MM, **Buxbaum, LJ**, *Bylsma LM, Jax, SA. Toward an integrated account of object and action selection: A computational analysis and empirical findings from reaching-to-grasp and tool use. *Neuropsychologia*, 47(3), 671-83, 2009.

50. *Dawson, AM, **Buxbaum, LJ,** Duff, S. The impact of left hemisphere stroke on force control with familiar and novel objects: Neuroanatomic substrates and relationship to apraxia. *Brain Research*, 1317: 124-36, 2010.

51. *Myung, J-Y, Blumstein, SE, Yee, E, Sedivy, JC, Thompson-Schill, S, **Buxbaum, LJ.** Impaired access to manipulation features in apraxia: Evidence from eyetracking and semantic judgment tasks. *Brain and Language*, 112(2):101-12, 2010.

52. *Jax, S., and **Buxbaum, LJ.** Response interference between functional and structural actions linked to the same familiar object. *Cognition*, 115(2): 350-355, 2010. PMID: 20156619

53. **Buxbaum, LJ**, *Kalénine, S. Action knowledge, visuomotor activation, and embodiment in the two action systems, *Annals of the New York Academy of Sciences*, 1191: 201-218, 2010.

54. *Kalénine, S, Buxbaum, LJ, Coslett, HB. Critical brain regions for action recognition: lesion-symptom mapping in left hemisphere stroke. *Brain*, 133(11):3269-80, 2010

55. Sathian, K. Buxbaum, LJ Cohen, L., Krakauer, J.W., Lang, C., Corbetta, M., and Fitzpatrick, S. M. Neurological Principles and Rehabilitation of Action Disorders: Common Clinical Deficits. *Neurorehabilitation and Neural Repair,* June: 25 (5 Suppl.), 215-325, 2011.

56. *Palluel-Germain, R., Jax, S., **Buxbaum, LJ.** Visuo-motor gain adaptation and generalization following left hemisphere stroke. Neuroscience Letters, 498, 222-226, 2011.

57. *Bark, K, *Khanna, P, *Irwin, R, *Kapur, P, **Buxbaum, LJ**, Jax, S, Kuchenbecker, KJ. Lessons in using vibrotactile feedback to guide fast arm motions. *IEEE World Haptics Conference*, IEEE Xplore, 21-24 June, 355-360, 2011.

58. *Kalénine, S, Mirman, D, **Buxbaum, LJ.** A combination of thematic and similarity-based semantic processes confers resistance to deficit in left hemisphere stroke. *Frontiers in Human Neuroscienc*e, 6:106, 2012. PMID: 22586383

59. *Kalénine, S., Mirman, D., *Middleton, EL, **Buxbaum, LJ.** Temporal dynamics of activation of thematic and functional action knowledge during conceptual processing of manipulable artifacts. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 38(5): 1274-95, 2012. PMID: 22449134

60. **Buxbaum, LJ**, *Dawson, AM, *Linsley, D. Reliability and validity of the Virtual Reality Lateralized Attention Test in assessing hemispatial neglect in right hemisphere stroke. *Neuropsychology*, 26(4): 430-441, 2012. PMID: 22642393

61. Jax, S, **Buxbaum, LJ.** Response interference between functional and structural object-related actions is increased in patients with ideomotor apraxia. *Journal of Neuropsychology*, 7(1):12-8, 2013, PMID: 22515637

62. Binkofski, F, **Buxbaum, LJ.** Two action systems in the human brain. *Brain and Language*, 127(2):222-9, 2013, PMID: 22889467

63. Lee, C, *Middleton, E, Mirman, D, * Kalénine, S, **Buxbaum, LJ.** Incidental and contextresponsive activation of structure- and function-based action features during object identification. *Journal of Experimental Psychology: Human Perception and Performance*, Feb;39(1):257-70, 2013, PMID: 22390294

64. *Kalénine, S, *Shapiro, A, **Buxbaum, LJ.** Processing of action means and outcome in left hemisphere stroke. *Neuropsychologia,* Jun;51(7):1224-33, 2013. PMID: 23566892

65. *Kalénine, S, *Shapiro, AD, *Flumini, A, Borghi, AM, **Buxbaum, LJ.** Visual context modulates potentiation of grasp types during semantic object categorization. *Psychonomic Bulletin and Review*, Jun;21(3):645-51, 2014, PMID: 24186270 PMCID: PMC4008714

66. *Tsagkaridis, K, Jax, SA, *Watson, C, **Buxbaum, LJ.** The role of action representations in thematic object relations. *Frontiers in Human Neuroscience*, 2014 Mar 18;8:140. PMID: 24672461

67. **Buxbaum, L.J.,** *Shapiro, A.D., Coslett, H.B. Critical brain regions for tool-related and imitative actions: A componential analysis. *Brain*, 2014 Jul;137(Pt 7):1971-85. PMID:24776969

68. *Lee, C-L, Mirman, D, **Buxbaum, LJ.** Abnormal dynamics of activation of object use information in apraxia: evidence from eyetracking. *Neuropsychologia*, 2014, 59:13-26.PMID:24746946

69. *Watson, C, **Buxbaum, LJ**. Uncovering the architecture of action semantics. *Journal of Experimental Psychology: Human Perception and Performance*, 2014 Oct;40(5):1832-48. PMID:25045905

70. Jax, SA, *Rosa-Leyra, D., **Buxbaum, LJ.** Conceptual- and production-related predictors of pantomimed tool use deficits in apraxia. *Neuropsychologia*, 2014;62:194-201. PMID:25107676

71. *Watson, C., **Buxbaum, LJ**. A Distributed Network Critical for Selecting Among Tool-Directed Actions. *Cortex*, 2015, Jan 24; 65C: 65-82. PMID: 25681649.

72. *Bark, K, *Hyman, E, *Tan, F, *Cha, E, Jax, SA, **Buxbaum, LJ**, Kuchenbecker, KJ. Effects of vibrotactile feedback on human learning of arm motions. *IEEE Transactions on Neural Systems & Rehabilitation Engineering*, Jan;23(1):51-63, 2015. PMID: 25486644

73. *Tarhan, LY, Watson, CE, **Buxbaum, LJ**. Shared and distinct neuroanatomic regions critical for tool-related action production and recognition: Evidence from 131 left hemisphere stroke patients. *Journal of Cognitive Neuroscience*, 2015, 27(12): 2491-511. PMID: <u>26351989</u>

74. *Kalénine, S, **Buxbaum, L.J.** Thematic knowledge, artifact concepts, and the left posterior temporal lobe: where action and object semantics converge. *Cortex*, 2016, 82: 164-178. PMID: <u>27389801</u>

75. *Soliman, T., **Buxbaum, LJ,** Jax, SA. The mirror illusion's effects on body state estimation. *Cognitive Neuropsychology*, 2016, 33(1-2): 102-11. PMID: <u>27390062</u>

76. **Buxbaum, LJ.** Learning, remembering, and predicting how to use tools: Distributed neurocognitive mechanisms. *Psychological Review*, 124(3), 2017. PMCID: <u>PMC5375056</u>

77. *De Wit, M, **Buxbaum, LJ**. Critical motor involvement in the prediction of human and non-human actions. *Journal of the International Neuropsychological Society*, 23(2), 2017. PMCID: <u>PMC5360459</u>

78. *Matheson, HE, **Buxbaum, LJ**, Thompson-Schill, SL. Differential tuning of ventral and dorsal streams during the generation of common and uncommon tool uses. *Journal of Cognitive Neuroscience* 29(11), 1791-1802, 2017. PMID: 28654359 PMCID: PMC5623132

79. Lee, C-L., *Huang, H-W, Federmeier, K.D., **Buxbaum, L.J**. Sensory and semantic activations evoked by action attributes of manipulable objects: Evidence from ERPs. *Neuroimage*, 26(167), 331-341, 2017. PMID: 29183777

80. *Ambron, E, *Miller, A., Kuchenbecker, K.J., **Buxbaum, L.J.**, Coslett, H.B. Immersive low-cost virtual reality treatment for phantom pain of the lower limb. *Frontiers: Neurology*, 19 February 2018.

81. Wong, AL, Jax, SA, *Smith, LL, **Buxbaum, LJ**, Krakauer, JW. Movement imitation via an abstract trajectory representation in dorsal premotor cortex. *Journal of Neuroscience*, 2019, Apr 24;39(17):3320-3331. PMID: 30804087

82. Watson, C.E., Gotts, S.J., Martin, A., **Buxbaum, L.J.** Bilateral functional connectivity at rest predicts apraxic symptoms after left hemisphere stroke. *Neuroimage: Clinical*, 2019;21:101526. doi: 10.1016/j.nicl.2018.08.033. Epub 2018 Aug 31. PubMed PMID: 30612063; PubMed Central PMCID: PMC6319198.

83. *Howard, CM, Smith, LL, **Buxbaum, LJ**. The role of conflict, feedback, and action comprehension in monitoring of action errors: Evidence for internal and external routes. *Cortex*, 115, 184-200, 2019.

84. *Garcea, F., **Buxbaum, LJ.** Gesturing tool use and tool transport actions modulates inferior parietal functional connectivity with the dorsal and ventral object processing pathways. *Human Brain Mapping*, Jul;40(10):2867-288, 2019.

85. *Garcea FE, *Stoll H, **Buxbaum LJ**. Reduced competition between tool action neighbors in left hemisphere stroke. *Cortex*. 2019 Jun 19;120:269-283. doi: 10.1016/j.cortex.2019.05.021. PMID: 31352237

86. **Buxbaum, LJ,** Varghese, R, Stoll, H, Winstein, C. Predictors of limb non-use in chronic stroke: A preliminary investigation. *Journal of Neurorehabilitation and Neural Repair,* 2020 Jun;34(6):512-522. PMID: 32476616

87. *Stoll, H., *De Witt, M., Middleton, E.M., **Buxbaum, L.J**. Treating limb apraxia via action semantics: a preliminary study. *Neuropsychological Rehabilitation*, 2021 Aug;31(7):1145-1162. doi: 10.1080/09602011.2020.1762672. Epub 2020 May 19.

88. *Garcea, FE, *Greene, C, Grafton, ST, **Buxbaum, LJ**. Structural disconnection of the tool use network after left hemisphere stroke predicts limb apraxia severity. *Cereb Cortex Communications*. 2020;1(1):tgaa035. doi: 10.1093/texcom/tgaa035. PMID: 33134927

89. Vigliocco, G., *Krason, A., *Stoll, H., *Monti, A. **Buxbaum, LJ**. Multimodal comprehension in left hemisphere stroke patients. *Cortex*. 2020 Oct 12;133:309-327. doi: 10.1016/j.cortex.2020.09.025. PMID: 33161278

90. Matheson, H., *Garcea, FE, **Buxbaum, LJ**. Scene context reshapes category representational geometry during processing of tools. *Cortex.* 2021 Apr 10;141:1-15. doi: 10.1016/j.cortex.2021.03.021. PMID: 34020166

91. Therrien, A., *Howard, CM, **Buxbaum, LJ.** Efferent retargeting in above-knee amputees is positively related to phantom limb pain. *Journal of Neurophysiology*, 2021 Jun 1;125(6):2135-2143. doi: 10.1152/jn.00482.2020. Epub 2021 May 5.PMID: 33949884

92. *Ambron, E, **Buxbaum, LJ**, *Miller, A., Stoll, H, Kuchenbecker, K.J., Coslett, H.B. Virtual reality treatment displaying the missing leg improves phantom limb pain: A small clinical trial. Neurorehabilitation and Neural Repair. 2021 Oct 27:15459683211054164. PMID: 34704486

93. *Isaacs, M, **Buxbaum, LJ.,** Wong, AL. Proprioceptive goals support successful imitation and are disrupted in apraxia. *Cortex*, 2021 Nov 27;147:140-156.doi: 10.1016/j.cortex.2021.11.010.

94. *Metzgar, R, *Stoll, H., **Buxbaum, LJ,** *Garcea, FE. Single-case disconnectome lesion-symptom mapping: identifying two subtypes of limb apraxia. *Neuropsychologia*, 2022 Jun 6;170:108210. PMID: 35283160 PMCID: PMC9189785

95. Barhorst-Cates EM, Isaacs MW, Buxbaum LJ, Wong AL. Action imitation via trajectory-based or posture-based planning. Hum Mov Sci. 2022 Jun;83:102951. doi: 10.1016/j.humov.2022.102951. Epub 2022 Apr 20. PMID: 35460956; PMCID: PMC9670324.

96. *Barhorst-Cates, E., Isaacs, M.W., **Buxbaum, L.J.,** Wong, A.L. Does spatial perspective in virtual reality affect imitation accuracy in stroke patients? *Frontiers in Virtual Reality*, 2022;3:934642. doi: 10.3389/frvir.2022.934642. PMID: 37063476; PMCID: PMC10104493.

97. Dresang HC, Wong AL, Buxbaum LJ. Shared and distinct routes in speech and gesture imitation: Evidence from stroke. Cortex. 2023 May;162:81-95. doi: 10.1016/j.cortex.2023.01.010. Epub 2023 Mar 6. PMID: 37018891; PMCID: PMC10106441.

98. Krason A, Vigliocco G, Mailend ML, Stoll H, Varley R, Buxbaum LJ. Benefit of visual speech information for word comprehension in post-stroke aphasia. Cortex. 2023 May 16;165:86-100. doi: 10.1016/j.cortex.2023.04.011. Epub ahead of print. PMID: 37271014.

99. *Garcea, FE., **Buxbaum, LJ**. Mechanisms and neuroanatomy of response selection in tool and non-tool action tasks: Evidence from left-hemisphere stroke. *Cortex,* In Press.

100. Dresang HC, Williamson R, Kim H, Hillis AE, Buxbaum LJ. Gesture profiles distinguish primary progressive aphasia variants. bioRxiv [Preprint]. 2023 Jan 19:2023.01.19.524719. doi: 10.1101/2023.01.19.524719. PMID: 36711535; PMCID: PMC9882352.

101. *Potts, C., Williamson, R.A., Jacob, J.D., Kantak, S.S., **Buxbaum, L.J.** Reaching the cognitive motor interface: cognitive load diminishes arm choice efficiency and motor performance in individuals with chronic stroke. Under Review.

102. *Mailend, M-L, Vigliocco, G., *Krason, A., **Buxbaum, LJ**. Predictors of speech entrainment effects in left hemisphere stroke. In preparation.

103. *Barhorst-Cates, E, Wong, A.L., **Buxbaum, L.J.** Spatial navigation in right and left hemisphere stroke patients. In preparation.

104. *Potts, C., **Buxbaum, L.J**., Kantak, S. Bimanual versus unimanual arm choice in stroke. In preparation.

105. *Edwards, G. **Buxbaum, L.J.,** *Chen, G., Edwards, D, Batelli, L. Improving visual attention in right unilateral stroke patients: A preliminary study. Under Review.

BOOKS

Jackson SR, **Buxbaum LJ**, Coslett HB (eds.): *The Body in the Brain: Body Representations, Processes and Neural Mechanisms. Cognitive Neuroscience*. Psychology Press, 2(3-4), 2011. Note: This is a double Special Issue of Cognitive Neuroscience that is also being sold separately as a monograph.

BOOK CHAPTERS

Schwartz MF, **Buxbaum LJ.** Naturalistic action. In Rothi, L.G. & Heilman, K.M. (eds.) *Apraxia: The Neuropsychology of Action*. Lawrence Erlbaum Associates, 1997

Farah MJ, **Buxbaum LJ.** Object-based attention in visual neglect: Distinguishing among "object-based" hypotheses. In Karnath, H.O. & Thier, P. (eds.) *The Parietal Lobe Contribution to Orientation in 3D Space*. 1997

Buxbaum, LJ,Coslett, HB. Spatio-Motor Aspects of Action. In B. Rapp (Ed.), *The Handbook of Cognitive Neuropsychology.* 543-563. Philadelphia: Psychology Press, 2001.

Coslett, HB, **Buxbaum, LJ**. Treatment of Neglect. In J. Noseworthy (Ed.), *Neurological Therapeutics: Principles and Practice*. London: Martin Dunitz, 2002.

Sirigu, A., Daprati, E., **Buxbaum, LJ.** Giraux, P. How the human brain represents gestures: Effects of brain damage. In S. Johnson (Ed.), *Cognitive Neuroscience Perspectives on the Problem of Intentional Action.* Cambridge, MA: MIT Press, 2003.

Buxbaum, LJ, Coslett, HB. Limb Apraxia. In L. Squire (Ed.), *Encyclopedia of Neuroscience*. Academic Press, 2009.

Buxbaum, LJ. Body Perception: Disorders. In B. Goldstein (Ed.), *Encyclopedia of Perception.* Thousand Oaks, CA: SAGE Publications, 2009.

Kalénine, S, **Buxbaum, LJ.** Role of action in conceptual object representation and organization. In Yann Coello and Martin H. Fischer (Eds.), *Foundations of Embodied Cognition*. New York: Routledge, 2016.

Buxbaum, LJ, Randerath, J. Limb apraxia and the left parietal lobe. In *Handbook of Clinical Neurology: The Parietal Lobe* (Guiseppe Vallar & H. Branch Coslett (Eds.), 151: 349-363, 2018. PMID:29519468

Buxbaum, LJ, Kalenine, S. Limb apraxia: A disorder at the cognitive-motor interface. In Poeppel, M., Mangun R., Gazzaniga, D. *The Cognitive Neurosciences (6th Ed).* Cambridge: MIT Press, May, 2020

Semenza, C., **Buxbaum, LJ**, Coslett, HB. Manual lesion segmentation. In Pustina, D. and Mirman D. *Lesion-to-symptom mapping: Principles and tools*. New York: Springer, August 2022

Chick, I., Garrard, P., **Buxbaum, L.J.**, Vigliocco, G. Co-verbal gesture production in spoken discourse among speakers with acquired language disorders. In Kong, P-H. Spoken discourse impairments in the neurogenic populations: A state-of-the art, contemporary approach. London: Springer Nature, In press.

INVITED COMMENTARY AND REVIEW

Buxbaum, LJ. Ideomotor apraxia: A call to action. Neurocase, 7, 445-58, 2001.

Coslett, HB **Buxbaum, LJ.** The planning-control model and spatio-motor deficits following brain damage. Comment on Glover, S. Separate visual representations in the planning and control of action. *Behavioral and Brain Sciences*, 27(1), 31-32, 2004.

Buxbaum, LJ. On the right (and left) track: Twenty years of progress in studying hemispatial neglect. *Cognitive Neuropsychology,* 23(1), 184-201, 2006.

Buxbaum, LJ. Complex object-related actions: Structure, meaning, and context. *Journal of the International Neuropsychological Society*, 13(6), 993-996, 2007

Jackson, S., **Buxbaum, LJ,** Coslett, HB. Cognitive neuroscience of bodily representations: Psychological processes and neural mechanisms. *Cognitive Neuroscience*, 2 (3-4), 2011.

Buxbaum, LJ. Moving the gesture engram into the 21st century. *Cortex*, 2014 Aug;57:286-9; discussion 306-8. PMID:24552694

Buxbaum LJ, Shapiro AD, Coslett HB. Apraxia: a gestural or a cognitive disorder? *Brain.* 2015 Mar;138(Pt 3):e334. PMID:25173604

NORMED AND VALIDATED CLINICAL TESTS

Schwartz, MF, **Buxbaum, LJ**, Ferrraro, M, Veramonti, T, Segal, M. The Naturalistic Action Test: Bury St. Edmunds, England: Thames Valley Test Co., 2002.

Buxbaum, LJ, Dawson, AM. The Virtual Reality Lateralized Attention Test. <u>http://mrri.org/virtual-reality-lateralized-attention-test-vrlat/</u>

Juried Presentations at International Scientific Meetings (*denotes student/post-doc author)

Coslett HB, **Buxbaum LJ**, Saffran EM. Disordered mapping of visual feature location in simultanagnosia. Presented at the International Neuropsychology Society Meeting, San Diego, CA. 1992.

Coslett HB, **Buxbaum LJ**, Mayer NH. An analysis of reaching behavior in a patient with optic ataxia. Presented at the International Neuropsychological Society Meeting, Galveston 1993.

Buxbaum LJ, Coslett HB, Schall RS, Goldberg G, McNally B. Hemispatial determinants in mirror writing. Presented at the International Neuropsychological Society Meeting, Galveston 1993

Buxbaum LJ, Coslett HB. Perceptual and semantic processing in allocentric neglect. Presented at the International Neuropsychological Society Meeting, Galveston 1993.

Buxbaum LJ, Coslett HB. Letter by letter deep dyslexia. Presented at the International Neuropsychological Society Meeting, Cincinnati, OH. 1994.

Buxbaum LJ, Schwartz MF, Coslett HB, *Giovannetti TG. Everyday action and praxis in callosal apraxia: evidence for lateralized contributions to action. Presented at the International Neuropsychological Society Meeting, Cincinnati, OH. 1994.

Buxbaum LJ. Visual attention to objects and space: Object-based neglect or location focus? Presented at the International Neuropsychological Society Meeting, Seattle, WA. 1995.

Buxbaum LJ, Coslett HB, Farah MJ. Mental rotation in object-based neglect. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA. 1995.

Buxbaum LJ, *Lee SS, Schwartz MF. Object selection and use in ideational apraxia: the role of distractors. Presented at the International Neuropsychological Society Meeting, Chicago, IL. 1996.

Buxbaum LJ, Coslett HB, Glosser G. Relative sparing of object recognition in alexia-prosopagnosia. Presented at TENNET VII, Montreal, Canada 1996.

Buxbaum LJ, Schwartz MF. Object identification processes in selective reaching. Presented at the Cognitive Neuroscience Society Meeting, Boston 1997.

Buxbaum LJ, Schwartz MF, *Cunningham T. Has 'ideational apraxia' outlived its usefulness? Presented at the Academy of Aphasia, Philadelphia, PA. 1997.

Buxbaum LJ, Saffran EM. Knowing 'how' vs. 'what for': A new dissociation. Presented at the Academy of Aphasia, Santa Fe, NM. 1998.

Buxbaum LJ, Coslett HB. A selective impairment of body-part structural descriptions in autotopagnosia. Presented at the International Neuropsychological Society Meeting, Honolulu, 1998.

*Giovannetti T, Libon D, **Buxbaum LJ**, Schwartz MF. Naturalistic action impairment in dementia. Presented at the International Neuropsychological Society Meeting, Boston, 1999.

Buxbaum LJ, *Giovannetti TG, Libon D. Evidence for impairment of the body schema in primary progressive apraxia. Presented at the International Neuropsychological Society Meeting, Boston, 1999.

Buxbaum LJ, *Permaul P. Asymmetries of hand-centered attention and motor programming in neglect. Presented at the Psychonomics Society Meeting, Los Angeles, 1999.

Buxbaum LJ, Sirigu A, Schwartz MF, Giovanetti T, Klatzky R, Pradat-Diehl P. Cognitive representations of hand posture in apraxia and agnosia. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, 2000.

*Pavese, A, Coslett, HB, Saffran, EM, **Buxbaum, LJ**, and *Lie, E. Early and late visual deficits in simultanagnosia. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, 2000.

Buxbaum, LJ and *Pavese, A. Action plans and object affordances influence selection for action. Presented at the Cognitive Neuroscience Society Meeting, N.Y., 2001.

*Giovannetti, TG, Schwartz, MF, **Buxbaum, LJ**, *Holz, D. Limited resources reduce top-down constraints on object selection in everyday action. Presented at the Psychonomics Society Meeting, Orlando, 2001.

Buxbaum, LJ, Johnson, SH, *Bartlett, M. Role of the left inferior parietal lobe in planning objectoriented actions: Evidence from ideomotor apraxia. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, 2002.

*Biran, I, *Giovannetti, T, **Buxbaum, LJ,** Chatterjee, A. The alien hand syndrome-- what makes the alien hand alien? Presented at the American Academy of Neurology Meeting, Denver, 2002.

Buxbaum, LJ, *Schwoebel, J, Coslett, HB. Body representations and imitation in ideomotor apraxia. Presented at the Cognitive Neuroscience Society Meeting, New York, 2003.

*Giovannetti, T, **Buxbaum, LJ,** *Biran, I, Chatterjee, A. Dividing attention in naturalistic tasks: Effects on an anarchic hand. Presented at the Cognitive Neuroscience Society Meeting, New York, 2003.

Buxbaum, LJ, *McFalls, T, *Kyle, K, Whyte, J, Coslett, HB. Inconsistent effects of prism treatment on hemispatial neglect. Presented at the International Neuropsychological Society meeting, Baltimore, 2004. **Buxbaum, LJ**, *Boronat, C, Coslett, HB, *Tang, KZ, Saffran, EM, Kimberg, DY, Detre, JA. fMRI evidence for a distinction between function and manipulation object knowledge. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, 2004.

Coslett, HB, *Schwoebel, J, **Buxbaum, LJ.** The "forward model" in reaching: Evidence from a patient with central deafferentation. Presented at the American Academy of Neurology Meeting, San Francisco, April 2004.

Buxbaum, LJ, *Kyle, KM, Grossman, M, Coslett, HB. Left inferior parietal representations for skilled hand-object interactions: Evidence from stroke and corticobasal degeneration. Presented at the International Neuropsychological Society Meeting, St. Louis, Feb. 2005.

Buxbaum, LJ, Kyle, KM, *Tang K. Neural substrates of recognition of hand postures for object use vs. grasp. Presented at the Cognitive Neuroscience Society Meeting, New York, April 2005.

*Jax, SA, **Buxbaum, LJ,** *Moll, AD. Deficits in coding relative positions of body parts in ideomotor apraxia. Presented at the Society for Neuroscience, Washington DC, Nov. 2005

*Myung, J-Y, Blumstein, SE, **Buxbaum, LJ**, *Yee, E, Sedivy, JC, Thompson-Schill, S. Impaired access to manipulation features in apraxia: Evidence from eyetracking and semantic judgment tasks. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2006.

*Barde, L, **Buxbaum, LJ**, *Moll, A. Abnormal reliance on structural features of objects in ideomotor apraxics' gesture learning. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2006.

Buxbaum, LJ. Virtual reality assessment of wheelchair navigation in hemispatial neglect. International Workshop on Virtual Rehabilitation, New York, August 2006.

*Jax, SA, **Buxbaum, LJ.** Interference in planning hand postures for grasp and skilled use of objects. Talk presented at the Society for Neuroscience, Atlanta, October 2006.

*Jax, SA, Coslett, HB, *Lie, E, **Buxbaum, LJ**. Disrupted visuomotor transformations into head- and body-centered coordinates in optic ataxia. Presented at the Cognitive Neuroscience Society Meeting, NY, May 2007.

*Palluel-Germain, R, Jax, SA, **Buxbaum, LJ.** Multiple internal models guide visuomotor adaptation: Evidence from optic ataxia. Presented at the Society for Neuroscience, San Diego, November 2007.

Jax, SA, **Buxbaum, LJ,** *Palluel-Germain, R. Disupted learning, generalization, after-effects, and relearning of visuomotor rotations following left hemisphere stroke. Presented at the Society for Neuroscience, San Diego, November 2007.

*Dawson, AM, Duff, S, **Buxbaum, LJ**. Anticipatory control during lifts of familiar objects following unilateral parietal stroke. Presented at the Society for Neuroscience, San Diego, November 2007.

*Dawson, AM, **Buxbaum, LJ,** Rizzo, AA. The Virtual Reality Lateralized Attention Test: Sensitivity and validity of a new clinical tool for assessing hemispatial neglect. Presented at Virtual Rehabilitation, Vancouver, August 2008.

*Kapur, P, *Premakumar, S, Jax, S, **Buxbaum, LJ,** *Dawson, A., Kuchenbecker, K. Vibrotactile feedback system for intuitive upper limb rehabilitation. Presented at IEEE World Haptics, March 2009.

*Desmarais, G, **Buxbaum, LJ.** The strength of the links between objects, actions, and names influences action production and visual object identification in patients with left-hemisphere stroke. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2009.

Buxbaum, LJ, Jax, SA, Schwartz, MF. Action knowledge mediates artifact naming. Presented at the Neurobiology of Language conference, Chicago, October 2009.

*Kapur, P., *Premakumar, S, Jax, S, **Buxbaum, LJ,** *Dawson, A., Kuchenbeker, K. Vibrotactile feedback system for intuitive upper limb rehabilitation. IEEE World Haptics Conference, 2009.

*Kapur, P, *Jensen, M, **Buxbaum, LJ.**, Jax, SJ, Kuchenbecker, K. Spatially Distributed Tactile Feedback for Kinesthetic Motion Guidance. Presented at IEEE Haptics Symposium, Boston, March 2010.

Jax, SA and **Buxbaum, LJ.** Response interference between functional and structural actions linked to the same familiar object is increased in patients with ideomotor apraxia. Presented at the Cognitive Neuroscience Society Meeting, Montreal, April 2010.

*Kalénine, S, **Buxbaum, LJ,** Coslett, HB. Action recognition does not rely upon mirror neurons: evidence from left hemisphere stroke. Presented at the Cognitive Neuroscience Society Meeting, Montreal, April 2010.

*Kalénine, S, Mirman, D, *Middleton, E, **Buxbaum, LJ**. Influence of action representations on the activation of thematic and functional object knowledge. Presented at the Workshop on Concepts, Actions, and Objects (CAOS), Rovereto, Italy, May 2011.

*Lee, C, *Middleton, E, *Kalénine, S, Mirman, D, **Buxbaum, LJ.** Eye gaze in action: Effects of manipulation features and linguistic context on object identification. Presented at the Workshop on Concepts, Actions, and Objects (CAOS), Rovereto, Italy, May 2011.

*Lee, C, Mirman, D., **Buxbaum, LJ**. Incidental and context-responsive activation of function-based action features during object identification: Evidence from left-hemisphere stroke. Presented at the Cognitive Neuroscience Society Meeting, Chicago, April 2012

*Kalénine, S, **Buxbaum, L.J.**, *Shapiro, A.D. Dissociable representations of action means and outcomes: evidence from stroke. Presented at the Cognitive Neuroscience Society Meeting, Chicago, April 2012

*Kalénine, S, Mirman, D, *Middleton, E, **Buxbaum, LJ.** Impact of linguistic context on action and function information activation during object identification. Presented at the International Congress of Psychology, Cape Town, South Africa, July 2012.

*Watson, CE, *Kington, AG, *Shapiro, AD, **Buxbaum, LJ.** Reduced activation strength of object use actions: Evidence from left hemisphere stroke. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2013.

*Kalénine, S., *Kington, AG, **Buxbaum, LJ.** The critical role of posterior temporal cortex in thematic object knowledge: Evidence from left hemisphere stroke. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2013.

*Lee, C, *Huang, H-W, Federmeier, KD, **Buxbaum, LJ**. ERPs reveal faster activation of grasp than skilled use information during object processing. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2013.

*Johnson, A, **Buxbaum, LJ**, Grafton, S. Greater deficits of complex action planning with everyday objects in patients with anterior compared to posterior left brain damage. Presented at the Cognitive Neuroscience Society Meeting, San Francisco, April 2013.

*Johnson, A, **Buxbaum, LJ**, Grafton, S. Novel planning task involving everyday objects reveals unique behavioral differences not captured by the Tower of London. Presented at the Concepts, Actions, and Objects Meeting, Rovereto, Italy, May 2013.

*Watson, CE, **Buxbaum, LJ.** Uncovering the structure of "action semantics". Presented at the Concepts, Action, and Objects Meeting, Rovereto, Italy, May 2013.

*Kalénine, S, *Shapiro, A, *Flumini, A, Borghi, A, **Buxbaum, LJ**. Effect of visual context on the activation of move- and use-related actions during semantic object processing. Presented at Society for Neuroscience, November 2013.

Buxbaum, LJ, *Shapiro, AD, Coslett, HB. Separable components of object-related gesture

production in the left hemisphere. Presented at Society for Neuroscience, November 2013.

Jax, SA, *Rosa-Leyra, D, **Buxbaum, LJ.** Neural correlates of intrinsic and extrinsic coordinate control following left-hemisphere stroke. Presented at Society for Neuroscience, November 2013.

Gotts, SJ, *Watson, CE, **Buxbaum, LJ**, Martin, A. The influence of left parietal lesions in apraxia on functional interactions with frontal and temporal cortex. Presented at the Concepts, Action, and Objects Meeting, Rovereto, Italy, May 2014.

*Watson, CE, **Buxbaum, LJ.** Abnormal sensitivity to action similarity of tools after left hemisphere stroke. Presented at the Concepts, Action, and Objects Meeting, Rovereto, Italy, May 2014.

Jax, SA, **Buxbaum, LJ.** Enhancing activation of object use information with transcranial direct current stimulation. Presented at the annual meeting of the American Society for Neurorehabilitation, Washington, DC, November 2014.

*Tarhan, LY, Watson, CE, **Buxbaum, LJ.** Action understanding and production: Common and distinct neural substrates. Presented at the International Neuropsychological Society Meeting, Denver, February 2015.

*Matheson, H, **Buxbaum, LJ**, Thompson-Schill, S. Accessing distributed object representations for common and uncommon object use. Presented at the Concepts, Actions, and Objects Meeting, Rovereto, Italy, May 2015.

*Wong, AL, Jax, SA, *Smith, LL, **Buxbaum, LJ**, Krakauer, JW. Trajectory planning deficits in apraxia. Presented at Translational and Computational Motor Control, Chicago, October 2015.

*Wittenberg, RE, Watson, CE, **Buxbaum, LJ**, & Thompson-Schill, SL. The role of action information in thematic relations between objects. Presented at Society for Neuroscience, Chicago, October 2015.

*Smith, LL, Watson, CE, **Buxbaum, LJ.** Response selection in tool action and common competition tasks draws upon shared and distinct brain regions. Presented at the Cognitive Neuroscience Society Meeting, New York, April 2016.

*De Wit, M, **Buxbaum, LJ**. Critical substrates of biological and non-biological action prediction. Presented at the Cognitive Neuroscience Society Meeting, New York, April 2016.

*Ambron, E., *Miller, A., Kuchenbecker, K, **Buxbaum, LJ,** Coslett, HB. Virtual reality treatment for phantom limb pain. Presented at the American Society of Neurorehabilitation Meeting, San Diego, November 2016.

*Krason, A., Vigliocco, G., *Stoll, H., **Buxbaum, LJ**. Speech-gesture integration in aphasic and apraxic patients. Presented at the British Neuropsychology Society, London, March 2017.

Vigliocco, G, *Krason, A., *Monti, A., *Stoll, H., **Buxbaum, LJ**. Speech-gesture integration in aphasic and apraxic patients. Presented at the International Convention of Psychological Science, Vienna, March 2017.

Gotts, SJ, Watson CE, Martin, A., **Buxbaum, LJ.** Whole-brain disturbances of functional connectivity in apraxia relate to behavioral impairments in tool use and action selection. Presented at the Concepts, Actions, and Objects Meeting, Rovereto, Italy, May 2017.

Buxbaum, LJ*, Howard, CM, *Soliman, TM, *Smith, LL. The role of conflict and feedback in action error monitoring and correction: evidence from conduite d'approche. Presented at the Society for the Neurobiology of Language Conference, Baltimore, November 2017.

*Stoll H, *Soliman, TM, **Buxbaum, LJ.** Reduced Stroop competition between tool action "neighbors" in left hemisphere stroke. Presented at the Society for the Neurobiology of Language Conference, Baltimore, November 2017.

*Varghese, R, *Stoll, HM, Jax, SA, **Buxbaum, LJ**, Winstein, CJ. The best predictors of non-use in chronic stroke: a preliminary investigation. Presented at the American Society of Neurorehabilitation, Baltimore, November 2017.

Wong, AL, Jax, SA, *Smith, LL, **Buxbaum, LJ**, Krakauer, JW. Imitation depends on a representation of abstract trajectory shape in dorsal premotor cortex. Presented at the Society for Neuroscience Annual Meeting, Washington DC, November 2017.

Buxbaum, LJ, *Stoll, H., *Krason, A., Vigliocco, G. Multimodal effects on comprehension in left hemisphere stroke. Presented at the Society for the Neurobiology of Language Conference, Quebec City, August 2018.

*Garcea, F.E., Mahon, B.Z., & **Buxbaum, L.J.** Object-directed action modulates functional interactions with the ventral visual pathway. Presented at the Society for Neuroscience Annual Meeting. San Diego, CA. November 2018.

Matheson, H.E., *Garcea, F.E., **Buxbaum, L.J.** Scene context realigns category representations during tool processing. Presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA, March 2019.

Mailend, M-L, Schwartz, M.F., Vigliocco, G., **Buxbaum, L.J.** Sensorimotor processing in language production: Evidence from audiovisual speech entrainment in people with aphasia. Presented at the Society for Neurobiology of Language Annual Meeting, Helsinki, August 2019.

*Garcea, F.E., *Greene, C., Grafton, S., **Buxbaum, L.J**. Connectivity of the tool action network: lesion- and connectome-based symptom mapping of limb apraxia after left hemisphere cerebrovascular accident. Presented at the Society for Neuroscience Annual Meeting. Chicago, IL, October 2019. *Isaacs, M.W., **Buxbaum, L.J.**, Wong, A.L. Two routes to imitation as revealed by differential responses to visual and proprioceptive cuing. Presented at the Society for Neuroscience Annual Meeting. Chicago, IL, October 2019.

Ambron, E, **Buxbaum, LJ**, Kuchenbecker K, Miller, A, Coslett, HB. Virtual reality treatment for phantom limb pain. Presented at the meeting of the American Society of Neurorehabilitation, Chicago, IL, October 2019

*Krason, A, Vigliocco, G, Mailend, M-L, Stoll, H, **Buxbaum, LJ.** Audiovisual comprehension in aphasia under clear and distorted listening conditions. Presented at the meeting of the Society for the Neurobiology of Language, October 2020.

*Barhorst-Cates, E, Isaacs, M, **Buxbaum, LJ,** Wong, AL. Action imitation via trajectory-based or posture-based planning. Presented at Neuromatch, October 2020.

*Edwards, G, **Buxbaum, LJ**, Edwards, D, Battelli, L. Improving left visual field attention in right hemispheric stroke patients. Presented at Vision Sciences Society, May 2021.

*Barhorst-Cates, E., Wong, AL, **Buxbaum, LJ**. Determinants of navigation ability post-stroke. Presented at the meeting of the Psychonomic Society, November 2021.

*Dresang, HC, *Metzgar, R, Wong, AL, **Buxbaum, LJ.** The role of language and semantics in gesture imitation following left-hemisphere stroke. Presented at the Society for the Neurobiology of Language, October, 2021.

Buxbaum, LJ., Ivry, R, Lewthwaite, R. Between thinking and doing: cognitive influences on motor abilities. Chair of symposium presented at the American Society of Neurorehabilitation meeting, St. Louis, March 2022.

Buxbaum, L.J. The role of competition in motor planning. Presented at the American Society of Neurorehabilitation meeting, St. Louis, March 2022.

*Potts, C, Kantak, S. **Buxbaum, LJ**. Virtual reality assessment of arm choice under cognitive load. Presented at the American Society of Neurorehabilitation meeting, St Louis, March 22.

*Dresang, H.C., *Williamson, R., *Kim, H., Hillis, A.E., **Buxbaum, L.J.** Components of limb apraxia distinguish patients with different primary progressive aphasia variants. Presented at the Society for the Neurobiology of Language, October, 2022.

*Jacob, J., *Potts, C., **Buxbaum, L.J**., Kantak, S. Task difficulty influences paretic arm choice during goal-directed planar reaching movements after right hemispheric stroke. Presented at the American Society of Neurorehabilitation meeting, Charleston, SC, March 2023.

Ambron, E., *Williamson, R., Rombokas, E., *Li, J-S, Coslett, HB, **Buxbaum, L.J.** Mechanisms and neuroanatomy of virtual reality treatment of phantom limb pain. Presented at the Cognitive Neuroscience Society meeting, San Francisco, March 2023.

*Potts, C, *Williamson, R., Kantak, S., **Buxbaum, L.J.** Cognitive load disrupts reach efficiency, speed, and curvature in chronic stroke. Presented at the Neural Control of Movement meeting, Vancouver, British Columbia, April 2023.

*Thibault, S., **Buxbaum, L.J**., Wong, A.L. Tool-use impairments in limb apraxia arise from errors in both planning and execution. Presented at the Concepts Actions and Objects meeting, Rovereto, Italy, May 2023.

Invited Lectures and Addresses (Outside of Albert Einstein Healthcare Network)

"Spatio-motor reference frames in reaching", Hôpital de la Salpetriere, Paris, France, May 1998.

"Semantic mediation of object use", TENNET VIII, Montreal, Canada, June 1998.

"Knowing 'how' vs. 'what for': a double dissociation", European Congress of Cognitive Neuropsychology, Bressanone, Italy, January 1999.

"Function and manipulation knowledge in left hemisphere lesioned patients", SISSA, Trieste, Italy, February 1999.

"Dissociation between 'what for' and 'how' knowledge in brain damaged patients", Institut des Sciences Cognitives, Lyon, France, March 1999.

"The way(s) you do the things you do: Routes to action in the healthy and damaged brain", Institute for Research in Cognitive Science Colloquium, University of Pennsylvania, October 2001.

"Knowing where and knowing how: two routes to action in healthy and brain-damaged subjects", Rotman Research Institute, Toronto, Canada, May 2002.

"Disordered body representations in reaching and praxis", Center for Cognitive Neuroscience, University of Pennsylvania, October 2003.

"Cognitive representations for the recognition and production of skilled object-related gestures: Evidence from Ideomotor apraxia", International Neuropsychological Symposium, Porto Heli, Greece, June 2004.

"Conflict in theoretical models and deficits of limb apraxia", International Apraxia Workshop, Bethesda, Md., September 2004.

"Cognitive representations for control of object prehension and use", TENNET XVI, Montreal, Canada, June 2005.

"Using and grasping objects: evidence from neuropsychology and functional neuroimaging", Johns Hopkins University, Baltimore, June 2005.

"Ideomotor and ideational apraxia: clinical and theoretical perspectives" (Keynote Address), 6th Annual Stroke Rehabilitation Symposium, Toronto Rehabilitation Institute, December 2005.

"Designing an apraxia rehabilitation study", Upper Extremity Translational Research Conference, University of Florida, Gainesville, January 2006.

"Skilled hand-object interactions and the left inferior parietal lobe: Evidence from stroke and corticobasal degeneration", presented at the World Federation of Neurology- Research Group in Aphasia and Cognitive Disorders, Buenos Aires, Argentina, March 2006.

"Apraxia and Related Disorders", (Meet the Expert session), Movement Disorders Society 10th International Congress, Kyoto, Japan, October 2006.

"Use it or Move it: Two Action Systems in the Human Brain", Institute for Research in Cognitive Science, University of Pennsylvania, November 2006.

"Apraxia as a Disorder of the Third Visual Stream", Society for the Neural Control of Movement, Seville, Spain, March 2007.

"Body Representations in Apraxia", (Keynote Address), International Workshop on Body Representations, Nottingham, England, April 2008.

"Meaning and Action: Inroads at the semantic/motor crossroads" (President's Invited Speaker), presented at the British Neuropsychological Society Meeting, London, England, April 2008.

"Interactions between Object Selection and Action Selection" (Invited symposium member) presented at the International Congress of Psychology, Berlin, Germany, July 2008.

"Objects, Actions, and Meanings", Presented at the Department of Psychology, University of California Irvine, January 2009.

"Moving beyond: Understanding the interface between cognition and high-level action control" (Invited Seminar Leader). Presented at the International Neuropsychological Society Annual Meeting, Atlanta, Georgia, February 2009.

"Generalization and the older brain". Presented at NIH workshop on Learning and Generalization in Stroke, Bethesda, Maryland, June 2009.

"Action semantics and the action system architecture: Implications for 'embodied cognition". Presented at the Eleanor M. Saffran Conference, Philadelphia, September 2009.

"The direct and indirect routes to action come of age: Dissecting out the dorso-dorsal and ventrodorsal processing streams on the basis of human behavior". Presented at Neural Control of Object Recognition and Action, Atlanta, October 2009.

"The parietal lobe in action". Presented at the International Conference on Parietal Lobe Function, Amsterdam, September 2010.

"Stop neglecting and start treating neglect: Advances in the treatment of hemispatial neglect". Presented at the American Academy of Physical Medicine and Rehabilitation, Seattle, November 2010.

"Therapeutic options for persons with right hemisphere stroke". Presented at the Research Institute of Chicago Annual Interdisciplinary Stroke Course, Chicago, March 2011.

"Two action systems in the human brain: Functional neuroanatomy and relationship to apraxia". Presented at Washington University Neurorehabilitation Grand Rounds, St. Louis, April 2011.

"Motor, spatial, and language skills: What and how do we learn?" Presented at the Saffran Cognitive Neuroscience Conference, Philadelphia, September 2011.

"How can clinical disorders inform our understanding of the structure and function of the two action systems?" Presented at Processing Along the Dorsal and Ventral Streams in the Brain, Freiburg Germany, November 2011.

"Action imitation, recognition, and production in ideomotor apraxia". Presented at Johns Hopkins University, Baltimore, December 2012.

"Cognitive and neuroanatomical substrates of action events", presented as part of symposium entitled "Understanding events: New cross-disciplinary research" at the Cognitive Neuroscience Society Meeting, Chicago, April 2012.

"Limb apraxia in left hemisphere stroke: Recent developments", presented at Hospital of the University of Pennsylvania Neurology Grand Rounds, October 2012.

"Action news: update on the neuropsychology of action", presented at the Philadelphia Neuropsychology Society Meeting, March 2013.

"Competitive interactions between action representations in apraxia", presented at Symposium on Behavioral Neurology, Lucerne, Switzerland, March 2013.

"Actions and Objects: Competition, Facilitation, and Conceptual Organization", presented at Concepts, Actions, and Objects (CAOS), Rovereto, Italy, May 2013.

"Objects of our actions: Influences of action semantics on object processing", Presented at the "Action Semantics in the Brain" symposium, Rohr University, Bochum, Germany, November 2013.

"Cognitive neuroscience of actions and tools: Neuroimaging and behavioral evidence for a distributed architecture". Presented at Temple University, Philadelphia, PA, January 2014.

"Grabbing or stabbing: Cognitive and neuroanatomic architecture of tool action selection". Presented at University of Western Ontario, London, Ontario, Canada, October 2014.

"Hemispatial Neglect: Bridging research and practice". Presented at Medical University of South Carolina, Charleston, March 2015.

"What parietal apraxia reveals about the brain's two action systems". Presented at Translational and Computational Motor Control, Chicago, October 2015.

"Your body in my brain: Mirror neurons, action prediction, and body representations in rehabilitation". Presented at "Optimizing Neurologic Rehabilitation Outcomes: Pushing Practice Forward", Philadelphia, November 2015.

"Two routes to action in the healthy and damaged brain". Presented at the American Academy of Neurology, Vancouver, BC, April 2016.

"Shared neurocognitive processes in limb apraxia and aphasia". Presented at Action, Brain, Language, and Evolution: From tools and gestures to the language-ready brain", Atlanta, April 2016.

"Tool-use memory and planning in the two action systems". Presented at the International symposium on apraxia and action, University of Angers, France, December 2016.

"The brain's two action systems". Presented at the American Academy of Neurology, Boston, MA, April 2017.

"Representation and selection of object-related actions in the dorsal and ventral streams". Presented at Brown University, October 2017.

"Two streams for representation and selection of object-related actions in the left hemisphere". Presented at MedStar National Rehabilitation Hospital/Georgetown University, December 2017.

Arthur Benton Award Lecture: "Tools in the Mind: Representations of actions and objects in the healthy and damaged brain". Presented at the International Neuropsychological Society Meeting, Feb. 2018.

"Speech-gesture integration in left hemisphere stroke". Presented at New Directions in Language and Action Research, University College London, March 2018.

"Stabbing or grabbing: cognitive and neural substrates of tool action representation and selection". Presented at Princeton University, April 2018.

"Two neurocognitive routes for tool use and transport in the left hemisphere". Presented at the Psychonomics Society Leading Edge Workshop *Time for Action: Reaching for a better understanding of the dynamics of cognition,* Amsterdam, May 2018.

"Apraxia: A disorder at the cognitive-motor interface". Presented at the 2018 Summer Institute in Cognitive Neuroscience, Lake Tahoe, CA, July 2018.

Kenneth Viste Award Lecture: "The cognitive-motor interface: What we know tells us where we're going". Presented at the American Society of Neurorehabilitation Meeting, San Diego, CA, November 2018

"Apraxia: A disorder at the cognitive-motor interface". Presented at State of the Science in Poststroke Motor Recovery, Perth, Western Australia, November 2018

"At the cognitive-motor crossroad: Limb apraxia in left hemisphere stroke". Presented at Neurology Grand Rounds, Johns Hopkins University, Baltimore, January 2019

"Mechanisms and neural substrates of apraxia in left hemisphere stroke". Presented at University of Southern California, March 2019.

ASNR Mentoring Session: Developing an Elevator Pitch. Presented at American Society of Neurorehabilitation, October 2019.

"Use it or move it: Representation and selection of object-related actions". Presented at the Shirley Ryan Ability Labs, Chicago, November 2019.

"Representation and selection of object-related actions in the brain". Presented at Villanova University, November 2019.

"Representation and selection of tool actions: Evidence from stroke". Juelich Research Center, Juelich, Germany, January 2020

"Tool use and related deficits in stroke patients". European Workshop on Cognitive Neuropsychology, Bressanone, Italy, January 2020

"Tools in the mind: Objects and actions in the healthy and damaged brain". Department of Experimental Psychology, University College London, May 2021.

"The way(s) you do the things you do: tool use representation and selection in the left hemisphere". Freda Newcombe Prize Talk of the British Neuropsychological Society, November 11, 2021.

"Shared and distinct neurocognitive processes in language and tool use actions: evidence from stroke lesion studies". Workshop on Perspectives on Pantomime: Evolution, Development, Interaction. Nicolaus Copernicus University, Torun, Poland, November 18, 2021

"Limb apraxia: A disorder at the cognitive-motor interface". Presented at Neurology Grand Rounds, University of California Los Angeles, December 2022.

"Semantic selection and monitoring of tool actions in the left hemisphere". Presented at Georgetown University Department of Neuroscience Seminar Series, February 7, 2023.

"Limb apraxia: A disorder at the cognitive-motor interface" Presented at Neurology Grand Rounds, University of Pittsburgh, March 8, 2023.

"Planning, selection, and monitoring of tool-use actions in the left hemisphere". Presented at Sapienza University, Rome, Italy, June 2023.

Lectures at MossRehab (Since 2021)

Buxbaum, LJ., Kantak, S., Potts, C. Understanding disparities between arm capacity and use in left hemisphere stroke. Shrier Famly Topics in Rehabilitation Science Seminar, January 19, 2021

Buxbaum, LJ, Whyte, J. Grant writing 101. T32 Lecture Series, December 8, 2021

Buxbaum, LJ. Clinical Trial Designs. T32 Lecture Series, January 11, 2023

Buxbaum, LJ. Early Career Funding. Presented in T32 Lecture Series, March 8, 2023

Buxbaum, LJ. Disorders at the cognitive-motor interface. Presented at Physical Medicine and Rehabilitation Grand Rounds, MossRehab, April 26, 2023