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VITA

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EDUCATION

B.A. in Psychology, 1981, Brown University, Providence, RI  
M.S. in Psychology, 1983, University of Oregon, Eugene, OR  
Ph.D. in Psychology, 1986, University of Oregon, Eugene, OR

PROFESSIONAL EXPERIENCE

Distinguished Professor of Psychology, University of California, Berkeley, 2011-present  
Faculty member, Helen Wills Neuroscience Institute University of California, Berkeley, 1997-present.  
Faculty member, Graduate Group in Bioengineering, 2009-present  
Professor, Department of Psychology, University of California, Berkeley, 1997-2021  
Chair, Department of Psychology, University of California, Berkeley, 2011-2015.  
Director, Institute of Cognitive and Brain Sciences, University of California, Berkeley, 2000-2010, 2018-2019  
Vice-Chair, Department of Psychology, University of California, Berkeley, 2003-2010  
Associate Professor, University of California, Berkeley, 1993-1997  
Assistant Professor, University of California, Berkeley, 1990-1993  
Assistant Professor, University of California, Santa Barbara, 1987-1990  
Research associate, University of Oregon and Good Samaritan Hospital, Portland, Oregon, 1987-1988

AWARDS AND FELLOWSHIPS

Fellow, American Academy of Arts and Sciences, 2022  
Graduate Mentor Award, Department of Psychology, UC Berkeley 2022  
Outstanding Investigator Award (R35 program), National Institute of Health, 2020  
Fellow, American Association for the Advancement of Science, 2020  
International Visiting Research Scholar, Peter Wall Inst. for Advanced Studies, Univ. of British Columbia, 2019  
William James Fellow Award, Association for Psychological Science, 2016  
Distinguished Service Award, Division of Social Sciences, UC Berkeley 2015  
Distinguished Visiting Professor, Wales Institute of Cognitive Neuroscience, Univ. of Wales, 2009  
Fellow, American Psychological Society, 2006  
Fellow, Society of Experimental Psychologists, 2003  
Distinguished Visiting Professor Fellowship, University of Auckland  
Troland Research Award, National Academy of Sciences, 1997  
Centre International des Etudiants et Stagiaires Research Fellow, 1995  
Whitehall Fellowship in Neuroscience, 1994-1997  
FIRST Award, National Institute of Health, 1991-1996  
Alfred P. Sloan Research Fellow in Neuroscience, 1990-1993  
Senior Thesis Award, Brown University, 1981

## LECTURESHIPS

Keynote Lecture, Society for Psychophysiological Research, 2022  
Keynote Lecture, Cognitive Science Society Annual Meeting, 2015  
Keynote Lecture, American Psychological Association, 2014  
Donders Lecture, Radboud University Nijmegen, 2012  
Pellecchia Memorial Lecture, University of Connecticut, 2010  
Donald O. Hebb Lecturer, McGill University, 2008  
Keynote Lecture, North American Society for the Psychology of Sport and Physical Activity, 1990

## EXTRAMURAL RESEARCH SUPPORT (direct costs)

National Institute of Health. 2022-2025. Exploring the parameter space of high frequency magnetic perturbation in manipulating neural excitability and plasticity. SBIR Award to Magnetic Tides, Inc (PI: L. Labruna). \$2,704,097 (with subcontract to UC Berkeley, PI: R. Ivry, \$270,000).

National Institute of Health. 2020-2028. Human Cerebellar Function in Multiple Task Domains. R35 Outstanding Investigator Award: \$3,900,000.

National Institute of Health. 2019-2021. Kilohertz-frequency, continuous-wave transcranial magnetic stimulation to increase the dynamic range of subthreshold neuromodulation. R21 award: \$135,000.

National Science Foundation. 2019-2021. EAGER: A novel, non-invasive approach to reliably alter cortical excitability using high frequency (kHz) transcranial magnetic perturbation. EAGER award: \$200,000.

National Institute of Health. 2018-2023. Specifying the Constraints on Cerebellar Dependent Sensorimotor Adaptation. R01 award: \$1,200,000. (last two years surrendered as part of conditions for R35 award).

National Institute of Health. 2018-2023. The role of the cerebellum in speech. \$1,950,000. (RO1, PIs: J. Houde and S. Nagarajan (UCSF), with subcontract to UCB, PI: Ivry, \$360,000)

National Institute of Health. 2016-2021. The Role of Ipsilateral Cortical Control of the Upper Limb in Monkey and Man. \$1,350,000. (RO1, PI: J. Carmena, Co-investigator: Ivry, \$550,000).

National Institute of Health. 2015-2020. Embodied decision making: The influence of action errors on reinforcement learning. RO1 award: \$1,200,000. (years 20-24 of RO1)

National Institute of Health. 2012-2017. Neural mechanism underlying hand choice during unimanual actions. RO1 award: \$1,100,000.

National Institute of Health. 2013-2016. Relationship of GABA to inhibitory mechanisms for response preparation. R21 award: \$250,000.

National Institute of Health. 2008-2013. Functional domain of the cerebellum in motor learning. RO1 award: \$1,000,000 (years 15-19 of RO1).

National Institute of Health. 2008-2012. Frontostriatal contributions to decision making and learning. \$3,500,000 (PI: Mark D'Esposito, Ivry Project 3 of Program Project, \$750,000).

US-Israel Binational Science Foundation. 2008-2011. Neural overlap of gesture and language for symbolic communication. \$180,000. (Co-investigator with M. Lavidor, Bar-Ilan Univ).

National Science Foundation. 2007-2010. The cerebellum as a state-estimator for the coordination of skilled movements. (PI: Ivry). \$570,000.

National Science Foundation. 2007-2010. PHYSNET: Physical interaction using the internet. \$1,000,000 (PI: Ruzena Basczy, Co-investigator, Ivry: \$240,000).

National Institute for Neurological Diseases and Stroke. 2003-2007. Functional substrates of long-term motor learning. RO1 award: \$1,800,000. (PI: Scott Grafton, Dartmouth College, Years 10-15, Co-investigator, Ivry: \$600,000).

McDonnell-Pew Foundation. 2002-2005. Cognitive and Neurobiological Research Consortium in Traumatic Brain Injury. \$2,688,788 (PI: Jamshid Ghajar, Cornell School of Medicine, Co-investigator, Ivry: \$210,000).

National Institute of Health, 2002-2007. Neural systems for event timing in action and cognition. (PI: Ivry) RO1 award: \$1,050,000 (years 11-14).

National Institute of Health, 2002-2007. Cognitive neuroscience and stroke. \$3,500,000 (PI: Robert Knight, Ivry Project 3 of Program Project, \$950,000).

National Institute of Health. 1999-2004. Sensorimotor interactions following callosotomy. \$3,200,000 (PI: Michael Gazzaniga, Dartmouth College, Ivry Project 3 of Program Project, \$740,000).

National Institute for Neurological Diseases and Stroke. 1999-2002. Functional substrates of motor sequence learning. RO1 award: \$1,400,000. (PI: Scott Grafton, Dartmouth College, Years 5-9; Co-investigator, Ivry: \$600,000).

National Science Foundation. 1998-2001. Learning complex motor tasks in natural and artificial systems. Principal Investigator: Stuart Russell (UC, Berkeley). \$1,200,000, Co-investigator, Ivry: \$150,000.

National Institute for Neurological Diseases and Stroke. 1997-2001. Timing and temporal coupling. (PI: Ivry) RO1 award: \$1,000,000 (Years 6-10).

National Institute of Neurological Diseases and Stroke. 1995-1998. Human motor learning: attention, awareness, and strategy. RO1 award: \$920,000. Principal Investigator: Scott Grafton (USC). Co-investigator, Ivry: \$360,000.

National Institute of Mental Health. 1994-1999. The posterior attentional system in perception and action. RO1 award: \$975,000. Principal Investigator: Robert Rafal (UC, Davis). Co-investigator, Ivry: \$300,000.

National Institute for Neurological Diseases and Stroke. 1994-1998. Hemispheric specialization in vision and audition. RO1 award: \$960,000.

National Science Foundation. 1994-1997. A formal model of visual feature integration. (PI: Ivry) \$180,000.

Whitehall Foundation. 1994-1997. The role of the cerebellum in temporal processing. (PI: Ivry) \$88,000.

National Institute for Neurological Diseases and Stroke. 1991-1996. Psychological and neural mechanisms of timing. RO1 Award: \$750,000 (FIRST Award).

Office of Naval Research Contract. 1987-1990. Modular conceptions of timing and sequencing in motor behavior. Co-Principal Investigator with Steve Keele. \$300,000.

#### PROFESSIONAL SERVICE AND MEMBERSHIPS

Treasurer, Association for Psychological Science, 2018 – present

Panel Member, APS William James Fellow Award Selection Committee, 2019-2022

Grant Reviewer: Panel Member

National Science Foundation: Human Perception and Cognition, 1994-1997.

National Institute of Health: Sensory, Motor, & Cognitive Neuroscience: Fellowship Review Panel, 2006-2008.

National Institute of Health: Cognitive Neuroscience Review Panel, 2008-2013.

Member: *American Psychological Society, Psychonomic Society, Society for Cognitive Neuroscience, Society for Neuroscience, Neural Control of Movement Society, American Physiology Society*

## EDITORIAL SERVICE

### Senior Editor

eLife, 2016-2021

### Reviewing Editor

eLife, 2016

### Associate Editor

Journal of Cognitive Neuroscience, 2003-2016

### Editorial Board

Cerebellum, 2001-present

Psychological Research, 1998-2010.

Journal of Experiment Psychology: Human Perception & Performance, 1994-2008.

Journal of Motor Behavior, 1993-2005.

Behavioral and Cognitive Neuroscience Reviews, 2001-2006.

Journal of Cognitive Neuroscience, 1997-2003.

## TRAINEES (completed)

<u>Ph.D students:</u>	<u>Years</u>	<u>Current Position</u>
Paul Leiby	1989-1995	Neuropsychologist, Children's Hospital, Madera, CA
Eliot Hazeltine	1991-1997	Professor, Univ. of Iowa
Nancy Kim	1991-1997	Oculoplastic Surgeon, Mass Eye and Ear Infirmary
Laura Helmuth	1992-1997	Editor-in-Chief, Scientific American
Susan Ravizza	1995-2000	Professor, Michigan State University
Brent Stansfield	1996-2001	Director of Graduate Education, Wayne St. Univ.
Jorn Diedrichsen	1998-2003	Professor, Western Ontario University
Tim Justus	1999-2003	Assoc. Professor, Pitzer College
Davina Chan	2000-2005	Adjunct Professor, University of San Francisco
Tim Verstynen	2001-2006	Assoc. Professor, Carnegie Mellon University.
Neil Albert	2001-2007	Associate Provost, Hamilton College
Aubrey Gilbert	2002-2007	Ophthalmologist, Kaiser Medical Foundation
Flavio Oliveira	2003-2008	Resident in Surgery, Stanford University
John Schlerf	2004-2010	Senior Manager, Capitol One
Jing Xu	2007-2011	Asst. Professor, Univ. of Georgia
Becca Stoloff	2008-2012	Curriculum Developer, Ada Developers Academy
Peter Butcher	2009-2014	Data Scientist, NBCUniversal
Sarah Hillenbrand	2009-2015	High School Science Teacher, Oakland, CA
Brent Parsons	2011-2017	Staff Scientist, Smith-Ketterwell Eye Inst, San Francisco, CA
Ryan Morehead	2012-2017	Asst. Prof. (Lecturer), Univ. of Leeds (UK)
Darius Parvin	2014-2019	Data Scientist, Bolt Labs
Christina Merrick	2015-2021	Post-doc, UC San Francisco

Maedbh King                      2017-2022    Post-doc, MIT

Post-doctoral advisees:

Liz Franz	1994-1998	Professor, Univ of Otago (New Zealand)
Laurence Casini	1997-1999	Research Scientist, CNRS-Marseille
Bonnie Connor	1997-1998	Rehabilitation Neuropsychologist
Jackie Shin	1999-2002	Assoc. Professor, Indiana State Univ.
Rebecca Spencer	2002-2007	Professor, Univ. of Massachusetts
Shawn Ell	2003-2006	Assoc. Professor, Univ. of Maine
Lisa Aziz-Zadeh	2005-2006	Assoc. Professor, Univ. of Southern California
Julie Duque	2006-2008	Professor, Univ. Catholique, of Louven (Belgium)
Arne Ridderikhoff	2007-2010	Staff Scientist, Free Univ. Amsterdam (disabled)
Chloe Meynier	2008-2009	Photographer, Oakland, CA
Jordan Taylor	2008-2012	Assoc. Professor, Princeton Univ.
Alit Stark	2011-2014	Staff Scientist, Intendu Corp.
Matt Crossley	2012-2014	Asst. Professor, Macquarie Univ. Australia
Ian Greenhouse	2012-2017	Asst. Professor, Univ. of Oregon
Ben Parrell	2014-2015	Asst. Professor, Univ. of Wisconsin
Masamichi Hayashi	2015-2017	Staff Scientist, CiNet, Osaka, Japan
Hyosub Kim	2015-2018	Asst. Professor, Univ. of Delaware
Sam McDougle	2019-2020	Asst. Professor, Yale University (start July 2020)
Assaf Breska	2016-2021	Max Planck Research Group Leader, Tuebingen, Germany
Will Saban	2019-2022	Asst. Professor (Sen. Lect), Tel Aviv Univ.

## BOOKS

Ivry, R. and Robertson, L. (1998). The Two Sides of Perception. Cambridge, MA: MIT Press.

Gazzaniga, M., Ivry, R., and Mangun, R. (2018). Cognitive Neuroscience: The Biology of the Mind, 5<sup>th</sup> Edition. W.W. Norton, Inc. (earlier editions published in 1998, 2002, 2008, and 2013)

## EDITED VOLUMES

Meck, W.H. and Ivry, R.B. (2016). Time in perception and action. Editors for special issue of Current Opinion in Behavioral Sciences, 9: 1-290.

## ARTICLES, REVIEWS AND CHAPTERS

Beck, J., Prazdny, K., and Ivry, R. (1984). The perception of transparency with achromatic colors. Perception & Psychophysics, 35, 407-422.

Ivry, R. and Jusczyk, P. (1985). Perceptual classification of information in vowel-consonant syllables. Perception & Psychophysics, 37, 93-102.

Keele, S., Pokorny, R., Corcos, D., and Ivry, R. (1985). Do perception and motor production share common timing mechanisms? Acta Psychologica, 60, 173-193.

Ivry, R. (1986). Force and timing components of the motor program. Journal of Motor Behavior, 18, 449-474.

Beck, J., Sutter, A., and Ivry, R. (1987). Spatial frequency channels and perceptual grouping in texture segregation. Computer Vision, Graphics, and Image Processing, 37, 299-325.

- Ivry, R. and Cohen, A. (1987). The perception of doubly-curved surfaces from intersecting contours. Perception & Psychophysics, 41, 293-302.
- Keele, S., Ivry, R., and Pokorny, R. (1987). Force control and its relation to timing. Journal of Motor Behavior, 19, 96-114.
- Beck, J. and Ivry, R. (1988). On the role of figural organization in perceptual transparency. Perception & Psychophysics, 44, 585-594.
- Ivry, R. (1988). Storms on the horizon. Contemporary Psychology, 33, 312-313.
- Ivry, R., Keele, S., and Diener, H. (1988). Dissociation of the lateral and medial cerebellum in movement timing and movement execution. Experimental Brain Research, 73, 167-180.
- Keele, S., Cohen, A., Ivry, R., Liotti, M., and Yee, P. (1988). Tests of a temporal theory of attentional binding. Journal of Experimental Psychology: Human Perception and Performance, 14, 444-452.
- Keele, S. and Ivry, R. (1988). Modular analysis of timing in motor skill. In G. Bower (Ed.) The psychology of learning and motivation. Volume 21, pp. 183-228.
- Beck, J., Rosenfeld, A., and Ivry, R. (1989). Line segregation. Spatial Vision, 4, 75-101.
- Cohen, A. and Ivry, R. (1989). Illusory conjunctions inside and outside the focus of attention. Journal of Experimental Psychology: Human Perception and Performance, 15, 650-663.
- Inhoff, A., Diener, H., Rafal, R., and Ivry, R. (1989). The role of cerebellar structures in the execution of serial movements. Brain, 112, 565-581.
- Ivry, R. and Keele, S. (1989). Timing functions of the cerebellum. Journal of Cognitive Neuroscience, 1, 136-152.
- Keele, S., Nicoletti, R., Ivry, R., and Pokorny, R. (1989). Mechanisms of perceptual timing: Beat-based or interval-based judgments? Psychological Research, 50, 251-256.
- Prinzmetal, B. and Ivry, R. (1989). Damn the (behavioral) data, full steam ahead. Brain and Behavioral Sciences, 12. 413-414.
- Cohen, A., Ivry, R., and Keele, S. (1990). Attention factors in the learning of movement sequences. Journal of Experimental Psychology: Learning, Memory, & Cognition, 16, 17-30.
- Ivry, R. and Cohen, A. (1990). Dissociation of short- and long-range apparent motion in visual search. Journal of Experimental Psychology: Human Perception and Performance, 16, 317-332.
- Keele, S., Cohen, A., and Ivry, R. (1990). Motor programs: Concepts and issues. In M. Jeannerod (Ed.) Attention & Performance. Volume XIII. (pp. 77-110). Hillsdale, NJ: Erlbaum.
- Cohen, A. and Ivry, R. (1991). Density effects in conjunction search: evidence for a coarse location mechanism of feature integration. Journal of Experimental Psychology: Human Perception and Performance, 17, 891-901.
- Ivry, R. and Diener, H.C. (1991). Impaired velocity perception in patients with lesions of the cerebellum. Journal of Cognitive Neuroscience, 3, 355-366.
- Ivry, R. and Prinzmetal, W. (1991). Effect of feature similarity in illusory conjunctions. Perception & Psychophysics, 49, 105-116.

- Keele, S. and Ivry, R. (1991). Does the cerebellum provide a common computation for diverse tasks: A timing hypothesis. In A. Diamond (Ed.), Developmental and Neural Basis of Higher Cognitive Function. (pp. 179-211). Annals New York Academy of Sciences (Vol. 608).
- Lundy-Ekman, L, Ivry, R., Keele, S.W., and Woollacott, M. (1991). Timing and force control deficits in clumsy children. Journal of Cognitive Neuroscience, 3, 370-377.
- Ivry, R. (1992). An alternative to associative learning theories. Contemporary Psychology, 37, 209-210.
- Ivry, R. and Baldo, J. (1992). Is the cerebellum involved in learning and cognition? Current Opinion in Neurobiology, 2, 212-216.
- Ivry, R. and Cohen, A. (1992). Aymmetry in visual search for targets defined by differences in movement speed. Journal of Experimental Psychology: Human Perception & Performance, 18, 1045-1057.
- Ivry, R. and Gopal. H. (1992). Speech perception and production in patients with cerebellar lesions. In D.E. Meyer and S. Kornblum (Eds.) Attention & Performance Volume XIV: Synergies in Experimental Psychology, Artificial Intelligence, and Cognitive Neuroscience. (pp. 771-802). Cambridge: MIT Press.
- Ivry, R. and Hazeltine, R. (1992). Models of timing-with-a-timer. In F. Macar, V. Pouthas, and W. Freidman (Eds.) Time, Action, and Cognition. (pp. 183-189). Kluwer Publishers.
- Williams, H.G., Woollacott, M.H., and Ivry, R. (1992). Timing and motor control in clumsy children. Journal of Motor Behavior, 24, 165-172.
- Diener, H.C., Hore, J., Ivry, R., & Dichgans, J. (1993). Cerebellar dysfunction of movement and perception. Canadian Journal of Neurological Science, 20, 1-8.
- Ivry, R. (1993). Cerebellar involvement in the explicit representation of temporal information. In P. Tallal, A. Galaburda, R.R. Llinas, & C. von Euler (Eds.), Temporal Information Processing in the Nervous System: Special Reference to Dyslexia and Dysphasia. (pp. 214-230). Annals New York Academy of Sciences (Vol. 682).
- Ivry, R. and Corcos, D. (1993). Slicing the variability pie: Component analysis of coordination and motor dysfunction. In K. Newell and D. Corcos (Eds.) Variability and motor control. (pp. 415-447). Human Kinetics Publishers.
- Ivry, R. and Leiby, P. (1993). Hemispheric differences in auditory perception are similar to those found in visual perception. Psychological Science, 4, 41-45.
- Ivry, R. (1994). Movement and rhythm. In S. Macey (Ed.) Encyclopedia of Time. (pp. 402-403). Garland Publishing Co.
- Maddox, W.T., Prinzmetal, W., Ivry, R.B., and Ashby, F.G. (1994). A probabilistic multidimensional model of location discrimination. Psychological Research, 56, 66-77.
- Cohen, A., Ivry, R., Rafal, R., and Kohn, C. (1995). Activating response codes by stimuli in the neglected visual field. Neuropsychology, 9, 165-173.
- Grafton, S., Hazeltine, E., and Ivry, R. (1995). Functional mapping of sequence learning in normal humans. Journal of Cognitive Neuroscience, 7, 497-510.
- Ivry, R. and Hazeltine, R.E. (1995). The perception and production of temporal intervals across a range of durations: Evidence for a common timing mechanism. Journal of Experimental Psychology: Human Perception and Performance, 21, pp. 1-12.

- Papka, M., Ivry, R., and Woodruff-Pak, D. (1995). Selective disruption of eyeblink classical conditioning by concurrent tapping. Neuroreport, 6, 1493-1497.
- Prinzmetal, W., Henderson, D., and Ivry, R. (1995). Loosening the constraints on illusory conjunctions: The role of exposure duration and attention. Journal of Experimental Psychology: Human Perception & Performance, 21, 1362-1375.
- Ashby, F.G., Prinzmetal, W., Ivry, R., and Maddox, W.T. (1996). A formal theory of illusory conjunctions. Psychological Review, 103, 165-192.
- Clarke, S., Ivry, R., Grinband, J., Roberts, S., and Shimizu, N. (1996). Exploring the domain of the cerebellar timing system. In M. Pastor and J. Artieda (Eds.), Time, Internal Clocks, and Movement. Amsterdam: Elsevier. (pp. 257-280)
- Cohen, A. and Ivry, R. (1996). Different patterns of popout for direction of motion and for orientation. In T. Inui and J.L. McClelland (Eds), Attention & Performance XVI: Information Integration in Perception and Communication. Cambridge, MA: MIT Press. (pp. 579-595).
- Franz, E., Eliassen, J., Ivry, R., and Gazzaniga, M. (1996). Dissociation of spatial and temporal coupling in the bimanual movements of callosotomy patients. Psychological Science, 7, 306-310.
- Franz, E., Ivry, R., and Helmuth, L. (1996). Reduced timing variability in patients with unilateral cerebellar lesions during bimanual movements. Journal of Cognitive Neuroscience, 8, 107-118.
- Grondin, S., Ivry, R., Franz, E., Perreault, L., and Metthe, L. (1996). Markers influence on duration discrimination of intrermodal intervals. Perception & Psychophysics, 58, 424-433.
- Helmuth, L. and Ivry, R. (1996). When two hands are better than one: Reduced timing variability during bimanual movements. Journal of Experimental Psychology: Human Perception & Performance, 22, 278-293.
- Ivry, R. (1996). The representation of temporal information in perception and motor control. Current Opinion in Neurobiology, 6, 851-857.  
Reprinted in Squire, L.R. & Kosslyn, S.M. (1998). Findings and Current Opinion in Cognitive Neuroscience. MIT Press.
- Ivry, R. (1996). Representational issues in motor learning: Phenomena and theory. H. Heuer and S. Keele (Eds.) Handbook of Perception and Action. Volume 2. London: Academic Press. (pp. 263-330). (translation in German: Gottingen: Hogrefe.)
- Rafal, R., Gershberg, F., Egly, R., Ivry, R., Kingstone, A., and Ro, T. (1996). Response channel activation and the lateral prefrontal cortex. Neuropsychologia, 34, 1197-1202.
- Woodruff-Pak, D., Papka, M., and Ivry, R. (1996). Cerebellar involvement in eyeblink classical conditioning in humans. Neuropsychology, 10, 443-458.
- Hazeltine, E., Grafton, S.T., and Ivry, R. (1997). Attention and stimulus characteristics determine the locus of motor sequence learning: A PET study. Brain, 120, 123-140.
- Hazeltine, E., Helmuth, L.L., and Ivry, R. (1997). Neural mechanisms of timing. Trends in Cognitive Sciences, 1: 163-169.
- Helmuth, L., Ivry, R., and Shimizu, N. (1997). Preserved performance by cerebellar patients on tests of word generation, discrimination learning, and attention. Learning and Memory, 3, 456-474.
- Ivry, R. (1997). Cerebellar timing systems. International Review of Neurobiology, 41, 555-573.



- Papka, M., Ivry, R., Woodruff-Pak, D. (1997). Eyeblink classical conditioning and awareness revisited. Psychological Science, 8, 404-408.
- Grafton, S.T., Hazeltine, R.E., and Ivry, R.B. (1998). Abstract and effector-specific representations of motor sequences identified with PET. Journal of Neuroscience, 18, 9420-9428.
- Ivry, R., Franz, E., Kingstone, A., and Johnston, J., (1998). The PRP effect following callosotomy: Uncoupling of lateralized response codes. Journal of Experimental Psychology: Human Perception & Performance, 24: 463-480.
- Ivry, R. and Leiby, P. (1998). The neurology of consonant perception: Specialized module or distributed processors? In M. Beeman and C. Chiarello (Eds), Right Hemisphere Language Comprehension: Perspectives from Cognitive Neuroscience. Hillsdale, NJ: Erlbaum. (pp. 3-25).
- Mangels, J.A., Ivry, R.B., and Shimizu, N. (1998). Dissociable contributions of the prefrontal and neocerebellar cortex to time perception. Cognitive Brain Research, 7, 15-39.
- Ro, T., Cohen, A., Ivry, R.B., and Rafal, R.D. (1998). Response channel activation and the temporo-parietal junction. Brain and Cognition, 37, 461-476.
- Casini, L. and Ivry, R.B. (1999). Effects of divided attention on temporal processing in patients with lesions of the cerebellum or frontal lobe. Neuropsychology, 13, 10-21.
- Green, J.T., Ivry, R.B., and Woodruff-Pak, D.S. (1999). Timing in eyeblink conditioning and timed-interval tapping. Psychological Science, 10, 19-23.
- Grondin, S., Guiard, Y., Ivry, R.B., and Koren, S. (1999). Manual laterality and hitting performance in major league baseball. Journal of Experimental Psychology: Human Perception & Performance, 25, 747-754.
- Ivry, R.B. and Hazeltine, E. (1999). Subcortical locus of temporal coupling in the bimanual movements of a callosotomy patient. Human Movement Science, 18, 345-375.
- Kim, N., Ivry, R.B., and Robertson, L.C. (1999). Sequential priming in hierarchically organized figures: Effects of target level and target resolution. Journal of Experimental Psychology: Human Perception & Performance, 25, 715-729.
- Cui S.Z., Li E.Z., Zang Y.F., Weng X.C., Ivry R.B., & Wang J.J. (2000). Both sides of human cerebellum are involved in preparation and execution of sequential movements. NeuroReport, 11, 3849-3853.
- Diedrichsen, J., Ivry, R.B. Cohen, A. and Danziger, S. (2000). Asymmetries in a Unilateral Flanker Task Depend on the Direction of the Response: The Role of Attentional Shift and Perceptual Grouping. Journal of Experimental Psychology: Human Perception and Performance, 26, 113-126.
- Green, J.T., Ivry, R.B., and Woodruff-Pak, D.S. (2000). Dual-task and repeated measures designs: Utility in assessing timing and neural functions in eyeblink conditioning. In D.S. Woodruff-Pak & J.E. Steinmetz (Eds.), Eyeblink classical conditioning: Human. Kluwer. (pp. 95-117).
- Ivry, R.B. (2000). Exploring the role of the cerebellum in sensory anticipation and timing: Commentary on Tesche and Karhu. Human Brain Mapping, 9, 115-118.
- Ivry, R.B. (2000). The neurosciences from A to Z. Nature Neuroscience, 3, 1071-1072.
- Ivry, R.B. and Fiez, J.A. (2000). Cerebellar contributions to cognition and imagery. In M. Gazzaniga (Ed.), The Cognitive Neurosciences, 2<sup>nd</sup> Edition. Cambridge, MA: MIT Press. (pp. 999-1011).

- Ivry, R.B. and Hazeltine, E. (2000). Task switching in a callosotomy patient and normal participants: Evidence for response-related sources of interference. In S. Monsell and J. Driver (Eds.), Control of Cognitive Processes. Attention and Performance XVIII. Cambridge, MA: MIT Press. (pp. 401-423).
- Robertson, L.C. and Ivry, R.B. (2000). Hemispheric asymmetries: Attention to visual and auditory primitives. Current Directions in Psychological Science, 9, 59-63.
- Diedrichsen, J., Hazeltine, E., Kennerley, S., and Ivry, R.B. (2001). Moving to directly cued locations abolishes spatial interference during bimanual actions. Psychological Science, 12, 493-498.
- Ivry, R. and Justus, T.C. (2001). A neural instantiation of the motor theory of speech perception. Trends in Neurosciences, 24, 513-515.
- Ivry, R.B., Justus, T.C., and Middleton, C. (2001). The cerebellum, timing, and language: Implications for the study of dyslexia. In M. Wolf (Ed.), Dyslexia, Fluency, and the Brain, Timonium, MD: York Press. (pp. 189-211)
- Justus, T.C. and Ivry, R.B. (2001). The cognitive neuropsychology of the cerebellum. International Review of Psychiatry, 13, 276-282.
- Mangels, J.A. and Ivry, R.B. (2001). Time perception. In B. Repp (Ed.), Handbook of Cognitive Neuropsychology: What Defecits Reveal about the Mind. Philadelphia, PA: Psychology Press. (pp. 467-493).
- Prinzmetal, W., Diedrichsen, J., & Ivry, R.B. (2001). Illusory conjunctions are alive and well: A replay to Donk 1999. Journal of Experimental Psychology: Human Perception and Performance, 27, 538-541.
- Ravizza, S. and Ivry, R.B. (2001). Comparison of the basal ganglia and cerebellum in attention shifting. Journal of Cognitive Neuroscience, 13, 285-297.
- Semjen, A. and Ivry, R.B. (2001). The coupled oscillator model of between-hand coordination in alternate-hand tapping: A reappraisal. Journal of Experimental Psychology: Human Perception and Performance, 27, 251-265.
- Bischoff-Grethe, A., Ivry, R.B., and Grafton, S.T. (2002). Cerebellar involvement in response reassignment rather than attention. Journal of Neuroscience, 22, 546-553.
- Grafton, S.T., Hazeltine, E., and Ivry, R.B. (2002). Motor sequence learning with the non-dominant hand: A PET functional imaging study. Experimental Brain Research, 146, 369-378.
- Hazeltine, E. and Ivry, R.B. (2002). Can we teach the cerebellum new tricks? Science, 296, 1979-1980.
- Hazeltine, E. and Ivry, R.B. (2002). Motor skill. In V.S. Ramachandran (Ed.), Encyclopedia of the Brain. San Diego: Academic Press. (pp. 183-200).
- Hazeltine, E. and Ivry, R.B. (2002). Neural structures that support implicit sequence learning. In L. Jiminez, Attention and Implicit Learning. Philadelphia: John Benjamins Publishing Company. (pp. 71-107).
- Hazeltine, E., Teague, D., and Ivry, R.B. (2002). Simultaneous dual-task performance reveals parallel response selection after practice. Journal of Experimental Psychology: Human Perception and Performance, 28, 527-545.
- Ivry, R.B. and Knight, R. (2002). Making order from chaos: The misguided frontal lobe. Nature Neuroscience, 5, 394-396.
- Ivry, R.B. and Richardson, T. (2002). Temporal control and coordination: The multiple timer model. Brain and Cognition, 48, 117-132.

- Ivry, R.B., Richardson, T.C., and Helmuth, L.L. (2002). Improved temporal stability in multi-effector movements. Journal of Experimental Psychology: Human Perception and Performance, 28, 72-92.
- Ivry, R.B., Spencer, R.M., Zelaznik, H.N., and Diedrichsen, J. (2002). The cerebellum and event timing. In S.M. Highstein and W.T. Thach (Eds.), The Cerebellum: Recent Developments in Cerebellar Research. Annals of the New York Academy of Sciences, Vol. 978. New York: New York Academy of Sciences. (pp 302-317).
- Kennerley, S.W., Diedrichsen, J., Hazeltine, E., Semjen, A., and Ivry, R.B. (2002). Callosotomy patients exhibit temporal and spatial uncoupling during continuous bimanual movements. Nature Neuroscience, 5, 376-381.
- Macar, F. and Ivry, R.B. (2002). Exploring the limits of the internal timer in prospective temporal judgments. Cognitive Processing, 3, 77-84.
- Prinzmetal, W., Ivry, R.B., Beck, D., Shimizu, N. (2002). A measurement theory of illusory conjunctions. Journal of Experimental Psychology: Human Perception and Performance, 28, 251-269.
- Shin, J.C. & Ivry, R.B. (2002). Concurrent learning of temporal and spatial sequences. Journal of Experimental Psychology: Human Learning and Memory 28, 445-457.
- Zelaznik, H., Spencer, R., and Ivry, R.B. (2002). Dissociation of explicit and implicit timing processes in repetitive tapping and drawing movements. Journal of Experimental Psychology: Human Perception and Performance, 28, 575-588.
- Deouell, L.Y., Ivry, R.B., and Knight, R.T. (2003). Electrophysiologic methods and transcranial magnetic stimulation in behavioral neurology and neuropsychology. In T.E. Feinberg and M.J. Farah (Eds.), Behavioral Neurology and Neuropsychology, 2<sup>nd</sup> Edition. New York: McGraw-Hill. (pp. 105-134).
- Diedrichsen, J., Hazeltine, E., Nurss, W.K., and Ivry, R.B. (2003). The role of the corpus callosum in the coupling of bimanual isometric force pulses. Journal of Neurophysiology, 90, 2409-2418.
- Diedrichsen, J., Ivry, R.B., Hazeltine, E., Kennerley, S., and Cohen, A. (2003). Bimanual interference associated with the selection of target locations. Journal of Experimental Psychology: Human Perception and Performance, 29, 64-77.
- Diedrichsen, J., Ivry, R.B., & Pressing, J. (2003). Cerebellar and basal ganglia contributions to interval timing. In W.H. Meck (Ed.), Functional and Neural Mechanisms of Interval Timing. Boca Raton, FL: CRC Press. (pp. 457-481).
- Diedrichsen, J., Verstynen, T., Hon, A., Lehman, S.L., & Ivry, R.B. (2003). Anticipatory adjustments in the unloading task: Is an efference copy necessary for learning? Experimental Brain Research, 148, 272-276.
- Handy, T., Gazzaniga, M., and Ivry, R.B. (2003). Cortical and subcortical contributions to the representation of temporal information. Neuropsychologia, 41, 1461-1473.
- Hazeltine, E., Diedrichsen, J., Kennerley, S.W., and Ivry, R.B. (2003). Bimanual cross-talk during reaching movements is primarily related to response selection, not the specification of motor parameters. Psychological Research, 67, 56-70.
- Ivry, R.B. (2003). Cerebellar involvement in clumsiness and other developmental disorders. Neural Plasticity, 10, 143-155.
- Ivry, R.B. and Helmuth, L.L. (2003). Representations and neural mechanisms of sequential movements. In S. Johnson-Frey (Ed.), Taking Action: Cognitive Neuroscience Perspectives on the Problem of Intentional Action. Cambridge, MA: MIT Press. (pp. 221-257).

- Keele, S.W., Ivry, R.B., Mayr, U., Hazeltine, E., and Heuer, H. (2003). The cognitive and neural architecture of sequence representation. Psychological Review, 110, 316-330.
- Shin, J.C. and Ivry, R.B. (2003). Spatial and temporal sequence learning in patient's with Parkinson's disease or cerebellar lesions. Journal of Cognitive Neuroscience, 15, 1232-1243.
- Spencer, R.C.M., Zelaznik, H.N., Diedrichsen, J., and Ivry, R.B. (2003). Disrupted timing of discontinuous but not continuous movements by cerebellar lesions. Science, 300, 1437-1439.
- Zang, Y., Jia, F., Weng, X., Li, E., Cui, S., Wang, Y., Hazeltine, E., and Ivry, R.B. (2003). Functional organization of the primary motor cortex characterized by event-related fMRI during movement preparation and execution. Neuroscience Letters, 337, 69-72.
- Ackermann, H., Mathiak, K., and Ivry, R.B. (2004). Temporal organization of "internal speech" as a basis for the cerebellar modulation of cognitive functions. Behavioral and Cognitive Neuroscience Reviews, 3, 14-22.
- Derakhshan, I., Diedrichsen, J., Hazeltine, E., & Ivry, R. B. (2004). Hugo Liepmann revisited, this time with numbers Journal of Neurophysiology, 91, 2934-2935.
- Diedrichsen, J., Nambisan, R., Kennerley, S.W., and Ivry, R.B. (2004). Independent on-line control of the two hands during bimanual reaching. European Journal of Neuroscience, 19, 1643-1652.
- Grafton, S. and Ivry, R.B. (2004). The representation of action. In M.S. Gazzaniga (Ed.), The Cognitive Neurosciences, 3rd Edition. Cambridge, MA: MIT Press. (pp. 441-451).
- Ivry, R.B., Diedrichsen, J., Spencer, R.C.M., Hazeltine, E., and Semjen, A. (2004). A cognitive neuroscience perspective on bimanual coordination. In S. Swinnen and J. Duysens (Eds.), Neuro-behavioral Determinants of Interlimb Coordination. Boston: Kluwer Academic Publishing. (pp. 259-295).
- Ivry, R.B. and Spencer, R.C.M. (2004). The neural representation of time. Current Opinion in Neurobiology, 14, 225-232.
- Ivry, R.B. and Spencer, R.C.M. (2004). Evaluating the role of the cerebellum in temporal processing: beware of the null hypothesis. Brain, 127, e1-3.
- Miall, R.C. and Ivry, R.B. (2004). Moving to a different beat. Nature Neuroscience, 7, 1025-1026.
- Spencer, R.C.M., Hazeltine, E., Semjen, A., and Ivry, R.B. (2004). Goal based representation in bimanual movements. International Journal of Sport and Exercise Psychology, 2, 239-254.
- Aparicio, P., Diedrichsen, J., and Ivry, R.B. (2005). Effects of focal basal ganglia lesions on timing and force control. Brain and Cognition, 58, 62-74.
- Diedrichsen, J., Verstynen, T., Lehman, S.L., and Ivry, R.B. (2005). Cerebellar involvement in anticipating the consequences of self-produced actions during bimanual movements. Journal of Neurophysiology, 93, 801-812.
- Justus, T., Ravizza, S. M., Fiez, J. A., & Ivry, R. B. (2005). Reduced phonological similarity effects in patients with damage to the cerebellum. Brain and Language, 95, 304-318.
- Maddox, W.T., Aparicio, P., Marchant, N.L., and Ivry, R.B. (2005). Rule-based category learning is impaired in patients with Parkinson's Disease but not in patients with cerebellar disorders. Journal of Cognitive Neuroscience, 17, 707-723.

- Mainland, J.D., Johnson, B.N., Khan, R., Ivry, R.B., and Sobel, N. (2005). Olfactory deficits in patients with unilateral cerebellar lesions are selective to inputs from the contralesional nostril. Journal of Neuroscience, 25, 6362-6371.
- Shin, J.C., Aparicio, P., and Ivry, R.B. (2005). Multidimensional sequence learning in patients with focal basal ganglia lesions. Brain and Cognition, 58, 75-83.
- Spencer, R.C.M. and Ivry, R.B. (2005). Comparison of patients with Parkinson's disease or cerebellar lesions in the production of periodic movements involving event-based or emergent timing. Brain and Cognition, 58, 84-93.
- Spencer, R.C.M., Ivry, R.B., Cattaert, D., and Semjen, A. (2005). Bimanual coordination during rhythmic movements in the absence of somatosensory feedback. Journal of Neurophysiology, 94, 2901-2910.
- Spencer, R.C.M., Ivry, R.B., and Zelaznik, H.N. (2005). Role of the cerebellum in movements: Control of timing or movement transitions? Experimental Brain Research, 161, 383-396.
- Verstynen, T., Diedrichsen, J., Albert, N., Aparicio, P., and Ivry, R.B. (2005). Ipsilateral motor cortex activity during unimanual hand movements relates to task complexity. Journal of Neurophysiology, 93, 1209-1222.
- Zelaznik, H.N., Spencer, R.M.C., Ivry, R.B., Baria, A., Bloom, M., Dolansky, L., Justice, S., Patterson, K., Whetter, E. (2005). Timing variability in circle drawing and tapping: Probing the relationship between event and emergent timing. Journal of Motor Behavior, 37, 395-403.
- Cools, R., Ivry, R.B., and D'Esposito, M. (2006). The human striatum is necessary for responding to changes in stimulus relevance. Journal of Cognitive Neuroscience, 18, 1973-1983.
- Diedrichsen, J., Grafton, S., Albert, N., Hazeltine, E., and Ivry, R.B. (2006). Goal-selection and movement-related conflict during bimanual reaching movements. Cerebral Cortex, 16, 1729-1738.
- Ell, S., Marchant, N., and Ivry, R.B. (2006). Focal putamen lesions impair learning in rule-based, but not information integration categorization tasks. Neuropsychologia, 44, 1737-1751.
- Esterman, M., Verstynen, T., Ivry, R.B., and Robertson, L.C. (2006). Coming unbound: Disrupting automatic integration of synesthetic color and graphemes by TMS of the right parietal lobe. Journal of Cognitive Neuroscience, 18, 1570-1576.
- Gilbert, A., Regier, T., Kay, P., and Ivry, R.B. (2006). Whorf hypothesis is supported in the right visual field but not the left. Proceedings of the National Academy of Sciences, 103, 489-494.
- Ivry, R.B., Mayr, U., Corcos, D.M., and Posner, M.I. (2006). Psychological processes and neural mechanisms for action: The legacy of Steven W. Keele. Journal of Motor Behavior, 38, 3-6.
- Mayr, U., Diedrichsen, J., Ivry, R.B., and Keele, S.W. (2006). Dissociating task-set selection from task-set inhibition in prefrontal cortex. Journal of Cognitive Neuroscience, 18, 14-21.
- McMillan, S., Ivry, R.B., and Byblow, W.D. (2006). Corticomotor excitability during a choice-hand reaction time task. Experimental Brain Research, 172, 230-245.
- Ravizza, S.M., McCormick, C.A., Schlerf, J.E., Justus, T., Ivry, R.B., and Fiez, J.A. (2006). Cerebellar damage produces selective deficits in verbal working memory. Brain, 129, 306-320.
- Serrien, D.J., Ivry, R.B., and Swinnen, S.P. (2006). Dynamics of hemispheric specialization and integration in the context of motor control. Nature Reviews Neuroscience, 7, 160-166.

- Spencer, R.C.M., Summ, M. and Ivry, R.B. (2006). Sleep dependent consolidation of contextual learning. Current Biology, 16, 1001-1005.
- Verstynen, T., Konkle, T., and Ivry, R.B. (2006). Two types of TMS-induced movement variability following stimulation of the primary motor cortex. Journal of Neurophysiology, 96, 1018-1029.
- Albert, N., Weigelt, M., Hazeltine, E., and Ivry, R.B. (2007). Target selection during bimanual reaching to direct cues is unaffected by the perceptual similarity of the targets. Journal of Experimental Psychology: Human Perception and Performance, 33, 1107-1116.
- Diedrichsen, J., Verstynen, T.D., Hon, A., Zhang, Y., and Ivry, R.B. (2007). Illusions of force perception: the role of sensori-motor predictions, visual information, and motor errors. Journal of Neurophysiology, 97, 3305-3313.
- Drivonikou, V., Kay, P., Regier, T., Ivry, R.B., Gilbert, A., Franklin, A., and Davies, I. (2007). Further evidence that Whorfan effects are stronger in the right visual field than the left. Proceedings of the National Academy of Sciences, 104, 1097-1102.
- Hazeltine, E., Aparicio, P., Weinstein, A., and Ivry, R.B. (2007). Configural response learning: The acquisition of a non-predictive motor skill. Journal of Experimental Psychology: Human Perception & Performance, 33: 1451-1467.
- Schlerf, J.E., Spencer, R.M.C., Zelaznik, H.N., and Ivry, R.B. (2007). Timing of rhythmic movements in patients with cerebellar degeneration. Cerebellum, 5, 221-231.
- Serrien, D.J., Ivry, R.B., and Swinnen, S.P. (2007). The missing link between action and cognition. Progress in Neurobiology, 82, 95-107.
- Spencer, R. M. C., Gouw, A., & Ivry, R. B. (2007). Age-related decline of sleep-dependent consolidation. Learning and Memory, 14, 480-484.
- Spencer, R.C.M., and Ivry, R.B. (2007). The temporal representation of in-phase and anti-phase movements. Human Movement Science, 26, 226-234.
- Spencer, R.C.M., Semjen, A., Yang, S., and Ivry, R.B. (2007). An event-based account of coordination stability. Psychonomic Bulletin and Review, 13, 702-710.
- Spencer, R.M.C., Verstynen, T., Brett, M., and Ivry, R.B. (2007). Cerebellar activation during discrete and not continuous timed movements: An fMRI study. NeuroImage, 36, 378-387.  
\*\* Section Editor's Citation for Human Brain Mapping Conference, 2007.
- Sternad, D., Wei, K., Diedrichsen, J., and Ivry, R.B. (2007). Intermanual interactions during initiation and production of rhythmic and discrete movements in individuals lacking a corpus callosum. Experimental Brain Research, 176, 559-574.
- Verstynen, T., Spencer, R., Stinear, C., Konkle, T., Diedrichsen, J., Byblow, W., and Ivry, R.B. (2007). Ipsilateral Corticospinal Projections Do Not Predict Congenital Mirror Movements: A Case Report. Neuropsychologia, 45, 844-852.
- Aziz-Zadeh L, Fiebach CJ, Naranayan S, Feldman J, Dodge E, Ivry RB. (2008). Modulation of the FFA and PPA by language related to faces and places. Social Neuroscience, 3, 229-238.
- Ell SW, Ivry RB. (2008). Cerebellar pathology does not impair performance on identification or categorization tasks. Journal of International Neuropsychological Society, 14, 760-770.

- Ghajar, J. and Ivry, R.B. (2008). The predictive brain state: Timing deficiency in traumatic brain injury? Neurorehabilitation and Neural Repair, 22, 217-227.
- Gilbert, A., Regier, T., Kay, P., and Ivry, R.B. (2008). Support for lateralization of the Whorfian effect beyond the realm of color discrimination. Brain and Language, 105, 91-98.
- Hazeltine, E., Weinstein, A., and Ivry, R.B. (2008). Parallel response selection after callosotomy. Journal of Cognitive Neuroscience, 20, 526-540.
- Ivry, R.B. and Schlerf, J.E. (2008). Dedicated and intrinsic models of time perception. Trends in Cognitive Science, 12, 273-280.
- Moberget, T., Karns, C.M., Deouell, L.Y., Lindgren, M., Knight, R.T., and Ivry, R.B. (2008). Detecting violations of sensory expectancies following cerebellar degeneration: A mismatch negativity study. Neuropsychologia, 46, 2569-2579.
- Oliveira, F.T.P. and Ivry, R.B. (2008). The representation of action: Insights from bimanual coordination. Current Directions in Psychological Science, 17, 130-135.
- Zelaznik, H.N., Spencer, R.M.C., and Ivry, R.B. (2008). Behavioral analysis of human movement timing. In S. Grondin (Ed.), The Psychology of Time. Bingley, UK; Emerald Group Publishing (pp. 233-260).
- Albert NB, Ivry RB. (2009). The persistence of spatial interference after extended training in a bimanual drawing task. Cortex, 45, 377-385.
- Aziz-Zadeh, L. and Ivry, R.B. (2009). The human mirror neuron system and embodied representations. In D. Sternad (Ed.), Progress in Motor Control: A Multidisciplinary Perspective. pp 355-376. New York: Springer.
- Bischoff-Grethe, A., Hazeltine, E., Bergren, L., Ivry, R.B., and Grafton, S.T. (2009). The influence of feedback valence in associative learning. NeuroImage, 44, 243-251.
- Duque J, Ivry RB. (2009). Role of corticospinal suppression during motor preparation. Cerebral Cortex, 19, 2013-2024.
- Ghajar J, Ivry RB. (2009). The predictive brain state: asynchrony in disorders of attention? Neuroscientist, 15, 232-242.
- Spencer RM, Ivry RB. (2009). Sequence learning is preserved in individuals with cerebellar degeneration when the movements are directly cued. Journal of Cognitive Neuroscience, 21, 1302-1310.
- Spencer RM, Karmarkar U, Ivry RB. (2009). Evaluating dedicated and intrinsic models of temporal encoding by varying context. Philosophical Transactions Royal Society, London B Biological Sciences, 364, 1853-1863.
- Brookshire, G., Ivry, R., & Casasanto, D. (2010). Modulation of motor-meaning congruity effects for valenced words. In S. Ohlsson & R. Catrambone (Eds.), Proceedings of the 32nd Annual Conference of the Cognitive Science Society (pp. 1940-1945). Austin, TX: Cognitive Science Society.
- Clark, D. and Ivry, R.B. (2010). Multiple systems for motor skill learning. Wiley Interdisciplinary Reviews: Cognitive Science, 1, 461-467.
- Diedrichsen, J., Shadmehr, R., and Ivry, R.B. (2010). The coordination of movement: Optimal feedback control and beyond. Trends in Cognitive Science, 14, 31-39. PMID: 20005767

- Duque, J. Lew, D., Mazzocchio, R., Olivier, E., and Ivry, R. (2010). Evidence for two concurrent inhibitory mechanisms during response preparation. Journal of Neuroscience, 30, 3793-3802.
- Ell, S.W., Weinstein, A., and Ivry, R.B. (2010). Rule-based categorization deficits in focal basal ganglia lesion and Parkinson's disease patients. Neuropsychologia, 48, 2974-2986. PMID: 20600196
- Landau, A., Aziz-Zadeh, L., and Ivry, R.B. (2010). The influence of language on perception: Listening to sentences about faces affects the perception of faces. Journal of Neuroscience, 30, 15254-15261.
- Oliveira, F., Diedrichsen, J., Verstynen, T., Duque, J., and Ivry, R.B. (2010). Transcranial magnetic stimulation of posterior parietal cortex affects decisions of hand choice. Proceedings of the National Academy of Sciences, 107, 17751-17756. PMID: 20876098
- Regier, T. Kay, P., Gilbert, A.L., and Ivry, R.B. (2010). Which side are you on, anyway? In P. Wolff and B.C. Malt (Eds), Words and the Mind: How Words Capture Human Experience. New York: Oxford Univ. Press. (pp. 165-181).
- Schlerf, J.E., Verstynen, T.D., Ivry, R.B., and Spencer, R.M. (2010). Evidence of a novel somatopic map in the human neocerebellum during complex actions. Journal of Neurophysiology, 103, 3330-3336. PMID: 20393055
- Taylor JA, Kleffuss NM, Ivry RB. (2010). An explicit strategy prevails when the cerebellum fails to compute movement errors. Cerebellum, 9: 580-586. PMID: 20697860
- Verstynen, T., Oliver, M., and Ivry, R.B. (2010). Experiencing the future: The influence of self-initiation on temporal perception. In R. Nijhawan and B. Khurana (Eds.), Space and Time in Perception and Action. Cambridge, UK: Cambridge Univ. Press. (pp. 164-180).
- Labruna, L., Fernández-del-Olmo, M., and Ivry, R.B. (2011). Comparison of Different Baseline Conditions in Evaluating Factors that Influence Motor Cortex Excitability. Brain Stimulation, 4, 152-155.
- Labruna, L., Fernandez-del-Olmo, M., Landau, A., Duque, J., and Ivry, R.B. (2011). Modulation of the motor system during visual and auditory language processing. Experimental Brain Research, 211: 243-250.
- Paluy, Y., Gilbert, A.L., Baldo, J.V., Dronkers, N.F., and Ivry, R.B. (2011). Aphasic patients reveal a reversal of hemispheric asymmetries in categorical color perception. Brain and Language, 116, 151-156. PMID: 21216454
- Schlerf, J.E. and Ivry, R.B. (2011). Task goals influence online corrections and adaptation of reaching movements. Journal of Neurophysiology, 106, 2622-2631. PMID: 21849618.
- Stoloff, R.H., Taylor, J.A., Xu, J., Ridderikhoff, A., and Ivry, R.B. (2011). Effect of reinforcement history on hand choice in an unconstrained reaching task. Frontiers in Decision Neuroscience. 5:41. Doi: 10.3389/fnins.2001.0041 PMID: 21472031
- Taylor, J.A. and Ivry, R.B. (2011). Flexible cognitive strategies during motor learning. PLoS Computational Biology, 7:e1001096. PMID: 21390266
- Taylor, J.A., Wojaczynski, G.J., and Ivry, R.B. (2011). Trial-by-trial analysis of intermanual transfer during visuomotor adaptation. Journal of Neurophysiology, 106, 3157-3172.
- Verstynen, T. and Ivry, R.B. (2011). Network dynamics mediating ipsilateral motor cortex activity during unimanual actions. Journal of Cognitive Neuroscience, 23, 2468-2480. PMID: 21268666.



- Willems, R.M., Labruna, L., D'Esposito, M., Ivry, R., and Casasanto, D. (2011). A functional role for the motor system in language understanding: Evidence from theta burst TMS. Psychological Science, 22, 849-854.
- Duque, J., Labruna, L., Verset, S., Olivier, E., and Ivry, R.B. (2012). Dissociating the role of prefrontal and premotor cortices in controlling inhibitory mechanisms during motor preparation. Journal of Neuroscience, 32, 806-816.
- Klemfuss, N., Prinzmetal, B., and Ivry, R.B. (2012). How does language change perception: A cautionary note. Frontiers in Psychology, 3:38. Doi: 10.3389/fpsyg.2012.00078.
- Manto M, Bower JM, Conforto AB, Delgado-García JM, da Guarda SN, Gerwig M, Habas C, Hagura N, Ivry RB, Mariën P, Molinari M, Naito E, Nowak DA, Oulad Ben Taib N, Pelisson D, Tesche CD, Tilikete C, and Timmann D. (2012). Consensus Paper: Roles of the cerebellum in motor control. Cerebellum, 11, 457-487.
- Sela, T., Ivry, R.B., and Lavidor, M. (2012). Prefrontal control during a semantic decision task that involves idiom comprehension: A transcranial direct current stimulation study. Neuropsychologia, 50, 2271-2280.
- Schlerf, J.E., Ivry, R.B., and Diedrichsen, J. (2012). Encoding of sensory prediction errors in the human cerebellum. Journal of Neuroscience, 32: 4913-4922.
- Taylor, J.A. and Ivry, R.B. (2012). The role of strategies in motor learning. Annals of the New York Academy of Science: The Year in Cognitive Neuroscience, 1051, 1-12.
- Wilson, J.K., Baran, B., Pace-Schott, E.F., Ivry, R.B., and Spencer, R.M.C. (2012). Sleep modulates word-pair learning but not motor sequence learning in healthy older adults. Neurobiology of Aging, 33, 991-1000.
- Ravizza, S.M., Solomon, M., Ivry, R.B., and Carter, C.S. (2013). Restricted and repetitive behaviors in autism spectrum disorders: The relationship of attention and motor deficits. Development and Psychopathology, 25, 773-784.
- Schlerf, J.E., Xu, J., Klemfuss, N.M., Griffiths, T.L., and Ivry, R.B. (2013). Individuals with cerebellar degeneration show similar adaptation deficits with large and small visuomotor errors. Journal of Neurophysiology, 109, 1164-1173. PMID: 23197450
- Spencer, R.M.C. and Ivry, R.B. (2013). The Cerebellum and Timing. In M. Manto, D.Gruol, J. Schmähmann, N. Koibuchi, . F. Rossi (Eds.) Handbook of the Cerebellum and Cerebellar Disorders. Springer Press. (pp. 1201-1219).
- Taylor, J.A., Hieber, L.L., and Ivry, R.B. (2013). Feedback-dependent generalization. Journal of Neurophysiology, 109, 202-215. PMID: 23054603
- Taylor, J.A. & Ivry, R.B. (2013). Context-dependent generalization. Frontiers in Human Neuroscience, 7:171 doi: 10.3389/fnhum.2013.00171. PMID: 23653603
- Taylor, J.A. & Ivry, R.B. (2013) Implicit and Explicit Processes in Motor Learning. In W. Prinz, M. Beisert, and A. Herwig (Eds). Action Science: Foundations of an Emerging Discipline, Boston: MIT Press. (pp. 63-88).
- Baumann, O., Borra, J., Bower, J., Cullen, K., Habas, C., Ivry, R.B. et al., (2014). Consensus Paper: The role of the cerebellum in perceptual processes. Cerebellum, (Online: DOI 10.1007/s12311-014-0627-7).
- Duque, J., Labruna, L., Cazaes, C., and Ivry, R.B. (2014). Dissociating the influence of response selection and task anticipation on corticospinal suppression during response preparation. Neuropsychologia, 65, 287-296. PMID: 25128431

- Labruna, L., Lebon, F., Duque, J., Klein, P.A., Cazares, C., and Ivry, R.B. (2014). Generic inhibition of the selected movement and constrained inhibition of non-selected movements during response preparation. Journal of Cognitive Neuroscience, 26, 269-278.
- Press, C., Berlot, E., Bird, G., Ivry, R. and Cook, R. (2014). Moving time: The influence of action on duration perception. Journal of Experimental Psychology: General., 145, 1787-1793. PMID: 25089534
- Moberget, T., Gullesen, E.H., Andersson, S., Ivry, R.B., and Endestad, T. (2014). Generalized role for the cerebellum in the generation of internal models: Evidence from semantic processing. Journal of Neuroscience, 34, 2871-2878.
- Taylor, J.A., and Ivry, R.B. (2014). Cerebellar and prefrontal cortex contributions to adaptation, strategies, and reinforcement learning. Progress in Brain Research: The Cerebellum in Memory Formation: Structure, Computation, and Function, 210, 217-253.
- Taylor, J.A., Krakauer, J.W., and Ivry, R.B. (2014). Explicit and implicit contributions to learning in a sensorimotor adaptation task. Journal of Neuroscience, 34, 3023-3032.
- Vainiger, D., Labruna, L., Ivry, R.B., and Lavidor, M. (2014). Beyond words: Evidence for automatic language-gesture integration of symbolic gestures but not dynamic landscapes. Psychological Research, 78, 55-69.
- Baumann O, Borra RJ, Bower JM, Cullen KE, Habas C, Ivry RB, Leggio M, Mattingley JB, Molinari M, Moulton EA, Paulin MG, Pavlova MA, Schmahmann JD, Sokolov AA. (2015). Consensus paper: The role of the cerebellum in perceptual processes. Cerebellum, 14: 197-220. PMID: 25479821
- Casasanto, D., Brookshire, G., and Ivry, R.B. (2015). Meaning is not a reflex: Context dependence of spatial congruency effects. Cognitive Science. 39, 1979-1986. PMID: 26432077
- Greenhouse, I., Sias, A., Labruna, L, and Ivry, R.B. (2015). Non-specific inhibition of the motor system during response preparation. Journal of Neuroscience, 35: 10675-10684.
- Greenhouse, I., Saks, D., Hoang, T., and Ivry, R.B. (2015). Inhibition during response preparation is sensitive to response complexity. Journal of Neurophysiology, 113: 455-465.
- Klein PA, Duque J, Labruna L, Ivry RB. (2015). Comparison of the two cerebral hemispheres in inhibitory processes operative during movement preparation. Neuroimage, 125:220-232.
- Morehead, J.R., Qasim, S., Crossley, M., and Ivry, R.B. (2015). Savings upon re-aiming in visuomotor adaptation. Journal of Neuroscience, 35:14386-96.
- Xu, J., Westrick, Z., and Ivry, R.B. (2015) Selective inhibition of a multi-component response can be achieved without cost. Journal of Neurophysiology, 113, 455-465. PMID: 25339712
- Breska, A. and Ivry, R.B. (2016). Taxonomies of Timing: Where Does the Cerebellum Fit In? Current Opinion in Behavioral Sciences, 8, 282-288. PMID: 27088121
- Brudner, S.N., Kethidi, N., Graeupner, D., Ivry, R.B., and Taylor, J.A. (2016). Delayed feedback during sensorimotor learning selectively disrupts adaptation, but not strategy use. Journal of Neurophysiology, 115, 1499-1511. PMID: 26792878
- De Hollander, G., Labruna, L, Sellaro, R., Trutti, A., Colzato, L.S. Ratcliff, R., Ivry, R.B., Forstmann, B.U. (2016). Transcranial direct current stimulation does not influence the speed-accuracy tradeoff in perceptual decision-making: Evidence from three independent replication studies. Journal of Cognitive Neuroscience, 28, 1283-1294. PMID: 27054398

- Greenhouse, I., Noah, S., Maddock, R.J., and Ivry, R.B. (2016). Individual differences in GABA content are reliable but are not uniform across the human cortex. NeuroImage., 139, 1-7.
- Hillenbrand, S., Ivry, R.B., and Schlerf, J.E. (2016). Impact of task-related changes in heart rate on estimation of hemodynamic response and model fit. NeuroImage., 132, 455-468.
- Labruna, L., Jamil, A., Fresnoza, S., Batsikadze, G., Kuo, M-F., Vanderschelden, B., Ivry, R.B., Nitsche, M.A. (2016). Efficacy of anodal transcranial direct current stimulation is related to sensitivity to transcranial magnetic stimulation. Brain Stimulation. 9, 8-15. PMID: 26493498
- Lebon, F., Greenhouse, I., Labruna, L., Vanderschleden, B., Papaxanthis, C., Ivry, R.B. (2016). Influence of delay period duration on inhibitory processes for response preparation. Cerebral Cortex., 26, 2461-2470.
- McDugle, S.D., Boggess, M.J., Crossley, M.J., Parvin, D., Ivry, R.B., and Taylor, J.A. (2016). Credit assignment in movement-dependent reinforcement learning. Proceedings of the National Academy of Sciences, 113, 6797-6802.
- McDugle, S.D., Ivry, R.B., and Taylor, J.A. (2016). Taking aim at the cognitive side of learning in sensorimotor adaptation tasks. Trends in Cognitive Sciences, 20, 535-544.
- Moberget, T., Hilland, E., Andersson, S., Lundar, T., Due-Tonnessan, B.J., Heldal, A., Ivry, R.B., Endestad, T. (2016). Patients with focal cerebellar lesions show reduced auditory cortex activation during silent reading. Brain and Language, 161, 18-27. PMID: 26341544
- Moberget, T., and Ivry, R.B. (2016). Cerebellar contributions to motor control and language comprehension: Searching for common computational principles. Annals of the New York Academy of Sciences, 1369, 154-171.
- Butcher, P.A., Ivry, R.B., Kuo, S-H., Rydz, D., Krakauer, J.W., and Taylor, J.A. (2017). The cerebellum does more than sensory-prediction error-based learning in sensorimotor adaptation tasks. Journal of Neurophysiology, 118, 1622-1636. PMID: 28637818
- Duque, J., Greenhouse I., Labruna, L. and Ivry, R.B. (2017). Physiological markers of motor inhibition during human behavior. Trends in Neurosciences, 40, 219-236. PMID: 28341235
- Greenhouse, I., King, M., Noah, S., Maddock, R.J., and Ivry, R.B. (2017). Individual differences in resting cortico-spinal excitability are correlated with reaction time and GABA content in motor cortex. Journal of Neuroscience, 37, 2686-2696. PMID: 28179557
- Morehead, J.R., Taylor, J.A., Parvin, D., and Ivry, R.B. (2017). Characteristics of implicit sensorimotor adaptation revealed by task-irrelevant clamped feedback. Journal of Cognitive Neuroscience, 29, 1061-1074. PMID: 28195523
- Oostwoud-Wijdenes, L.O, Ivry, R., and Bays, P. (2017). Competition between movement plans increases motor variability: evidence of a shared resource for movement planning. Journal of Neurophysiology, 116, 1295-1303. PMID: 27358315
- Parrell, B., Agnew, Z., Houde, J., Nagarajan, S., and Ivry, R.B. (2017). Impaired feedforward control and enhanced feedback control of speech in patients with cerebellar degeneration. Journal of Neuroscience, 37:9249-9258. PMID: 28842410
- Sokolov, A.A., Miall, R.C., and Ivry, R.B. (2017). The Cerebellum: Adaptive Prediction for Movement and Cognition. Trends in Cognitive Sciences, 21, 313-332. PMID: 28385461
- Stark-Inbar, A., Taylor, J., Raza, M., and Ivry, R.B. (2017). Individual differences in implicit motor learning: Task specificity in sensorimotor adaptation and sequence learning. Journal of Neurophysiology, 117, 412-428. PMID: 27832611

- Winkel, J., Hawkins, G.E., Ivry R.B., Brown, S.D., Cools, R., and Forstmann, B.U. (2017). Focal striatum lesions impair cautiousness in humans. Cortex, 85, 37-45. PMID: 27810498
- Yon, D., Edey, R., Ivry, R.B., and Press, C. (2017). Time on your hands: Perceived duration of sensory events is biased towards concurrent actions. Journal of Experimental Psychology: General, 146, 182-193. PMID: 28134542
- Bareš M., Apps R., Avanzino L., Breska A., D'Angelo E., Filip P., Gerwig M., Ivry R.B., Lawrenson C.L., Louis E.D., Lusk N.A., Manto M., Meck W.H., Mitoma H., Petter E.A. (2018). Consensus paper: Decoding the Contributions of the Cerebellum as a Time Machine. From Neurons to Clinical Applications. Cerebellum. doi: 10.1007/s12311-018-0979-5.
- Breska, A. and Ivry, R.B. (2018). Double dissociation of single-interval and rhythmic temporal prediction in cerebellar degeneration and Parkinson's disease. Proceedings of the National Academy of Sciences, 115: 12283-22288. PMID: 30424170
- Gijssels, T., Ivry, R.B., and Casasanto, D. (2018). tDCS to premotor cortex changes action verb understanding: Complementary effects of inhibitory and excitatory stimulation. Scientific Reports, 8: 11452, doi: 10.1038/s41598-018-29600-6. PMID: 30061670
- Kim, H. E., Morehead, J. R., Parvin, D. E., Moazzezi, R., & Ivry, R. B. (2018). Invariant errors reveal limitations in motor correction rather than constraints on error sensitivity. Communications Biology, 1:19. <https://doi.org/10.1038/s42003-018-0021-y>, PMID: 30271906
- Lebon F, Ruffino C, Greenhouse I, Labruna L, Ivry RB, Papaxanthis C. (2018). The neural specificity of movement preparation during actual and imagined movements. Cerebral Cortex, 29: 689-700. PMID: 29309536.
- Parvin, D. McDougale, S., Taylor, J., and Ivry, R.B. (2018). Credit assignment in a motor decision making task is influenced by agency and not sensorimotor prediction errors. Journal of Neuroscience, 38: 4521-4530. PMID: 29650698
- Diedrichsen, J., King, M., Hernandez-Castillo, C, Sereno, M., and Ivry, R.B. (2019). Universal transform or multiple functionality? Understanding the contribution of the human cerebellum across task domains. Neuron. 102:918-928. PMID: 31170400
- Houde, J.F., Gill, J.S., Agnew, Z., Kothare, H., Hickok, G.S., Parrell, B., Ivry, R.B., and Nagarajan, S.S. (2019). Abnormally increased vocal responses to pitch perturbations in patients with cerebellar degeneration. The Journal of the Acoustical Society of America Express Letters. 145:EL372. doi: 10.1121/1.5100910. PMID: 31153297.
- Labruna, L., Stark-Inbar, A., Breska A., Dabit M, Vanderschelden B., Nitsche M.A., and Ivry, R.B. (2019). Individual differences in TMS sensitivity influence the efficacy of tDCS in facilitating sensorimotor adaptation. Brain Stimulation, 12: 992-1000.
- Labruna, L., Tischler, C., Cazares, C., Greenhouse, I., Duque, J., Lebon, F., and Ivry, R.B. (2019). Planning face, hand, and leg movements: Anatomical constraints on preparatory inhibition. Journal of Neurophysiology. 121:1609-1620. PMID: 30785815
- Kim, H.E., Parvin, D.E., and Ivry, R.B. (2019). The influence of task outcome on implicit motor learning. eLife. doi: 10.7554/eLife.39882. PMID: 31033439
- King, M., Hernandez-Castillo, C.R., Poldrack, R.A., Ivry, R.B., and Diedrichsen, J., (2019). Functional boundaries in the human cerebellum revealed by a multi-domain task battery. Nature Neuroscience. 22:1371-1378. PMID: 31285616

- McDougle, S.D., Butcher, P.A., Parvin, D., Mushtaq, F., Niv, Y., Ivry, R.B, and Taylor, J.A. (2019). Neural signatures of prediction errors in a decision-making task are modulated by action execution failures. Current Biology. 29:1606-1613. PMID: 31056386
- Moberget, T. and Ivry, R.B. (2019). Prediction, psychosis, and the cerebellum. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 4: 820-831. PMID: 31495402
- Argyropoulos G.P.D, van Dun K., Adamaszek M., Leggio M., Manto M., Masciullo M., Molinari M., Stoodley C.J., Van Overwalle F., Ivry R.B., Schmahmann J.D. (2020). The Cerebellar Cognitive Affective/Schmahmann Syndrome: a Task Force Paper. Cerebellum. 19:102-125. PMID: 31522332; PMCID: PMC6978293.
- Aron, A.R., Ivry, R.B., Jefferey, K.J., Poldrack, R.A., Schmidt, R., Summerfield, C., Urai, A.E. (2020). How can neuroscientists respond to the climate emergency? Neuron, 106: 17-20.
- Breska, A. and Ivry, R.B. (2020). Context-specific control over the neural dynamics of temporal attention by the human cerebellum. Science Advances. 6(49):eabb1141. doi:10.1126/sciadv.abb1141. PMID: 33268365
- Hayashi, M.J. and Ivry, R.B. (2020). Duration-selectivity in right parietal cortex reflects the subjective experience of time. Journal of Neuroscience. 40(40):7749-7758. PMID: 32928883
- Miller, J.A., Kiyonaga, A., Ivry, R.B., and D'Esposito, M. (2020). Prioritized verbal working memory content biases ongoing action. Journal of Experimental Psychology: Human Perception & Performance. 2020 Oct 22:10.1037/xhp0000868. doi: 10.1037/xhp0000868.
- Raud, L, Huster, R.J., Ivry, R.B., Labruna, L., Messel, M.S., Greenhouse, I. (2020). A single mechanism for global and selective response inhibition under the influence of motor preparation. Journal of Neuroscience. 40(41):7921-7935. PMID: 32928884
- Tsay, J.S., Parvin, D.E., and Ivry, R.B., (2020). Continuous Reports of Sensed Hand Position During Sensorimotor Adaptation. Journal of Neurophysiology. 124:1122-1130. PMID: 32902347
- Avraham, G., Morehead, J.R., Kim, H.E., and Ivry, R.B. (2021). Re-exposure to a sensorimotor perturbation produces opposite effects on explicit and implicit learning processes. PLoS Biology. 19(3):e3001147. doi: 10.1371/journal.pbio.3001147. PMID: 33667219
- Breska, A. and Ivry, R.B. (2021). The human cerebellum is essential for modulating perceptual sensitivity based on temporal expectations. eLife, 10:e66743. doi: 10.7554/eLife.66743. PMID: 34165079
- Dixon, T.C., Merrick, C.M., Wallis, J.D., Ivry, R.B., and Carmena, J.M. (2021). Hybrid dedicated and distributed coding in PMd/M1 provides separation and interaction of bilateral arm signals. PLoS Computational Biology. 17(11):e1009615. doi: 10.1371/journal.pcbi.1009615. PMID: 34807905
- Kim, H.E., Avraham, G., and Ivry, R.B. (2021). The Psychology of Reaching: Action Selection, Movement Implementation, and Sensorimotor Learning. Annual Review of Psychology. 72:61-95. PMID: 32976728
- Parrell, B., Ivry, R.B., Nagarajan, S.S., Houde, J.F. (2021). Intact correction for self-produced vowel formant variability in individuals with cerebellar ataxia regardless of auditory feedback availability. Journal of Speech, Language, and Hearing Research. 64(6S):2234-2247. PMID: 33900786
- Parrell, B., Kim, H.E., Breska, A., Saxena, A., and Ivry, R.B. (2021). Differential effects of cerebellar degeneration on feedforward versus feedback control across speech and reaching movements. Journal of Neuroscience, 41:8779-8789. doi: 10.1523/JNEUROSCI.0739-21.2021. PMID: 34446570
- Saban, W. and Ivry, R.B. (2021). PONT: A protocol for online neuropsychological testing. Journal of Cognitive Neuroscience, 33:2413-2425. doi: 10.1162/jocn\_a\_0176. PMID: 34347867

- Sheltraw, D.J., Inglis, B., Labruna, L., and Ivry, R.B. (2021). Comparing the electric fields of transcranial electric and magnetic perturbation. Journal of Neural Engineering. 18(4). doi:10.1088/1741-2552/abebee. PMID: 33662947
- Tsay, J.S., Avraham, G., Kim, H.E., Parvin, D.E., Wang, Z., and Ivry, R.B., (2021). The effect of visual uncertainty on implicit motor adaptation. Journal of Neurophysiology. 125(1):12-22. PMID: 33236937
- Tsay, J.S., Kim, H.E., Parvin, D.E., Stover, A.R., and Ivry, R.B., (2021). Individual differences in proprioception predict the extent of implicit sensorimotor adaptation. Journal of Neurophysiology. 125:1307-1321. PMID: 33656948
- Avraham, G., Taylor, J.A., Breska, A., Ivry, R.B., and McDougale, S.D. (2022). Contextual effects in sensorimotor adaptation adhere to associative learning rules. eLife. 11:e75801. doi: 10.7554/eLife.75801. PMID: 36197002
- Ayanampudi, V., Kumar, V., Krishnan, A., Walker, M.P., Ivry, R.B., Knight, R.T., and Gurumoorthy, R. (2022). Personalized transcranial alternating current stimulation improves sleep quality: Initial Findings. Frontiers in Human Neuroscience. 16:1066453. doi: 10.3389/fnhum.2022.1066453.
- McDougale, S.D., Tsay, J.S., Pitt, B., King, M., Saban, W., Taylor, J.A., and Ivry, R.B. (2022). Continuous manipulation of mental representations is compromised in cerebellar degeneration. Brain. doi: 10.1093/brain/awac072. PMID: 35202465
- Merrick, C.M., Dixon, T.C., Breska, A., Lin, J.J., Change, E.F., King-Stephens, D., Laxer, K.D., Weber, P.B., Carmena, J.M., Knight, R.T., and Ivry, R.B. (2022). Left hemisphere dominance for bilateral kinematic encoding in the human brain. eLife. 11:e69977. doi: 10.7554/eLife.69977.PMID: 35227374
- Mushtaq, F., McDougale, S.D., Craddock, M.P., Parvin, D.E., Brookes, J., Schaefer, A., Mon-Williams, M., Taylor, J.A., and Ivry, R.B. (2022). Distinct neural signatures of outcome monitoring following selection and execution errors. Journal of Cognitive Neuroscience. 34:748-765. doi: 10.1162/jocn\_a\_01824. PMID: 35104323
- Terzic, L., Voegtle, A., Farahat, A., Hartong, N., Galazky, I., Nasuto, S.J., de Oliveira Andrade, A., Knight, R.T., Ivry, R.B., Voges, J., Buentjen, L., Sweeney-Reed, C.M. (2022). Deep brain stimulation of the ventrointermediate nucleus of the thalamus to treat essential tremor improves motor sequence learning. Human Brain Mapping. 43(15):4791-4799. doi: 10.1002/hbm.25989. PMID: 35792001
- Tsay, J.S., Kim, H.E., Saxena, A. Parvin, D.E., Versynten, T., and Ivry, R.B. (2022). Dissociable use-dependent processes for volitional goal-directed reaching. Philosophical Transactions Royal Society, London B Biological Sciences. 289:20220415. doi: 10.1098/rspb.2022.0415. PMID: 35473382
- Tsay, J.S., Haith, A.M., Ivry, R.B., and Kim, H.E. (2022). Interactions between sensory prediction error and task error during implicit motor learning. PLoS Computational Biology. 18(3):e1010005. doi: 10.1371/journal.pcbi.1010005. PMID: 35320276
- Tsay, J.S., Kim, H.E., Haith, A.M., and Ivry, R.B. (2022). Understanding implicit sensorimotor adaptation as a process of proprioceptive re-alignment. eLife. 15;11:e76639. doi: 10.7554/eLife.76639. PMID: 35969491
- Tsay, J.S., Najafi, T., Schuck, L., Wang, T., and Ivry, R.B. (2022). Implicit sensorimotor adaptation is preserved in Parkinson's Disease. Brain Communications. 4(6):fcac303. doi:10.1093/braincomms/fcac303. PMID: 36531745
- Tsay, J.S., Lee, A.S., Ivry, R.B., and Avraham, G. (in press). Moving outside the lab: The viability of conducting sensorimotor learning studies online. Neurons, Behavior, Data Analysis, and Theory.
- King, M., Bruinsma, S., and Ivry, R.B. (in press). No evidence for semantic prediction deficits in individuals with cerebellar degeneration. Neurobiology of Language.

Walters, J., King, M., Bissett, P., Ivry, R.B., Diedrichsen, J., and Poldrack, R.A. (in press). Predicting brain activation maps for arbitrary tasks with cognitive encoding models. NeuroImage.

Tsay, J.S., Schuck, L., and Ivry, R.B. (in press). Cerebellar degeneration impairs strategy discovery but not strategy recall. Cerebellum.

Tsay, J.T., Tan, S., Chu, M., Ivry, R.B., and Cooper, E.A. (in press). Low vision may impair implicit sensorimotor adaptation in response to small errors, but not large errors. Journal of Cognitive Neuroscience.

Tsay, J.T., Irving, C., and Ivry, R.B. (in press). Signatures of contextual interference in implicit sensorimotor adaptation. Proceedings of the Royal Society B: Biological Sciences.

King, M., Shahshahani, L., Ivry, R.B., Diedrichsen, J. (in press). A task-general connectivity model reveals variation in convergence of cortical inputs to functional regions of the cerebellum. eLife.

Wang, T., Luo, Y., Ivry, R.B., Tsay, J.S., Poppel, E., and Bao, Y. (in press). A Unitary Mechanism Underlies Adaptation to Both Local and Global Environmental Statistics in Time Perception. PLoS Computational Biology.

Binoy, S., Woody, R., Ivry, R.B., and Saban, W. (in press). Feasibility and Efficacy of Online Neuropsychological Assessment. Sensors.