

PERSONAL

P. Read Montague

Citizenship: USA

[Faculty Profile](#)

EDUCATION

1991-1992 **Fellow**, HHMI/Computational Neurobiology Lab, The Salk Institute for Biological Studies, La Jolla, CA
Sponsor: Terrence Sejnowski, PhD

1989-1991 **Fellow**, The Neurosciences Institute, Rockefeller University, New York, NY
Sponsor: Gerald Edelman, MD, PhD | Concentration: Theoretical Neurobiology

1988 **Ph.D. Biophysics**, University of Alabama at Birmingham School of Medicine, Birmingham, AL

1985 *Neurobiology Course*, Marine Biological Laboratory, Woods Hole, MA

1983 **B.S. Mathematics**, Auburn University, Auburn, AL

ACADEMIC APPOINTMENTS

2019-present **Director**, Center for Human Neuroscience Research, Fralin Biomedical Research Institute at VTC

2018-present **Honorary Professor**, The Wellcome Centre for Human Neuroimaging, University College London, UK

2016-present **Virginia Tech Carilion Vernon Mountcastle Research Professor**, *Inaugural Appointment*

2011-2018 **Wellcome Trust Principal Research Fellow**, The Wellcome Centre for Human Neuroimaging, University College London, UK

2010-present **Director**, Computational Psychiatry Unit, Fralin Biomedical Research Institute at VTC

2010-present **Director**, Human Neuroimaging Laboratory, Fralin Biomedical Research Institute at VTC

2010-present **Professor**, Department of Physics, College of Science, Virginia Tech

2010-present **Professor**, Psychiatry and Behavioral Medicine, Virginia Tech Carilion School of Medicine

2010-2013 **Adjunct Professor**, Department of Neuroscience, Baylor College of Medicine

2006-present **Honorary Professor**, Gatsby Computational Neuroscience Unit, University College London, UK

2005-2006 **Member**, Institute for Advanced Study

2003-2010 **Brown Foundation Professor of Neuroscience**, Baylor College of Medicine

2003-2010 **Professor**, Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine

2001-2010 **Director**, Human Neuroimaging Laboratory, Baylor College of Medicine

2001-2010 **Professor**, Department of Neuroscience, Baylor College of Medicine

1998-2001 **Associate Professor**, Division of Neuroscience, Baylor College of Medicine

1993-1998 **Assistant Professor**, Division of Neuroscience, Baylor College of Medicine

1992-1993 **Staff Scientist**, HHMI/Computational Neurobiology Lab, The Salk Institute for Biological Studies

HONORS AND AWARDS

Dorcas Cummings Memorial Lecture, Cold Spring Harbor Laboratory, 2018

Wellcome Trust Principal Research Fellowship, 2011-2018

Network Member, The MacArthur Foundation Research Network on Law and Neuroscience, 2011- 2016

William R. and Irene D. Miller Lectureship Recipient, Cold Spring Harbor Laboratory, 2011-2012

Walter Gilbert Award, Auburn University, 2011

Kavli Fellow, National Academy of Sciences, U.S.- China Frontiers of Science, 2010

Member, Institute for Advanced Study, 2005-2006

Michael E. DeBakey Excellence in Research Award, 1997, 2005

NATIONAL SCIENTIFIC PARTICIPATION

Review Panels:

Dana Foundation Career Network in Neuroscience & Society Panel, 2023

NIMH K99/R00 Review Panel, 2023

NIH Director's New Innovator Award, 2021

NIBIB P41 Review Panel, 2020, 2021

NIBIB BRAIN Initiative: Theories, Models and Methods Review Panel, 2019

Stanford University, Center for Mind, Brain and Computation, Member of Advisory Board

NIMH Research Domain Criteria Project (RDoC) Panel, 2013:
(RFA-MH-14-050) Dimensional Approaches to Research Classification in Psychiatric Disorders

NIH Center for Scientific Review, 2011:
Cognitive Neuroscience (COG) Study Section

NIH Director's Pioneer Award (NDPA) Review Panel, 2004

NASA Neuroscience (ground) Panel, 1999

NIH Study Section Integrative Functional Cognitive Neuroscience (IFCN) 8, 1998-2002

NIMH Cognitive Function Study Section, 1997; 1998

Ad hoc Reviewer: National Science Foundation, The Wellcome Trust

Reviewer for: Cerebral Cortex, Journal of Cognitive Neuroscience, Journal of Computational Neuroscience, Journal of Neurochemistry, Journal of Neurophysiology, Journal of Neuroscience, Journal of Theoretical Biology, Nature, Nature Neuroscience, Network: Computation in Neural Systems, Neural Computation, NeuroImage, Neuron, Psychological Review, Science, The Lancet

Organizer for:

- 2018 Computational Psychiatry: from theory to practice, San Diego, CA, Nov 2-3
- 2017 Computational Psychiatry: a didactic introduction, Washington, DC, Nov 10-11
- 2013 Computational Psychiatry, Miami, FL, Oct 22-23
- 2011 Organizing Committee, Chinese-American Kavli Frontiers of Science Symposium, Shenzhen, China, Nov 5-7
- 2004 Neuroeconomics, Kiawah Island, SC, Sept 16-19

PRESENTATIONS

- 2024 Invited | Caltech Conference, Pasadena, CA, December 7
- 2024 Invited | Shenandoah Club Guest Speaker, Roanoke, VA, March 22
- 2023 Invited | Neuroeconomics Seminar, Zürich Center for Neuroeconomics, University of Zürich, Zürich, Switzerland, TBD
- 2023 North Cross School, Roanoke, VA, Nov 28
- 2023 Maury Strauss Distinguished Public Lecture, Fralin Biomedical Research Institute at VTC, Roanoke, VA, Sep 28
- 2023 Neuroscience, Virtual Reality, and Computational Modeling Summer School (Virtual), East China Normal University, Shanghai, China, Aug 26
- 2023 Learning and Memory Seminar, UCI Conte Center & Center of Neurobiology of Learning and Memory, University of California, Irvine, July 11
- 2023 WVU Rockefeller Neuroscience Institute, West Virginia University Health System, Morgantown, WV, Jan 24
- 2023 Brain and Mind Workshop (Hybrid), Hokkaido, Japan, Jan 5-7

- 2022 Center for Computational Brain Science, Carney Institute for Brain Science, Brown University, Providence, RI, Nov 1
- 2022 Arousal, Attention and Motivation, Neuroscience School of Advanced Studies, Venice, Italy, Sept 10-17
- 2022 Nobel Mini-Symposium, Karolinska Institutet, Stockholm, Sweden, Sept 8-9
- 2022 International Precision Neuroscience Conference, Roanoke, VA, May 25-26
- 2022 North Cross School, Roanoke, VA, Feb 25

- 2021 Keynote Speaker, Summer Research Retreat (Virtual), School of Neuroscience, College of Science, Virginia Tech, Blacksburg, VA, Aug 6
- 2021 Law and Neuroscience (Virtual Seminar), Harvard Law School, Cambridge, MA, Apr 7
- 2021 Altered States of the Human Mind: Implications for Anthropogeny (Virtual Symposia), Center for Academic Research and Training in Anthropogeny (CARTA), UCSD, San Diego, CA, March 13-14

- 2020 From Computation to Clinic-Identifying and Overcoming Barriers to Clinical Translation of Computational Models of Cognition and Affect (Virtual Study Group), American College of Neuropsychopharmacology 59th Annual Meeting, Dec 9
- 2020 *Postponed* | Neuroscience School of Advanced Study, Firenze, Italy, Jun 20-27
- 2020 *Postponed* | Biomedical Engineering Seminar Series, Virginia Tech, Blacksburg, VA, Apr 21
- 2020 *Postponed* | Geneva Finance Research Institute, University of Geneva, Geneva, Switzerland, Apr 2
- 2020 *Postponed* | McLean Hospital Neuroscience Seminar Series, Harvard Medical School, Boston, MA, Mar 24
- 2020 Computational Psychiatry Workshop, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, CA, Feb 18-21

- 2019 Wake Forest Neuroscience Research Day, Wake Forest University, Winston Salem, NC, Dec 4
- 2019 Collaboratory Science in Society, Institute for Neural Computation at University of California, San Diego, CA, Oct 29
- 2019 Laureate Institute for Brain Research, Tulsa, OK, Oct 1
- 2019 Summer Seminars in Neuroscience and Philosophy (SSNAP), Duke Institute for Brain Sciences, Duke University, Durham, NC, Aug 16
- 2019 Computational Psychiatry Course, New York, NY, Jul 29-30
- 2019 Kavli Summer Institute in Cognitive Neuroscience (SICN), University of California, Santa Barbara, CA, Jul 1
- 2019 Virginia Drug Discovery Consortium Symposium, Roanoke, VA, May 21
- 2019 Ephaptic Coupling Conference, Fralin Biomedical Research Institute at VTC, Roanoke, VA, May 6
- 2019 Keynote Speaker, George Mason University Computational Social and Affective Neuroscience Preconference, Miami, FL, May 2
- 2019 Institute des Sciences Cognitives, Lyon, France, Mar 29

- 2018 Neuroeconomics Colloquium, Institute for the Study of Decision Making, New York University, New York, NY, Dec 4
- 2018 Computational Psychiatry 2018: from theory to practice, San Diego, CA, Nov 2-3
- 2018 Cutting Edge Neuroscience, Cutting Edge Neuroethics, International Neuroethics Society, San Diego, CA, Nov 1
- 2018 Fifth Lake Lucerne Neurofinance Conference, Lake Lucerne, Switzerland, Sept 13-15
- 2018 Computational Psychiatry Course, Translational Neuromodeling Unit, University of Zurich, Zurich, Switzerland, Sept 13
- 2018 Computational Psychiatry Course, Wellcome Trust Centre for Neuroimaging, University College London, London, UK, Jul 26
- 2018 Dorcas Cummings Memorial Lecture, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, Jun 2
- 2018 Brains and Behavior: Order and Disorder in the Nervous System, Cold Spring Harbor Laboratory Symposium, Cold Spring Harbor, NY, May 31

2018 Keynote Speaker, Symposium for Young Neuroscientists and Professors of the Southeast (SYNAPSE), High Point University, High Point, NC, Apr 14

2018 Center for Complex Systems and Brain Sciences, Florida Atlantic University, Boca Raton, FL, Apr 10

2018 Department of Psychology, University of Virginia, Charlottesville, VA, Mar 30

2017 Computational Psychiatry: a didactic introduction, Washington, DC, Nov 10-11

2017 Keynote Speaker, Research Symposium, Biocomplexity Institute of Virginia Tech, Blacksburg, VA, Nov 8

2017 Current Challenges in Computing Conference, Napa, CA, Sept 10-12

2017 Computational Psychiatry Course, University College London, London, UK, Jul 24-25

2017 NIMH Computational Psychiatry: Opportunities and Challenges for the Future, Bethesda, MD, Jun 26-27

2017 The Neural Framework for Moral Cognition, The Neuroscience School of Advanced Studies, Sestri Levante, Italy, Jun 16

2017 Joint Specialist Registrar Teaching Programme, University College London, London, UK, Jun 7

2017 Department of Psychiatry and Laboratory of Molecular Neuroimaging, Yonsei University, Seoul, South Korea, May 19

2017 Avison Biomedical Symposium, Yonsei University College of Medicine, Seoul, South Korea, May 18

2017 NSP Spring Seminar Series, Beckman Institute, University of Illinois at Urbana-Champaign, Urbana, IL, Apr 25

2017 Neuroscience Research Seminar Series, Arizona State University, Tempe, AZ, Apr 13

2017 First Friday, Inn at Virginia Tech, Blacksburg, VA, Apr 7

2017 Pleasure, Reward and Value Conference, Brown University, Providence, RI, Mar 17-19

2017 The Brain: An Owner's Guide, Center for BrainHealth Lecture Series, The University of Texas at Dallas, Dallas, TX, Feb 28

2017 Adrian Seminars in Neuroscience, University of Cambridge, Cambridge, UK, Feb 20

2017 Cognition and Psychiatric Diseases Symposium, ICM Brain and Spine Institute, Paris, France, Feb 2

2016 Society for Neuroscience Annual Meeting, San Diego, CA, Nov 14

2016 Invited Speaker, Honors Residential Commons, Principal's Tea, Virginia Tech, Blacksburg, VA, Oct 28

2016 Melbourne Brain Symposium, Melbourne, Australia, Oct 13

2016 Minds on Markets: A Public Lecture, Faculty of Business and Economics, Melbourne Business School, The University of Melbourne, Oct 12

2016 Society for Neuroscience, Melbourne Chapter, Melbourne Brain Centre, Melbourne, Australia, Oct 12

2016 Decision Neuroscience Symposium, University of Melbourne Neuroscience Institute, Melbourne, Australia, Oct 11

2016 Virginia-Nordic Precision Neuroscience Conference, Virginia Tech Carilion Research Institute, Roanoke, VA, Oct 5

2016 Social and Behavioral Sciences for National Security Summit, The National Academies of Sciences, Engineering, and Medicine, Washington, DC, Oct 4

2016 Dopamine Workshop, Gatsby Computational Neuroscience Unit, University College London, UK, Sept 28-30

2016 North Cross School, Roanoke, VA, Sept 22

2016 Conversations with Leaders: The Next Frontier for Virginia's Life Science Sector, Lead Virginia, Richmond, VA, Sept 20

2016 MD Anderson Cancer Center, Houston, TX, Aug 16

2016 Center for BrainHealth, The University of Texas at Dallas, Dallas, TX, Jun 17

2016 Depression Grand Challenge Seminar, UCLA Center for Neurobehavioral Genetics, Los Angeles, CA, Jun 16

2016 The Addicted Brain and New Treatment Frontiers: Sixth Annual Aspen Brain Forum, New York, NY, May 20

2016 Virginia Bio, Richmond, VA, May 12

2016 Keynote Speaker, California Cognitive Science Conference, University of California, Berkeley, Berkeley, CA, Apr 30

2016 Center for BrainHealth, The University of Texas at Dallas, Dallas, TX, Apr 14

2016 The Brain and Political Ideology, Science and Society Symposium, Duke University, Durham, NC, Apr 8

2016 Computational Psychiatry Symposium, Cognitive Neuroscience Society, New York, NY, Apr 3

2016 Vassar College, Poughkeepsie, NY, Apr 1

2016 Beyond Boundaries Forum, Arlington, VA, Mar 31

2016 Interpreting BOLD: a dialogue between cognitive and cellular neuroscience, Kavli Royal Society International Centre, Buckinghamshire, UK, Jan 28-30

2016 Rutgers Brain Health Institute, Rutgers University, New Brunswick, NJ, Jan 14

2015 International Symposium on Prediction and Decision Making, University of Tokyo, Japan, Oct 31-Nov 1

2015 Brain Stimulation Based Neural Circuits Modeling: Linking levels of Analysis, Satellite Symposium, Society for Neuroscience Annual Meeting, Chicago, IL, Oct 16

2015 Grand Rounds, Columbia University Irving Medical Center, New York, NY, Oct 14

2015 Champalimaud Neuroscience Symposium: Perspectives on Social Behavior, Champalimaud Centre for the Unknown, Lisbon, Portugal, Sep 18

2015 Computational Psychiatry: What Can Theoretical Neuroscience and Psychiatry Teach Each Other?, Ernst Strüngmann Forum, Frankfurt, Germany, Jun 28 – Jul 3

2015 Medical University of South Carolina, Charleston, SC, May 26

2015 Queensland Brain Institute, University of Queensland, St. Lucia, Australia, May 6

2015 Queensland Institute of Medical Research Berghofer, Brisbane, Australia, May 5

2015 Keynote Speaker, Royal Australian and New Zealand College of Psychiatrists 2015 Congress, Brisbane, Australia, May 4

2015 Implications of Research on the Neuroscience of Affect, Attachment and Social Cognition Conference, University College London, London, UK, Apr 26

2015 Reciprocity and Social Cognition, Berlin School of Mind and Brain, Humboldt Universität zu Berlin, Berlin, Germany, Mar 24

2014 Smart Approaches to Marijuana (SAM) Conference, Virginia Tech Carilion Research Institute, Roanoke, VA, Nov 3
 2014 Keynote Speaker, Children's National Medical Center, George Washington University, Washington, DC, Oct 14
 2014 Crowd Cognition, Max Planck Summer School, London, UK, Jul 9-11
 2014 Computational Psychiatry Course, Wellcome Trust Centre for Neuroimaging, London, UK, May 14
 2014 Department of Psychiatry Grand Rounds, University of Virginia, Charlottesville, VA, Apr 29
 2014 Vanderbilt University, Nashville, TN, Apr 14
 2014 Rethinking Regulation and Reform: Behavioral Economics and the Regulatory State, Fifth Annual Triangle Law and Economics Conference, Duke University, Durham, NC, Apr 11
 2014 Cognitive Neuroscience Colloquium, Duke Institute for Brain Sciences, Duke University, Durham, NC, Apr 11
 2014 Neuromarketing World Forum, New York, NY, Mar 6
 2014 Virginia Tech – Wake Forest University School of Biomedical Engineering and Sciences, Blacksburg, VA, Mar 27
 2014 University of Pennsylvania, Philadelphia, PA, Feb 3-4
 2014 Georgia Institute of Technology, Atlanta, GA, Jan 14
 2014 Center for Advanced Brain Imaging, Parker H. Petit Institute for Bioengineering and Bioscience, Georgia State University, Atlanta, GA, Jan 13

 2013 Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, Oct 31
 2013 Redefining Disease Concepts in Psychiatry: A "Hilbert List" for Translational Research, Translational Neuromodeling Unit Symposium, Zurich, Switzerland, Sept 18-20
 2013 Salem Veterans Affairs Medical Center, Salem, VA, Sept 3
 2013 Workshop on the Mechanism of Brain and Mind, Nagoya Congress Center, Aichi, Japan, Aug 30
 2013 Annual Meeting of the Research Society on Alcoholism, Grand Cypress, FL, Jun 23
 2013 Implications of Research on the Neuroscience of Affect, Attachment and Social Cognition Conference, University College London, London, UK, May 18-19
 2013 Annual Interdisciplinary Symposium on Decision Neuroscience, Temple University, Philadelphia, PA, May 5
 2013 New Experimental Approaches to Human Brain Function in Health and Disease, Symposium, Society for Experimental Biology and Medicine, Boston, MA, Apr 21
 2013 Mike McKay Annual Lecture on the Mind, Randolph Macon College, Ashland, VA, Apr 11
 2013 Accelerating Therapeutic Development for Nervous System Disorders Toward First in Human Trials, Institute of Medicine of the National Academies, Washington, DC, Apr 8

 2012 William R. and Irene D. Miller Lectureship, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, Oct 23
 2012 Dynamical Neuroscience XX, Collective Cognition: The Neurophysiology of Social Neuroscience, New Orleans, LA, Oct 11
 2012 Society for Neuroeconomics, Key Biscayne, FL, Sept 28
 2012 Korea Brain Research Institute, Daegu, South Korea, Sept 24
 2012 Radical Openness Conference, TEDGlobal 2012, Edinburgh, Scotland, Jun 27
 2012 Yale University, School of Medicine, New Haven, CT, Apr 11
 2012 Virginia Psychological Association, Roanoke, VA, Apr 6
 2012 School of Psychology, University of Nottingham, Nottingham, UK, Mar 21
 2012 What is Information in the Brain, DSRC/DARPA, George Mason University, Fairfax, VA, Mar 15
 2012 Brain and Computation, Stanford University, Stanford Center for Mind, Stanford, CA, Feb 29
 2012 St. Andrew's School, Middletown, DE, Feb 10
 2012 Medical Research Council Cognition and Brain Sciences Unit, University of Cambridge, Cambridge, UK, Jan 19

 2011 Foundations of Human Social Behavior, University of Zurich, Zurich, Switzerland, Dec 8
 2011 Society for Neuroeconomics, Evanston, IL, Sept 30-Oct 2
 2011 Annual Interdisciplinary Symposium on Decision Neuroscience, Temple University, Philadelphia, PA, Sept 16-18
 2011 Gatsby Computational Neuroscience Unit, University College London, London, UK, Jun 13
 2011 B.F. Skinner Lecture, Association for Behavior Analysis International, Denver, CO, May 30
 2011 Neuroeconomic Approaches to Mental Disorders, NIH Seminar Series, Bethesda, MD, May 2
 2011 Free Will and Responsibility, Transcending the Boundaries Symposium, Duke University, Durham, NC, Apr 14-16
 2011 Safra Symposium on the Scientific Basis of Conflict of Interest: The Role of Implicit Cognition, Harvard University, Cambridge, MA, Apr 12-14
 2011 Ethics Grand Rounds, University of Texas Southwestern Medical Center Dallas TX, Apr 11-12
 2011 NeuroMetric Market Behavior Prediction using Movie Trailers, EmSense Corporation New York, NY, Mar 21
 2011 Raymond and Beverly Sackler USA-UK Scientific Forum: Neuroscience and the Law, Irvine, CA, Mar 2-3
 2011 Motivation and Reward Studies in Social Neuroscience, Yonsei University, College of Medicine, Seoul, Korea, Feb 25

 2010 The Neurobiology of Political Violence: New tools, New Insights Conference, Silver Springs, MD, Dec 1-2
 2010 Southern Economic Association, Atlanta, GA, Nov 20-22
 2010 Adolescent Psychiatry Meeting, New York, NY, Oct 28-29
 2010 Dean's Distinguished Lecture, University of Arkansas for Medical Sciences, Little Rock, AR, Oct 12
 2010 Chinese-American Kavli Frontiers of Science Symposium, Irvine, CA, Sept 23-24
 2010 Computational Neuroscience Meeting, San Antonio, TX, Jul 27-28
 2010 Mount Sinai Brain Institute Translational Neuroscience Seminar Series, New York, NY, Jun 17

- 2010 NCCAM Advisory Council Strategic Planning Meeting, Bethesda, MD, Jun 3
 2010 Biological Sciences Advising Center, University of Texas at Austin, TX, Apr 28
 2010 7th Annual Skoll World Forum, University of Oxford, Oxford, UK, Apr 14-16
 2010 UC Davis Neuroscience Seminar Series, Davis, CA, Apr 8
 2010 The Interventional Centre, Rikshospitalet, Oslo, Norway, Mar 25
 2010 Yonsei University, College of Medicine, Seoul, Korea, Feb 26 - 27
 2010 Grand Rounds, University of Texas Southwestern Medical Center, Dallas, TX, Jan 20
 2010 NIDA Exploring Interconnections Workshop, Bethesda, MD, Jan 13
- 2009 Neuroscience Research Seminar, John Hopkins University, Baltimore, MD, Dec 10
 2009 American College of Neuropsychopharmacology, Hollywood, FL, Dec 8
 2009 Mind Science Foundation, San Antonio, TX, Oct 26
 2009 Tools for Recognizing Unconscious Signals of Trustworthiness Workshop, Arlington, VA, Sept 29
 2009 Oregon Health and Science University, Portland, OR, Aug 25
 2009 International Society for the Study of Personality Disorders, New York, NY, Aug 21
 2009 Wellcome Trust Centre for Neuroimaging Brain Meeting Series, London, UK, Jul 24
 2009 NIH Roadmap Meeting on the Science of Behavior Change, Bethesda, MD, Jun 15-16
 2009 Max Planck Institute for Human Development Colloquium Series, Center for Lifespan Psychology, Berlin, Germany, May 3-7
 2009 Neuroeconomics Summit (*Guest of Al Gore*), New York, NY, May 1
 2009 Psychogenic Movement Disorders and Related Conversion Disorders Conference, Washington, DC, Apr 3
 2009 Central Virginia Chapter of the Society for Neuroscience Symposium, Richmond, VA, Mar 12-13
 2009 Plenary Grand Rounds, Neuroscience, Medical University of South Carolina, Charleston, SC, Mar 4-5
 2009 Computational and Systems Neuroscience Meeting (Cosyne09), Salt Lake City, UT, Feb 26-Mar 1
 2009 American Neuropsychiatric Association, San Antonio, TX, Feb 19-22
- 2008 Roadmap to Define Neurobiological Mechanisms of Political Conflict, Arlington, VA, Dec 15-16
 2008 Trilience Conference, California Institute of Technology, Pasadena, CA, Nov 18-19
 2008 AAMC, Group on Institutional Advancement, San Antonio, TX, Nov 2
 2008 Neuroimaging in Obesity Research, National Institutes of Health, Bethesda, MD, Oct 27
 2008 Weill Medical College of Cornell University, New York, NY, Sept 25
 2008 Forum on Conflict of Interest in Academe, Mayo Clinic, Rochester, MN, Sept 14-16
 2008 Wellcome Trust Centre for Neuroimaging, Institute of Neurology, University College London, London, UK, Jul 21-25
 2008 SRC/NSF/ITRS Forum on 2020 Computing: Virtual Immersion Architectures, University of California, Santa Cruz, CA, Jul 10-11
 2008 Institute of Medicine's Forum on Neuroscience and Nervous System Disorders Workshop, "From Molecules to Mind: Challenges for the 21st Century," Washington DC, Jun 25
 2008 Imaging Imagining-National Institute of Mental Health and the National Institute on Drug Abuse Workshop, Rockville, MD, Feb 20-21
 2008 Edwin Gildea Lecture, Dept. of Psychiatry, Washington University, St. Louis, MO, Feb 12
 2008 University of Arizona Colloquium Series, Psychology Department, Tucson, AZ, Feb 1
 2008 Neuroeconomics Decision Making and the Brain Symposium, New York University, New York, NY, Jan 11-13
- 2007 The Behavior and Experimental Economics Workshop, Department of Economics, Harvard University, Cambridge, MA, Dec 11
 2007 Massachusetts Institute of Technology, Cambridge, MA, Nov 30
 2007 NINDS - A Blue Sky Vision for the Future of Neuroscience: Expert Panel, Washington, DC, Nov 13-14
 2007 37th Annual Society for Neuroscience Meeting, San Diego, CA, Nov 3-7
 2007 Keynote Speaker, Computational Cognitive Neuroscience Conference, San Diego, CA, Nov 1
 2007 Annual Keck Center Research Conference, League City, TX, Oct 11-12
 2007 NIDA Science Meeting- Social Neuroscience: Developing More Powerful Behavioral Interventions, Oct 1-2
 2007 Gordon Research Conference, Salve Regina University, Newport, RI, Jul 1-6
 2007 International Society for New Institutional Economics Conference, Reykjavik, Iceland, Jun 21-23
 2007 Reciprocity and Influence, AAMC, Washington, DC, Jun 12
 2007 Cognitive Neuroscience Society Annual Meeting, New York, NY, May 5-6
 2007 University of Alabama at Birmingham, Birmingham, AL, Apr 29-May 1
 2007 Computational Neuroscience Frontiers Meeting, Wellcome Trust, London, UK, Apr 16-17
 2007 Winter Conference on Brain Research, Snowmass Village, CO, Jan 22-Feb 2

MENTORSHIP: MEDICAL STUDENTS, PHD CANDIDATES & POSTDOCTORAL FELLOWS

Medical Students (2020-present): Patrick D'Onofrio

Ph.D. Candidates (1996-present): Josepheen Cruz, Xu Cui, David Eagleman, Amnah Eltahir, Ann Harvey, Gecia Hermsdorff, Richard King, Misha Koshelev, Jian Li, James Lu, Samuel McClure, Jamie Nelson, Nishika Raheja, Damon Tomlin, Ting Xiang

Postdoctoral Fellows (2000-present): Woo-Young Ahn, Ph.D., Zimbul Albo, Ph.D, Phillip Baldwin, Ph.D., Leonardo Barbosa, Ph.D., Seth Batten, Ph.D., Meghana Bhatt, Ph.D., Srinivasa Chakravarthy, Ph.D., Pearl Chiu, Ph.D., Kimberlee D'Ardenne, Ph.D., Jonathan Downar, Ph.D., Amnah Eltahir, Ph.D., Geoffrey Goodhill, Ph.D., Xiaosi Gu, Ph.D, Santosh Helekar, Ph.D., Sébastien Héту, Ph.D., Kevin Hill, Ph.D., Beniamino Hadj-Amar, Ph.D., Andreas Hula, Ph.D., Amin Kayali, Ph.D., Brooks King-Casas, Ph.D., Ulrich Kirk, Ph.D., Kenneth Kishida, Ph.D., Brie Linkenhoker, Ph.D., Laura Lomax-Bream, Ph.D., Yi Luo, Ph.D., Brandi Mattson, Ph.D., Tobias Nolte, Ph.D., Dustin Pluta, Ph.D., Ignacio Saez, Ph.D., Lester "Paul" Sands III, Ph.D., Carla Sharp, Ph.D., Alireza Soltani, Ph.D., Alec Solway, Ph.D., Lane Strathearn, Ph.D., Iris Vilares, Ph.D., Michael Wesley, Ph.D., Michael Wiest, Ph.D., Dongni Yang, Ph.D.

BOOKS

Montague, P. R. (2006). *Why Choose This Book?* (1st ed.). Dutton Press.

PUBLICATIONS (see also [Publication List](#))

- Batten, S.R., Bang, D., Kopell, B.H. *et al.* Dopamine and serotonin in human substantia nigra track social context and value signals during economic exchange. *Nat Hum Behav* (2024). [PDF](#)
Briefing: Neuromodulators in the human brain track context and value during social interaction. *Nat Hum Behav* (2024). [PDF](#)
- Zerban, M., Puhmann, L. M. C., Lassri, D., Fonagy, P., Montague, P. R., Kiselnikova, N., Lorenzini, N., Desatnik, A., Kalisch, R., & Nolte, T. (2023). What helps the helpers? Resilience and risk factors for general and profession-specific mental health problems in psychotherapists during the COVID-19 pandemic. *Frontiers in psychology*, *14*, 1272199. [PDF](#)
- Luo, Y., Pluta, D., Brodrick, B. B., Palka, J. M., McCoy, J., Lohrenz, T., Gu, X., Vannucci, M., Montague, P. R., & McAdams, C. J. (2023). Diminished Adaptation, Satisfaction, and Neural Responses to Advantageous Social Signals in Anorexia Nervosa and Bulimia Nervosa. *Biological psychiatry. Cognitive neuroscience and neuroimaging*, *S2451-9022(23)00307-5*. Advance online publication. [DOI](#)
- Liebenow, B., Wilson, T., Maas, B., Aladnani, E., Moran, R. J., White, J., Lohrenz, T., Haq, I. U., Siddiqui, M. S., Laxton, A. W., Tatter, S. B., Montague, P. R., & Kishida, K. T. (2023). Sub-second Dopamine Signals during Risky Decision-Making in Patients with Impulse Control Disorder. *bioRxiv : the preprint server for biology*, 2023.09.11.557178. [PDF](#)
- Sands, L. P., Jiang, A., Liebenow, B., DiMarco, E., Laxton, A. W., Tatter, S. B., Montague, P. R., & Kishida, K. T. (2023). Subsecond fluctuations in extracellular dopamine encode reward and punishment prediction errors in humans. *Science advances*, *9*(48), eadi4927. [PDF](#)
- Bang, D., Luo, Y., Barbosa, L. S., Batten, S. R., Hadj-Amar, B., Twomey, T., Melville, N., White, J. P., Torres, A., Celaya, X., Ramaiah, P., McClure, S. M., Brewer, G. A., Bina, R. W., Lohrenz, T., Casas, B., Chiu, P. H., Vannucci, M., Kishida, K. T., Witcher, M. R., ... Montague, P. R. (2023). Noradrenaline tracks emotional modulation of attention in human amygdala. *Current biology : CB*, *33*(22), 5003–5010.e6. [PDF](#)
Commentary: Kim, A. J. (2023). Noradrenaline: Can we now directly measure in humans?. *Current Biology*, *33*(24), R1294-R1296
- Wendt, L. P., Jankowsky, K., Schroeders, U., London Personality and Mood Disorder Research Consortium, Nolte, T., Fonagy, P., Montague, P. R., Zimmermann, J., & Olaru, G. (2023). Mapping established psychopathology scales onto the Hierarchical Taxonomy of Psychopathology (HiTOP). *Personality and mental health*, *17*(2), 117–134. [PDF](#)
- Holmes, N., Rea, M., Hill, R. M., Boto, E., Leggett, J., Edwards, L. J., Rhodes, N., Shah, V., Osborne, J., Fromhold, T. M., Glover, P., Montague, P. R., Brookes, M. J., & Bowtell, R. (2023). Naturalistic Hyperscanning with Wearable Magnetoencephalography. *Sensors (Basel, Switzerland)*, *23*(12), 5454. [DOI](#)
- Yang, R., Ma, Y., Pan, B. B., Bhatt, M. A., Lohrenz, T., Gu, H. G., Kanen, J. W., Camerer, C. F., Montague, P. R., & Luo, Q. (2022). Dynamic neural reconfiguration for distinct strategies during competitive social interactions. *NeuroImage*, *263*, 119585. [PDF](#)
- O'Driscoll, C., Nolte, T., Pilling, S., Feigenbaum, J., King-Casas, B., Leibowitz, J., ... Montague, P. R. (2022, July 11). The Effects of Diagnostic Group on the Association Between Personality and Psychopathological Symptoms: A Moderated Network Analysis. [PDF](#)
- Yip, S. W., Barch, D. M., Chase, H. W., Fligel, S., Huys, Q. J. M., Konova, A. B., Montague, P. R., & Paulus, M. (2022). From Computation to Clinic. *Biological Psychiatry Global Open Science*. [PDF](#)
- Stagaki, M., Nolte, T., Feigenbaum, J., King-Casas, B., Lohrenz, T., Fonagy, P., & Montague, P. R. (2022). The mediating role of attachment and mentalising in the relationship between childhood maltreatment, self-harm and suicidality. *Child abuse & neglect*, *128*, 105576. [PDF](#)
- Twomey, T., Barbosa, L., Lohrenz, T., & Montague, P. R. (2022). Deep Learning Architectures for FCSV, a Comparison. arXiv Preprints, arXiv:2212.01960. [PDF](#)

- Mancinelli, F., Nolte, T., Griem, J., Lohrenz, T., Feigenbaum, J., King-Casas, B., Montague, R., Fonagy, P., & Mathys, C. (2022). A Move-by-Move Paradigm for the Computational Characterization of Attachment Style and Personality Disorder. *PsyArXiv Preprints*. [PDF](#)
- Moran, R., Stephan, K. E., Botvinick, M., Breakspear, M., Carter, C. S., Kalivas, P. W., Montague, P. R., Paulus, M. P., & Petzschner, F. (2022). Candidate Examples for a Computational Approach to Address Practical Problems in Psychiatry. In *Computational Psychiatry: New Perspectives on Mental Illness* (Vol. 20, pp. 223–241). essay, MIT Press.
- Manavalan, M., Song, X., Nolte, T., Fonagy, P., Montague, P. R., & Vilares, I. (2022). Bayesian Decision-Making Under Uncertainty in Borderline Personality Disorder. [PDF](#)
- Luo, Y., Mendoza, C., Pelfrey, S., Lohrenz, T., Gu, X., Montague, P. R., & McAdams, C. J. (2022). Elevated Neurobehavioral Responses to Negative Social Interactions in Women With Bulimia Nervosa. *Biological psychiatry. Cognitive neuroscience and neuroimaging*, 7(7), 696–705. [PDF](#)
- Zhao, Z., Hampson, M., Nolte, T., Fonagy, P., Network, L. P. a. M. D. R., King-Casas, B., ... Montague, P. R. (2022). Transdiagnostic Brain Connectivity Markers of Dissociation during Resting State. [PDF](#)
- Eltahir, A., White, J., Lohrenz, T., & Montague, P. R. (2021). Low Amplitude Burst Detection of Catecholamines. *bioRxiv Preprints*, 1-12. [PDF](#)
- Lahnakoski, J. M., Nolte, T., Solway, A., Vilares, I., Hula, A., Feigenbaum, J., Lohrenz, T., Fonagy, P., Montague, P. R., & Schilbach, L. (2021). Multiscale Classification Reveals a Multivariate Functional Connectivity Marker for Borderline Personality Disorder. *OSF Preprints*, 1-34. [PDF](#)
- Rifkin-Zybutz, R.P., Moran, P., Nolte, T. *et al.* Impaired mentalizing in depression and the effects of borderline personality disorder on this relationship. *borderline personal disord emot dysregul* 8, 15 (2021). [PDF](#)
- Michael J, Chennells M, Nolte T, Ooi J, Griem J, London Personality and Mood Disorder Research Network, Christensen W, Feigenbaum J, King-Casas B, Fonagy P, & Montague PR. (2021). Probing commitment in individuals with borderline personality disorder. *Journal of Psychiatric Research* 137: 335-341. [PDF](#)
- Stagaki, M., Nolte, T., Feigenbaum, J., King-Casas, B., Lohrenz, T., Fonagy, P., & Montague, P. R. (2021). The Mediating Role of Attachment and Mentalising in the Relationship between Childhood Trauma, Self-Harm and Suicidality. *PsyArXiv Preprints*, 1-53. [PDF](#)
- Luo, Y., Shuster, A., Chung, D., O'Brien, M., Heflin, M., Perl, O., Kulkarni, K., Na, S., Fiore, V. G., Montague, P. R., & Gu, X. (2021). Altruism in a Time of Crisis: Dissociable Social Valuation and Perception During Covid-19 in the United States. *PsyArXiv Preprints*, 1-35. [PDF](#)
- Farah, MJ, Sternberg, S, Nichols, TA, Duda, JT, Lohrenz, T, Luo, Y, Sonnier, ME, Ramey, SL, Montague, P, & Ramey, CT. (2021). Randomized Manipulation of Early Cognitive Experience Impacts Adult Brain Structure. *Journal of Cognitive Neuroscience*, 1-13. [PDF](#)
- Bang, D., Kishida, K. T., Lohrenz, T., White, J. P., Laxton, A. W., Tatter, S. B., Fleming, S. M., & Montague, P. R. (2020). Sub-second Dopamine and Serotonin Signaling in Human Striatum During Perceptual Decision-Making. *Neuron* 108(5), 999-1010. [PDF](#)
- Hula, A., Moutoussis, M., Will, G.-J., Kokorikou, D., Reiter, A., Ziegler, G., NSPN Consortium, Bullmore, E., Jones, P., Goodyer, I., Fonagy, P., Montague, P. R., & Dolan, R. J. (2020). Multi-Round Trust Game Quantifies Inter-Individual Differences in Social Exchange from Adolescence to Adulthood. *PsyArXiv Preprints*, 1-20. [PDF](#)
- Jones, O. D., Montague, P. R., & Yaffe, G. (2020). Detecting Mens Rea in the Brain. *University of Pennsylvania Law Review*, 169(1). [PDF](#)
- Huang, Y. L., Fonagy, P., Feigenbaum, J., Montague, P. R., Nolte, T., & London Personality and Mood Disorder Research Consortium. (2020). Multidirectional Pathways between Attachment, Mentalizing, and Posttraumatic Stress Symptomatology in the Context of Childhood Trauma. *Psychopathology*, 1-11. [PDF](#)
- Kappes, A., Harvey, A. H., Lohrenz, T., Montague, P. R., & Sharot, T. (2020). Confirmation Bias in the Utilization of Others' Opinion Strength. *Nature Neuroscience*, 23(1), 130-137. [PDF](#)
- Wendt, L. P., Wright, A. G. C., Pilkonis, P. A., Nolte, T., Fonagy, P., Montague, P. R., Benecke, C., Krieger, T., & Zimmermann, J. (2019). The Latent Structure of Interpersonal Problems: Validity of Dimensional, Categorical, and Hybrid Models. *Journal of Abnormal Psychology*, 128(8), 823-839. [PDF](#)
- Solway, A., Lohrenz, T., & Montague, P. R. (2019). Loss Aversion Correlates with the Propensity to Deploy Model-Based Control. *Frontiers in Neuroscience*, 13, 915. [PDF](#)
- Kirk, U., Pagnoni, G., Héту, S., & Montague, P. R. (2019). Short-Term Mindfulness Practice Attenuates Reward Prediction Errors Signals in the Brain. *Scientific Reports*, 9, 6964. [PDF](#)

- Kishida, K. T., De Asis-Cruz, J., Treadwell-Deering, D., Liebenow, B., Beauchamp, M. S., & Montague, P. R. (2019). Diminished Single-Stimulus Response in vmPFC to Favorite People in Children Diagnosed with Autism Spectrum Disorder. *Biological Psychology*, *145*, 174-184. [PDF](#)
- Montague, P. R., Lohrenz, T., White, J. P., Moran, R. J., & Kishida, K. T. (2019). Random Burst Sensing of Neurotransmitters. *bioRxiv Preprints*, 1-15. [PDF](#)
- Euler, S., Nolte, T., Constantinou, M., Griem, J., Montague, P. R., Fonagy, P., & Personality and Mood Disorders Research Network. (2019). Interpersonal Problems in Borderline Personality Disorder: Associations with Mentalizing, Emotion Regulation, and Impulsiveness. *Journal of Personality Disorders*, *33*(2019), 427. [PDF](#)
- Luo, Y., Héту, S., Lohrenz, T., Hula, A., Dayan, P., Ramey, S. L., Sonnier-Netto, L., Lisinski, J., LaConte, S., Nolte, T., Fonagy, P., Rahmani, E., Montague, P. R., & Ramey, C. (2018). Early Childhood Investment Impacts Social Decision-Making Four Decades Later. *Nature Communications*, *9*(1), 4705. [PDF](#)
- Hula, A., Vilares, I., Lohrenz, T., Dayan, P., & Montague, P. R. (2018). A Model of Risk and Mental State Shifts During Social Interaction. *PLOS Computational Biology*, *14*(2), e1005935. [PDF](#)
- Moran, R. J., Kishida, K. T., Lohrenz, T., Saez, I., Laxton, A. W., Witcher, M. R., Tatter, S. B., Ellis, T. L., Phillips, P. E., Dayan, P., & Montague, P. R. (2018). The Protective Action Encoding of Serotonin Transients in the Human Brain. *Neuropsychopharmacology*, *43*(6), 1425-1435. [PDF](#)
- Montague, P. R., & Kishida, K. T. (2018). Computational Underpinnings of Neuromodulation in Humans. *Cold Spring Harbor Symposia on Quantitative Biology*, *83*, 71-82. [PDF](#)
- Montague, P. R. (2018). Dorcas Cummings Lecture: Connecting Mind and Brain in a Computational Age. *Cold Spring Harbor Symposia on Quantitative Biology*, *83*, 229-236. [PDF](#)
- Montague, P. R. (2018). Computational Phenotypes Revealed by Interactive Economic Games. In A. Anticevic & J. D. Murray (Eds.), *Computational Psychiatry* (pp. 273-292). Academic Press. [PDF](#)
- Solway, A., Gu, X., & Montague, P. R. (2017). Forgetting to Be Addicted: Reconsolidation and the Disconnection of Things Past. *Biological Psychiatry*, *82*(11), 774-775. [PDF](#)
- Luo, Q., Ma, Y., Bhatt, M. A., Montague, P. R., & Feng, J. (2017). The Functional Architecture of the Brain Underlies Strategic Deception in Impression Management. *Frontiers in Human Neuroscience*, *11*, 513. [PDF](#)
- Héту, S., Luo, Y., D'Ardenne, K., Lohrenz, T., & Montague, P. R. (2017). Human Substantia Nigra and Ventral Tegmental Area Involvement in Computing Social Error Signals During the Ultimatum Game. *Social Cognitive and Affective Neuroscience*, *12*(12), 1972-1982. [PDF](#)
- Montague, P. R., & Dayan, P. (2017). Neurobiological Modeling: Squeezing Top Down to Meet Bottom Up. In W. Bechtel & G. Graham (Eds.), *A Companion to Cognitive Science* (pp. 526-541). [DOI](#)
- Vilares, I., Wesley, M. J., Ahn, W. Y., Bonnie, R. J., Hoffman, M., Jones, O. D., Morse, S. J., Yaffe, G., Lohrenz, T., & Montague, P. R. (2017). Predicting the Knowledge-Recklessness Distinction in the Human Brain. *Proceedings of the National Academy of Sciences, USA*, *114*(12), 3222-3227. [PDF](#)
- Solway, A., Lohrenz, T., & Montague, P. R. (2017). Simulating Future Value in Intertemporal Choice. *Scientific Reports*, *7*, 43119. [PDF](#)
- Montague, P. R. (2016). There Are No Killer Apps but Connecting Neural Activity to Behavior through Computation Is Still a Good Idea. In A. D. Redish & J. A. Gordon (Eds.), *Computational Psychiatry: New Perspectives on Mental Illness* (pp. 247-258). The MIT Press. <https://doi.org/10.7551/mitpress/9780262035422.003.0013>
- Moran, R., Stephan, K. E., Botvinick, M., Breakspear, M., Carter, C. S., Kalivas, P. W., Montague, P. R., Paulus, M. P., & Petzschner, F. (2016). Candidate Examples for a Computational Approach to Address Practical Problems in Psychiatry. In A. D. Redish & J. A. Gordon (Eds.), *Computational Psychiatry: New Perspectives on Mental Illness*. <https://doi.org/10.7551/mitpress/10936.001.0001>
- Lohrenz, T., Kishida, K. T., & Montague, P. R. (2016). Bold and Its Connection to Dopamine Release in Human Striatum: A Cross-Cohort Comparison. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *371*(1705), 20150352. [PDF](#)
- Montague, P. R., Kishida, K. T., Moran, R. J., & Lohrenz, T. M. (2016). An Efficiency Framework for Valence Processing Systems Inspired by Soft Cross-Wiring. *Current Opinion in Behavioral Sciences*, *11*, 121-129. [PDF](#)
- Koffarnus, M. N., Johnson, M. W., Thompson-Lake, D. G. Y., Wesley, M. J., Lohrenz, T., Montague, P. R., & Bickel, W. K. (2016). Cocaine-Dependent Adults and Recreational Cocaine Users Are More Likely Than Controls to Choose Immediate Unsafe Sex over Delayed Safer Sex. *Experimental and Clinical Psychopharmacology*, *24*(4), 297-304. [PDF](#)

- Gu, X., Lohrenz, T., Salas, R., Baldwin, P. R., Soltani, A., Kirk, U., Cinciripini, P. M., & Montague, P. R. (2016). Belief About Nicotine Modulates Subjective Craving and Insula Activity in Deprived Smokers. *Frontiers in Psychiatry, 7*, 126. [PDF](#)
- McAdams, C. J., Jeon-Slaughter, H., Evans, S., Lohrenz, T., Montague, P. R., & Krawczyk, D. C. (2016). Neural Differences in Self-Perception During Illness and after Weight-Recovery in Anorexia Nervosa. *Social Cognitive and Affective Neuroscience, 11*(11), 1823-1831. [PDF](#)
- Kirk, U., Gu, X., Sharp, C., Hula, A., Fonagy, P., & Montague, P. R. (2016). Mindfulness Training Increases Cooperative Decision Making in Economic Exchanges: Evidence from fMRI. *NeuroImage, 138*, 274-283. [PDF](#)
- Hétu, S., Luo, Y., Saez, I., D'Ardenne, K., Lohrenz, T., & Montague, P. R. (2016). Asymmetry in Functional Connectivity of the Human Habenula Revealed by High-Resolution Cardiac-Gated Resting State Imaging. *Human Brain Mapping, 37*(7), 2602-2615. [PDF](#)
- Kishida, K. T., Saez, I., Lohrenz, T., Witcher, M. R., Laxton, A. W., Tatter, S. B., White, J. P., Ellis, T. L., Phillips, P. E. M., & Montague, P. R. (2016). Subsecond Dopamine Fluctuations in Human Striatum Encode Superposed Error Signals About Actual and Counterfactual Reward. *Proceedings of the National Academy of Sciences, USA, 113*(1), 200-205. [PDF](#)
- Commentary: Platt, M. L., & Pearson, J. M. (2016). Dopamine: Context and Counterfactuals. *Proceedings of the National Academy of Sciences, 113*(1), 22-23. [PDF](#)
- Stephan, K. E., Binder, E. B., Breakspear, M., Dayan, P., Johnstone, E. C., Meyer-Lindenberg, A., Schnyder, U., Wang, X.-J., Bach, D. R., Fletcher, P. C., Flint, J., Frank, M. J., Heinz, A., Huys, Q. J. M., Montague, P. R., Owen, M. J., & Friston, K. J. (2016). Charting the Landscape of Priority Problems in Psychiatry, Part 2: Pathogenesis and Aetiology. *The Lancet Psychiatry, 3*(1), 84-90. [PDF](#)
- Stephan, K. E., Bach, D. R., Fletcher, P. C., Flint, J., Frank, M. J., Friston, K. J., Heinz, A., Huys, Q. J. M., Owen, M. J., Binder, E. B., Dayan, P., Johnstone, E. C., Meyer-Lindenberg, A., Montague, P. R., Schnyder, U., Wang, X.-J., & Breakspear, M. (2016). Charting the Landscape of Priority Problems in Psychiatry, Part 1: Classification and Diagnosis. *The Lancet Psychiatry, 3*(1), 77-83. [PDF](#)
- McAdams, C. J., Lohrenz, T., & Montague, P. R. (2015). Neural Responses to Kindness and Malevolence Differ in Illness and Recovery in Women with Anorexia Nervosa. *Human Brain Mapping, 36*(12), 5207-5219. [PDF](#)
- Dayan, P., Dolan, R. J., Friston, K. J., & Montague, P. R. (2015). Taming the Shrewdness of Neural Function: Methodological Challenges in Computational Psychiatry. *Current Opinion in Behavioral Sciences, 5*, 128-132. [PDF](#)
- Hula, A., Montague, P. R., & Dayan, P. (2015). Monte Carlo Planning Method Estimates Planning Horizons During Interactive Social Exchange. *PLOS Computational Biology, 11*(6), e1004254. [PDF](#)
- Lu, J., Kishida, K. T., De Asis-Cruz, J., Lohrenz, T., Treadwell-Deering, D., Beauchamp, M., & Montague, P. R. (2015). Single Stimulus fMRI Produces a Neural Individual Difference Measure for Autism Spectrum Disorder. *Clinical Psychological Science, 3*(3), 422-432. [PDF](#)
- Montague, P. R., Lohrenz, T., & Dayan, P. (2015). The Three R's of Trust. *Current Opinion in Behavioral Sciences, 3*, 102-106. [PDF](#)
- Gu, X., Lohrenz, T., Salas, R., Baldwin, P. R., Soltani, A., Kirk, U., Cinciripini, P. M., & Montague, P. R. (2015). Belief About Nicotine Selectively Modulates Value and Reward Prediction Error Signals in Smokers. *Proceedings of the National Academy of Sciences, USA, 112*(8), 2539-2544. [PDF](#)
- Commentary: Volkow, N. D., & Baler, R. (2015). Beliefs Modulate the Effects of Drugs on the Human Brain. *Proceedings of the National Academy of Sciences, 112*(8), 2301. [PDF](#)
- Kirk, U., & Montague, P. R. (2015). Mindfulness Meditation Modulates Reward Prediction Errors in a Passive Conditioning Task. *Frontiers in Psychiatry, 6*, 90. [PDF](#)
- Gu, X., Wang, X., Hula, A., Wang, S., Xu, S., Lohrenz, T. M., Knight, R. T., Gao, Z., Dayan, P., & Montague, P. R. (2015). Necessary, yet Dissociable Contributions of the Insular and Ventromedial Prefrontal Cortices to Norm Adaptation: Computational and Lesion Evidence in Humans. *The Journal of Neuroscience, 35*(2), 467-473. [PDF](#)
- Koffarnus, M. N., Johnson, M. W., Wesley, M. J., Lohrenz, T., Montague, P. R., & Bickel, W. K. (2015). Cocaine-Dependent Adults Are More Likely Than Controls to Choose Immediate Unsafe Sex over Delayed Safe Sex. *Drug and Alcohol Dependence, 146*, e161. [PDF](#)
- Ahn, W.-Y., Kishida, K. T., Gu, X., Lohrenz, T., Harvey, A., Alford, J. R., Smith, K. B., Yaffe, G., Hibbing, J. R., Dayan, P., & Montague, P. R. (2014). Nonpolitical Images Evoke Neural Predictors of Political Ideology. *Current Biology, 24*(22), 2693-2699. [PDF](#)
- Montague, P. R. (2014). The Freedom to Choose and Drug Addiction. In W. Sinnott-Armstrong (Ed.), *Moral Psychology, Volume 4: Free Will and Moral Responsibility* (Vol. 4). MIT Press. [PDF](#)
- Wesley, M. J., Lohrenz, T., Koffarnus, M. N., McClure, S. M., De La Garza II, R., Salas, R., Thompson-Lake, D. G. Y., Newton, T. F., Bickel, W. K., & Montague, P. R. (2014). Choosing Money over Drugs: The Neural Underpinnings of Difficult Choice in Chronic Cocaine Users. *Journal of*

Addiction, 2014, 189853. [PDF](#)

Jones, O. D., Bonnie, R. J., Casey, B. J., Davis, A., Faigman, D. L., Hoffman, M., Montague, P. R., Morse, S. J., Raichle, M. E., Richeson, J. A., Scott, E., Steinberg, L., Taylor-Thompson, K., Wagner, A., & Yaffe, G. (2014). Law and Neuroscience: Recommendations Submitted to the President's Bioethics Commission. *Journal of Law and the Biosciences*, 1(2), 224-236. [PDF](#)

Smith, A., Lohrenz, T., King, J., Montague, P. R., & Camerer, C. F. (2014). Irrational Exuberance and Neural Crash Warning Signals During Endogenous Experimental Market Bubbles. *Proceedings of the National Academy of Sciences, USA*, 111(29), 10503-10508. [PDF](#)

Friston, K. J., Stephan, K. E., Montague, P. R., & Dolan, R. J. (2014). Computational Psychiatry: The Brain as a Phantastic Organ. *The Lancet Psychiatry*, 1(2), 148-158. [PDF](#)

Bickel, W. K., Wesley, M. J., Shin, J., Koffarnus, M. N., Lohrenz, T., & Montague, P. R. (2014). Neural Correlates of Cross-Commodity Discounting in Cocaine Users and Controls. *Drug and Alcohol Dependence*, 140, e13-e14. [PDF](#)

Kirk, U., Gu, X., Harvey, A. H., Fonagy, P., & Montague, P. R. (2014). Mindfulness Training Modulates Value Signals in Ventromedial Prefrontal Cortex through Input from Insular Cortex. *NeuroImage*, 100, 254-262. [PDF](#)

Gu, X., Kirk, U., Lohrenz, T. M., & Montague, P. R. (2014). Cognitive Strategies Regulate Fictive, but Not Reward Prediction Error Signals in a Sequential Investment Task. *Human Brain Mapping*, 35(8), 3738-3749. [PDF](#)

Lohrenz, T., Bhatt, M., Apple, N., & Montague, P. R. (2013). Keeping up with the Joneses: Interpersonal Prediction Errors and the Correlation of Behavior in a Tandem Sequential Choice Task. *PLOS Computational Biology*, 9(10), e1003275. [PDF](#)

Kishida, K. T., & Montague, P. R. (2013). Economic Probes of Mental Function and the Extraction of Computational Phenotypes. *Journal of Economic Behavior and Organization*, 94(100), 234-241. [PDF](#)

D'Ardenne, K., Lohrenz, T., Bartley, K. A., & Montague, P. R. (2013). Computational Heterogeneity in the Human Mesencephalic Dopamine System. *Cognitive, Affective, & Behavioral Neuroscience*, 13, 747-756. [PDF](#)

Xiang, T., Lohrenz, T., & Montague, P. R. (2013). Computational Substrates of Norms and Their Violations During Social Exchange. *The Journal of Neuroscience*, 33(3), 1099-1108a. [PDF](#)

Commentary: Chang, L. J., & Koban, L. (2013). Modeling Emotion and Learning of Norms in Social Interactions. *The Journal of Neuroscience*, 33(18), 7615-7617. [PDF](#)

Xiang, T., Ray, D., Lohrenz, T., Dayan, P., & Montague, P. R. (2012). Computational Phenotyping of Two-Person Interactions Reveals Differential Neural Response to Depth-of-Thought. *PLOS Computational Biology*, 8(12), e1002841. [PDF](#)

Friston, K., Adams, R., & Montague, P. R. (2012). What Is Value—Accumulated Reward or Evidence? [Hypothesis and Theory]. *Frontiers in Neurobotics*, 6, 11. [PDF](#)

Friston, K., Samothrakis, S., & Montague, P. R. (2012). Active Inference and Agency: Optimal Control without Cost Functions. *Biological Cybernetics*, 106(8-9), 523-541. [PDF](#)

Sharp, C., Monterosso, J., & Montague, P. R. (2012). Neuroeconomics: A Bridge for Translational Research. *Biological Psychiatry*, 72(2), 87-92. [PDF](#)

Montague, P. R. (2012). The Scylla and Charybdis of Neuroeconomic Approaches to Psychopathology. *Biological Psychiatry*, 72(2), 80-81. [PDF](#)

Kishida, K. T., & Montague, P. R. (2012). Imaging Models of Valuation During Social Interaction in Humans. *Biological Psychiatry*, 72(2), 93-100. [PDF](#)

Bhatt, M. A., Lohrenz, T., Camerer, C. F., & Montague, P. R. (2012). Distinct Contributions of the Amygdala and Parahippocampal Gyrus to Suspicion in a Repeated Bargaining Game. *Proceedings of the National Academy of Sciences, USA*, 109(22), 8728-8733. [PDF](#)

Kishida, K. T., Li, J., Schwind, J., & Montague, P. R. (2012). New Approaches to Investigating Social Gestures in Autism Spectrum Disorder. *Journal of Neurodevelopmental Disorders*, 4(1), 14. [PDF](#)

Kishida, K. T., Yang, D., Quartz, K. H., Quartz, S. R., & Montague, P. R. (2012). Implicit Signals in Small Group Settings and Their Impact on the Expression of Cognitive Capacity and Associated Brain Responses. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 367(1589), 704-716. [PDF](#)

Montague, P. R., Dolan, R. J., Friston, K. J., & Dayan, P. (2012). Computational Psychiatry. *Trends in Cognitive Sciences*, 16(1), 72-80. [PDF](#)

Downar, J., Bhatt, M., & Montague, P. R. (2011). Neural Correlates of Effective Learning in Experienced Medical Decision-Makers. *PLoS One*, 6(11), e27768. [PDF](#)

- Kishida, K. T., Sandberg, S. G., Lohrenz, T., Comair, Y. G., Sáez, I., Phillips, P. E. M., & Montague, P. R. (2011). Sub-Second Dopamine Detection in Human Striatum. *PLoS One*, 6(8), e23291. [PDF](#)
- Kirk, U., Harvey, A., & Montague, P. R. (2011). Domain Expertise Insulates against Judgment Bias by Monetary Favors through a Modulation of Ventromedial Prefrontal Cortex. *Proceedings of the National Academy of Sciences, USA*, 108(25), 10332-10336. [PDF](#)
- Kirk, U., Downar, J., & Montague, P. R. (2011). Interoception Drives Increased Rational Decision-Making in Meditators Playing the Ultimatum Game. *Frontiers in Neuroscience*, 5, 49. [PDF](#)
- Helekar, S. A., Shin, J. C., Mattson, B. J., Bartley, K., Stosic, M., Saldana-King, T., Montague, P. R., & Hutton, G. J. (2010). Functional Brain Network Changes Associated with Maintenance of Cognitive Function in Multiple Sclerosis. *Frontiers in Human Neuroscience*, 4, 219. [PDF](#)
- Bhatt, M. A., Lohrenz, T., Camerer, C. F., & Montague, P. R. (2010). Neural Signatures of Strategic Types in a Two-Person Bargaining Game. *Proceedings of the National Academy of Sciences, USA*, 107(46), 19720-19725. [PDF](#)
- Koshelev, M., Lohrenz, T., Vannucci, M., & Montague, P. R. (2010). Biosensor Approach to Psychopathology Classification. *PLOS Computational Biology*, 6(10), e1000966. [PDF](#)
- Kishida, K. T., King-Casas, B., & Montague, P. R. (2010). Neuroeconomic Approaches to Mental Disorders [Perspective]. *Neuron*, 67(4), 543-554. [PDF](#)
- Harvey, A. H., Kirk, U., Denfield, G. H., & Montague, P. R. (2010). Monetary Favors and Their Influence on Neural Responses and Revealed Preference. *The Journal of Neuroscience*, 30(28), 9597-9602. [PDF](#)
- Salas, R., Baldwin, P., de Biasi, M., & Montague, P. R. (2010). Bold Responses to Negative Reward Prediction Errors in Human Habenula. *Frontiers in Human Neuroscience*, 4, 36. [PDF](#)
- Li, J., Xiao, E., Houser, D., & Montague, P. R. (2009). Neural Responses to Sanction Threats in Two-Party Economic Exchange. *Proceedings of the National Academy of Sciences, USA*, 106(39), 16835-16840. [PDF](#)
- Strathearn, L., Fonagy, P., Amico, J., & Montague, P. R. (2009). Adult Attachment Predicts Maternal Brain and Oxytocin Response to Infant Cues. *Neuropsychopharmacology*, 34(13), 2655-2666. [PDF](#)
- Martin, L. E., Potts, G. F., Burton, P. C., & Montague, P. R. (2009). Electrophysiological and Hemodynamic Responses to Reward Prediction Violation. *Neuroreport*, 20(13), 1140-1143. [PDF](#)
- Cui, X., Stetson, C., Montague, P. R., & Eagleman, D. M. (2009). Ready...Go: Amplitude of the fMRI Signal Encodes Expectation of Cue Arrival Time. *PLoS Biology*, 7(8), e1000167. [PDF](#)
- van den Bos, W., Li, J., Lau, T., Maskin, E., Cohen, J. D., Montague, P. R., & McClure, S. M. (2008). The Value of Victory: Social Origins of the Winner's Curse in Common Value Auctions. *Judgment and Decision Making*, 3(7), 483-492. [PDF](#)
- King-Casas, B., Sharp, C., Lomax-Bream, L., Lohrenz, T., Fonagy, P., & Montague, P. R. (2008). The Rupture and Repair of Cooperation in Borderline Personality Disorder. *Science*, 321(5890), 806-810. [PDF](#) | [SOM](#)
- Montague, P. R. (2008). Free Will. *Current Biology*, 18(14), R584-585. [PDF](#)
- Rangel, A., Camerer, C., & Montague, P. R. (2008). A Framework for Studying the Neurobiology of Value-Based Decision Making. *Nature Reviews Neuroscience*, 9(7), 545-556. [PDF](#)
- Strathearn, L., Li, J., Fonagy, P., & Montague, P. R. (2008). What's in a Smile? Maternal Brain Responses to Infant Facial Cues. *Pediatrics*, 122(1), 40-51. [PDF](#)
- Montague, P. R., & Assad, J. (2008). Editorial Overview. *Current Opinion in Neurobiology*, 18(2), 117-119. [DOI](#)
- Chiu, P. H., Lohrenz, T. M., & Montague, P. R. (2008). Smokers' Brains Compute, but Ignore, a Fictive Error Signal in a Sequential Investment Task. *Nature Neuroscience*, 11(4), 514-520. [PDF](#)
- Chiu, P. H., Kayali, M. A., Kishida, K. T., Tomlin, D., Klinger, L. G., Klinger, M. R., & Montague, P. R. (2008). Self Responses Along Cingulate Cortex Reveal Quantitative Neural Phenotype for High-Functioning Autism. *Neuron*, 57(3), 463-473. [PDF](#)
Commentary: Frith, C. D., & Frith, U. (2008). The Self and Its Reputation in Autism. *Neuron*, 57(3), 331-332. [PDF](#)
- Ray, D., King-Casas, B., Montague, P. R., & Dayan, P. (2008). *Bayesian Model of Behaviour in Economic Games*. Advances in Neural Information Processing Systems (NIPS) 21. [PDF](#)

- Montague, P. R., & King-Casas, B. (2007). Efficient Statistics, Common Currencies and the Problem of Reward-Harvesting. *Trends in Cognitive Sciences*, 11(12), 514-519. [PDF](#)
- Montague, P. R., & Lohrenz, T. (2007). To Detect and Correct: Norm Violations and Their Enforcement. *Neuron*, 56(1), 14-18. [PDF](#)
- Montague, P. R. (2007). Neuroeconomics: A View from Neuroscience. *Functional Neurology*, 22(4), 219-234. [PDF](#)
- Montague, P. R. (2007). The First Wave. *Trends in Cognitive Sciences*, 11(10), 407-409. [PDF](#)
- Lohrenz, T., McCabe, K., Camerer, C. F., & Montague, P. R. (2007). Neural Signature of Fictive Learning Signals in a Sequential Investment Task. *Proceedings of the National Academy of Sciences, USA*, 104(22), 9493-9498. [PDF](#)
- Dani, J. A., & Montague, P. R. (2007). Disrupting Addiction through the Loss of Drug-Associated Internal States. *Nature Neuroscience*, 10(4), 403-404. [PDF](#)
- Bogacz, R., McClure, S. M., Li, J., Cohen, J. D., & Montague, P. R. (2007). Short-Term Memory Traces for Action Bias in Human Reinforcement Learning. *Brain Research*, 1153, 111-121. [PDF](#)
- Montague, P. R., & Chiu, P. H. (2007). For Goodness' Sake. *Nature Neuroscience*, 10(2), 137-138. [PDF](#)
- Cui, X., Jeter, C. B., Yang, D., Montague, P. R., & Eagleman, D. M. (2007). Vividness of Mental Imagery: Individual Variability Can Be Measured Objectively. *Vision Research*, 47(4), 474-478. [PDF](#)
- Li, J., McClure, S. M., King-Casas, B., & Montague, P. R. (2006). Policy Adjustment in a Dynamic Economic Game. *PloS One*, 1, e103. [PDF](#)
- Stetson, C., Cui, X., Montague, P. R., & Eagleman, D. M. (2006). Motor-Sensory Recalibration Leads to an Illusory Reversal of Action and Sensation. *Neuron*, 51(5), 651-659. [PDF](#)
- Potts, G. F., Martin, L. E., Burton, P., & Montague, P. R. (2006). When Things Are Better or Worse Than Expected: The Medial Frontal Cortex and the Allocation of Processing Resources. *Journal of Cognitive Neuroscience*, 18(7), 1112-1119. [PDF](#)
- Tomlin, D., Kayali, M. A., King-Casas, B., Anen, C., Camerer, C. F., Quartz, S. R., & Montague, P. R. (2006). Agent-Specific Responses in the Cingulate Cortex During Economic Exchanges. *Science*, 312(5776), 1047-1050. [PDF](#)
- Montague, P. R., King-Casas, B., & Cohen, J. D. (2006). Imaging Valuation Models in Human Choice. *Annual Review of Neuroscience*, 29, 417-448. [PDF](#)
- King-Casas, B., Tomlin, D., Anen, C., Camerer, C. F., Quartz, S. R., & Montague, P. R. (2005). Getting to Know You: Reputation and Trust in a Two-Person Economic Exchange. *Science*, 308(5718), 78-83. [PDF](#)
- Commentary: Miller, G. (2005). Economic Game Shows How the Brain Builds Trust. *Science*, 308(5718), 36. [PDF](#)
- Montague, P. R., Hyman, S. E., & Cohen, J. D. (2004). Computational Roles for Dopamine in Behavioural Control. *Nature*, 431(7010), 760-767. [PDF](#)
- McClure, S. M., Li, J., Tomlin, D., Cybert, K. S., Montague, L. M., & Montague, P. R. (2004). Neural Correlates of Behavioral Preference for Culturally Familiar Drinks. *Neuron*, 44(2), 379-387. [PDF](#)
- McClure, S. M., York, M. K., & Montague, P. R. (2004). The Neural Substrates of Reward Processing in Humans: The Modern Role of fMRI. *The Neuroscientist*, 10(3), 260-268. [DOI](#)
- Montague, P. R., McClure, S. M., Baldwin, P. R., Phillips, P. E., Budygin, E. A., Stuber, G. D., Kilpatrick, M. R., & Wightman, R. M. (2004). Dynamic Gain Control of Dopamine Delivery in Freely Moving Animals. *Journal of Neuroscience*, 24(7), 1754-1759. [PDF](#)
- McClure, S. M., Daw, N. D., & Montague, P. R. (2003). A Computational Substrate for Incentive Saliency. *Trends in Neurosciences*, 26(8), 423-428. [PDF](#)
- Montague, P. R. (2003). Uncertainty Rules. Review of Decisions, Uncertainty, and the Brain: The Science of Neuroeconomics by P.W. Glimcher. *Nature*, 424(6947), 371-372. [PDF](#)
- McClure, S. M., Berns, G. S., & Montague, P. R. (2003). Temporal Prediction Errors in a Passive Learning Task Activate Human Striatum. *Neuron*, 38(2), 339-346. [PDF](#)
- Commentary: Braver, T. S., & Brown, J. W. (2003). Principles of Pleasure Prediction: Specifying the Neural Dynamics of Human Reward Learning. *Neuron*, 38(2), 150-152. [PDF](#)
- Montague, P. R. (2002). Uniting the Confederation. Review of Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems by P. Dayan & L.F. Abbott. *Trends in Neurosciences*, 25(11), 595-596. [PDF](#)

- Montague, P. R., & Berns, G. S. (2002). Neural Economics and the Biological Substrates of Valuation. *Neuron*, 36(2), 265-284. [PDF](#)
- Montague, P. R., Berns, G. S., Cohen, J. D., McClure, S. M., Pagnoni, G., Dhamala, M., Wiest, M. C., Karpov, I., King, R. D., Apple, N., & Fisher, R. E. (2002). Hyperscanning: Simultaneous fMRI During Linked Social Interactions. *NeuroImage*, 16(4), 1159-1164. [PDF](#)
- Pagnoni, G., Zink, C. F., Montague, P. R., & Berns, G. S. (2002). Activity in Human Ventral Striatum Locked to Errors of Reward Prediction. *Nature Neuroscience*, 5(2), 97-98. [PDF](#)
- Montague, P. R., Eagleman, D. M., McClure, S. M., & Berns, G. S. (2002). Reinforcement Learning: A Biological Perspective. In L. Nadel (Ed.), *Encyclopedia of Cognitive Science* (pp. 908-913). MacMillan Press. [PDF](#)
- Eagleman, D. M., & Montague, P. R. (2002). Models of Learning and Memory. In L. Nadel (Ed.), *Encyclopedia of Cognitive Science* (pp. 806-812). MacMillan Press. [PDF](#)
- King, R. D., Wiest, M. C., & Montague, P. R. (2001). Extracellular Calcium Depletion as a Mechanism of Short-Term Synaptic Depression. *Journal of Neurophysiology*, 85(5), 1952-1959. [PDF](#)
- Berns, G. S., McClure, S. M., Pagnoni, G., & Montague, P. R. (2001). Predictability Modulates Human Brain Response to Reward. *The Journal of Neuroscience*, 21(8), 2793-2798. [PDF](#)
- Perrett, S. P., Dudgeon, S. M., Eagleman, D., Montague, P. R., & Friedlander, M. J. (2001). LTD Induction in Adult Visual Cortex: Role of Stimulus Timing and Inhibition. *The Journal of Neuroscience*, 21(7), 2308-2319. [PDF](#)
- Dayan, P., Kakade, S., & Montague, P. R. (2000). Learning and Selective Attention. *Nature Neuroscience*, 3 Suppl, 1218-1223. [PDF](#)
- Wiest, M. C., Eagleman, D. M., King, R. D., & Montague, P. R. (2000). Dendritic Spikes and Their Influence on Extracellular Calcium Signaling. *Journal of Neurophysiology*, 83(3), 1329-1337. [PDF](#)
- King, R. D., Wiest, M. C., Montague, P. R., & Eagleman, D. M. (2000). Do Extracellular Ca²⁺ Signals Carry Information through Neural Tissue? *Trends in Neurosciences*, 23(1), 12-13. [PDF](#)
- Montague, P. R., & Quartz, S. R. (1999). Computational Approaches to Neural Reward and Development. *Mental Retardation and Developmental Disabilities Research Reviews*, 5(1), 86-99. [PDF](#)
- Montague, P. R. (1999). Review of Reinforcement Learning: An Introduction by R.S. Sutton & A.G. Barto. *Trends in Cognitive Sciences*, 3(9), 360. [PDF](#)
- Egelman, D. M., & Montague, P. R. (1999). Calcium Dynamics in the Extracellular Space of Mammalian Neural Tissue. *Biophysical Journal*, 76(4), 1856-1867. [PDF](#)
- Egelman, D. M., & Montague, P. R. (1998). Computational Properties of Peri-Dendritic Calcium Fluctuations. *The Journal of Neuroscience*, 18(21), 8580-8589. [PDF](#)
- Egelman, D. M., Person, C., & Montague, P. R. (1998). A Computational Role for Dopamine Delivery in Human Decision-Making. *Journal of Cognitive Neuroscience*, 10(5), 623-630. [PDF](#)
- Egelman, D. M., King, R. D., & Montague, P. R. (1998). Interaction of Nitric Oxide and External Calcium Fluctuations: A Possible Substrate for Rapid Information Retrieval. In R. R. Mize, T. M. Dawson, V. L. Dawson, & M. J. Friedlander (Eds.), *Progress in Brain Research* (Vol. 118, pp. 199-211). Elsevier. [PDF](#)
- Montague, P. R. (1997). The Cerebral Code Is Still Encrypted. Review of The Cerebral Code ed. W.H. Calvin. *Journal of Chemical Neuroanatomy*, 14(1), 67-68. [PDF](#)
- Goodhill, G. J., Bates, K. R., & Montague, P. R. (1997). Influences on the Global Structure of Cortical Maps. *Proceedings of the Royal Society B: Biological Sciences*, 264(1382), 649-655. [PDF](#)
- Schultz, W., Dayan, P., & Montague, P. R. (1997). A Neural Substrate of Prediction and Reward [Review]. *Science*, 275(5306), 1593-1599. [PDF](#)
- Montague, P. R. (1997). Biological Substrates of Predictive Mechanisms in Learning and Action Choice. In J. W. Donahoe & V. P. Dorsel (Eds.), *Advances in Psychology* (Vol. 121, pp. 406-421). Elsevier. [DOI](#)
- Montague, P. R. (1996). The Resource Consumption Principle: Attention and Memory in Volumes of Neural Tissue. *Proceedings of the National Academy of Sciences, USA*, 93(8), 3619-3623. [PDF](#)
- Montague, P. R., Dayan, P., & Sejnowski, T. J. (1996). A Framework for Mesencephalic Dopamine Systems Based on Predictive Hebbian Learning.

The Journal of Neuroscience, 16(5), 1936-1947. [PDF](#)

Person, C., Egelman, D. M., King, R. D., & Montague, P. R. (1996). Three-Dimensional Synaptic Distributions Influence Neural Processing through the Resource Consumption Principle. *Journal of Physiology (Paris)*, 90(5-6), 323-325. [PDF](#)

Montague, P. R. (1996). General Properties of the Resource Consumption Principle of Neural Function. *Journal of Physiology (Paris)*, 90(3-4), 239-242. [PDF](#)

Montague, P. R., Dayan, P., Person, C., & Sejnowski, T. J. (1995). Bee Foraging in Uncertain Environments Using Predictive Hebbian Learning. *Nature*, 377(6551), 725-728. [PDF](#)

Commentary: Douglas, R. J. (1995). The Bee's Needs. *Nature*, 377(6551), 683-684. [PDF](#)

Sejnowski, T., Dayan, P., & Montague, P. R. (1995). *Predictive Hebbian Learning*. Proceedings of the Eighth Annual Conference on Computational Learning Theory, Santa Cruz, California, USA. [PDF](#)

Montague, P. R. (1995). Integrating Information at Single Synaptic Connections. *Proceedings of the National Academy of Sciences, USA*, 92(7), 2424-2425. [PDF](#)

Montague, P. R., & Sejnowski, T. J. (1994). The Predictive Brain: Temporal Coincidence and Temporal Order in Synaptic Learning Mechanisms [Review]. *Learning & Memory*, 1(1), 1-33. [PDF](#)

Montague, P. R., Gancayco, C. D., Winn, M. J., Marchase, R. B., & Friedlander, M. J. (1994). Role of No Production in NMDA Receptor-Mediated Neurotransmitter Release in Cerebral Cortex. *Science*, 263(5149), 973-977. [PDF](#)

Montague, P. R., Dayan, P., & Sejnowski, T. (1994). *Foraging in an Uncertain Environment Using Predictive Hebbian Learning*. Advances in Neural Information Processing Systems (NIPS) 6. [PDF](#)

Montague, P. R. (1993). Transforming Sensory Experience into Structural Change. *Proceedings of the National Academy of Sciences, USA*, 90(14), 6379-6380. [PDF](#)

Montague, P. R. (1993). The No Hypothesis. In B. Smith & G. Adelman (Eds.), *Neuroscience Year: Supplement 3 to the Encyclopedia of Neuroscience* (pp. 100-102). Birkhauser.

Montague, P. R., Dayan, P., Nowlan, S., Pouget, A., & Sejnowski, T. (1993). *Using Aperiodic Reinforcement for Directed Self-Organization During Development*. Advances in Neural Information Processing Systems (NIPS) 5. [PDF](#)

Montague, P. R., Dayan, P., & Sejnowski, T. J. (1993). Volume Learning: Signaling Covariance through Neural Tissue. In F. H. Eeckman & J. M. Bower (Eds.), *Computation and Neural Systems* (pp. 377-381). Springer US. [PDF](#)

Montague, P. R., Gally, J. A., & Edelman, G. M. (1991). Spatial Signaling in the Development and Function of Neural Connections. *Cerebral Cortex*, 1(3), 199-220. [PDF](#)

Montague, P. R., & Friedlander, M. J. (1991). Morphogenesis and Territorial Coverage by Isolated Mammalian Retinal Ganglion Cells. *The Journal of Neuroscience*, 11(5), 1440-1457. [PDF](#)

Gally, J. A., Montague, P. R., Reeke, G. N., Jr., & Edelman, G. M. (1990). The No Hypothesis: Possible Effects of a Short-Lived, Rapidly Diffusible Signal in the Development and Function of the Nervous System. *Proceedings of the National Academy of Sciences, USA*, 87(9), 3547-3551. [PDF](#)

Montague, P. R., & Friedlander, M. J. (1989). Expression of an Intrinsic Growth Strategy by Mammalian Retinal Neurons. *Proceedings of the National Academy of Sciences, USA*, 86(18), 7223-7227. [PDF](#)