

March 9, 2015

## CURRICULUM VITAE

### JODY CULHAM

Brain and Mind Institute  
Natural Sciences Centre 207  
Western University  
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## ACADEMIC CAREER

### *Department of Psychology*

#### *Western University (formerly University of Western Ontario)*

Professor, July 2013 – present  
Associate Professor, July 2007 – June 2013  
Visiting Associate Professor (Sabbatical), Department of Cognitive Neuroscience, University of Maastricht, Netherlands (September-December 2008) and Department of Physiology and Residence of Higher Studies, University of Bologna, Italy (January-May 2009)  
Assistant Professor, July 2001 – June 2007

Affiliations: Brain and Mind Institute; Graduate Program in Neuroscience; Canadian Action and Perception Network

#### Awards:

Natural Sciences and Engineering Research Council (Canada) E. W. R. Steacie Memorial Fellowship, June 2010  
Senior Fellowship, University of Bologna, January-March 2009  
Western Faculty Scholar Award, March 2008  
Western Faculty of Medicine Dean's Award for Excellence in Research in the Team category, CIHR Group on Action and Perception, 2007  
Canadian Institutes of Health Research New Investigator Award, 2003  
Ontario Premier's Research Excellence Award, 2003

### *McDonnell-Pew Postdoctoral Fellow*

#### *Western University*

May 1997 - June 2001  
Advisor: Dr. Melvyn A. Goodale

Affiliations: Vision and Motor Control Lab, CIHR Group on Action and Perception

#### Awards:

McDonnell-Pew Program in Cognitive Neuroscience, Investigator-initiated training grant, 1998-2001.

***Doctor of Philosophy in Psychology (Cognition, Brain, and Behavior Program)***  
***Harvard University***

September 1992 - June 1997

Ph.D. Thesis: "Attentive tracking of moving targets: Psychophysical and neuroimaging evidence for an attentional motion process."

Advisor: Dr. Patrick Cavanagh

Affiliations: Harvard Vision Sciences Lab, Nancy Kanwisher's High-level Vision Lab (Harvard); Massachusetts General Hospital Nuclear Magnetic Resonance Center

Awards:

Natural Sciences and Engineering Research Council (Canada) Postgraduate Scholarship A (declined: award untenable outside Canada)

***Bachelor of Science with First Class Honours in Psychology***  
***The University of Calgary***

September 1986 - June 1991

Honours thesis: "Contrast does not account for age differences in counterphase flicker thresholds."

Advisor: Dr. Donald Kline

Affiliations: Don Kline's Vision and Aging Lab; Jane Raymond's Visual Perception Lab

Awards:

Natural Sciences and Engineering Research Council (Canada) Undergraduate Student Research Award, 1991

Department of Psychology Undergraduate Research Award, 1991

Gordon C. Swann Bursary, 1990-91

Louise McKinney Scholarship, 1989-90

Gary A. S. Owen Bursary, 1986

**RESEARCH INTERESTS**

Cognitive neuroscience, sensorimotor control, visual perception, parietal cortex, grasping, reaching, tool use, object recognition, functional magnetic resonance imaging (fMRI), behaviour, kinematics, and psychophysics.

**RESEARCH GRANTS AND AWARDS: CURRENT, PRINCIPAL INVESTIGATOR (\$1M)**

***Canadian Institutes of Health Research***

***Operating Grant***

"Neural Coding and Interactions for Human Brain Areas Involved in Hand Actions"

October 2013-September 2019

C\$641,710 (C\$128,342 x 5 years) for operating expenses

***Natural Sciences and Engineering Research Council***

***Discovery Grant + Discovery Grant Accelerator Supplement***

"Behavioral and Neuroimaging Investigations of Objects in the Real World"

April 2011-March 2016

C\$280,000 (C\$56,000 x 5 years) for operating expenses

C\$120,000 (C\$40,000 x 3 years) for accelerator supplement

**RESEARCH GRANTS AND AWARDS: CURRENT, TEAM (\$9.7M)**

***Co-Applicant; Local Grant Coordinator for Western University Component  
Natural Sciences and Engineering Research Council***

***Collaborative Research and Training Experience (CREATE) Grant***

(paired with a German Research Foundation (Deutsche Forschungsgemeinschaft, DFG)

International Research Training Group (IRTG) program for student exchanges)

“The Brain in Action”

2014-2020

\$1,650,000 (\$300,000 x 5.5 years)

(to be matched by €3,600,000, with possibility of renewal, from DFG)

Co-investigators: Doug Crawford [CREATE Principal Investigator], Gunnar Blohm, Jody Culham, Stefan Everling, Mel Goodale, Laurence Harris, Denise Henriques, Doug Munoz, Niko Troje, Thilo Womelsdorf

[German co-investigators: Frank Bremmer [IRTG Principal Investigator], Katja Fiehler [Co-spokesperson], Wolfgang Einhäuser-Treyer, Roland Fleming, Karl Gegenfurtner, Tilo Kircher, Wolfgang Oertel, Jörn Munzert, Anna Schubö, Gudrun Schwarzer

***Co-Applicant***

***Canadian Foundation for Innovation***

***Leading Edge Fund***

“Centre for Functional and Metabolic Mapping”

2012-2017

\$6,235,244 [\$2,494,098 from CFI with equal match from Ontario Research Fund; remainder in-kind]

Co-investigators: Ravi Menon [Principal Investigator], Daniel Ansari, Blaine Chronik, Jody Culham, Rhodri Cusack, Stefan Everling, Mel Goodale, Victor Han, Adrian Owen, Peter Williamson

***Co-Applicant***

***Canadian Foundation for Innovation***

***New Initiatives Fund***

“Centre for the Development and Testing of MR-compatible Medical Devices and Technology”

2012-2017

\$705,911 (with equal match from Ontario Research Fund)

Co-investigators: Blaine Chronik [Principal Investigator], Jody Culham, John de Bruyn, Nicola De Zanche, Aaron Fenster, David Holdsworth, Ravi Menon, Michael Noseworthy, Shaun Salisbury, Kevin Shoemaker

***Acting Director (2010-present); Co-Applicant***

***Natural Sciences and Engineering Research Council***

***Collaborative Research and Training Experience (CREATE) Grant***

“Computational Approaches to Sensorimotor Transformations for the Control of Action”

2009-2015

C\$1,650,000 (\$300,000 x 5 years + \$150,000)

Co-Investigators: Melvyn Goodale [Original Principal Investigator], Gunnar Blohm, Brian Corneil, Douglas Crawford, Jody Culham, Randy Flanagan, Denise Henriques, Mike Jenkin, Doug Munoz, Steve Scott, Wolfgang Stuerzlinger

## RESEARCH GRANTS AND AWARDS: PAST INDIVIDUAL FUNDING (\$2.4M)

### *University of Western Ontario (Office of the VP-Research and Faculty of Social Sciences) Western Strategic Support for CIHR Success*

"Neural Coding and Interactions for Human Brain Regions Involved in Hand Actions"  
March 2013-February 2014  
C\$22,500 for pilot data collection

### *Canadian Institutes of Health Research Operating Grant*

"Neural Coding Within Human Brain Regions Involved in Grasping and Reaching" (Grant # MOP 84293)  
September 2007-August 2012  
C\$435,845 (\$87,169/year x 5 years) for operating expenses

### *Natural Sciences and Engineering Research Council E. W. R. Steacie Memorial Fellowship*

"Neuroimaging of Real World Actions and Objects"  
April 2010-March 2012  
C\$180,000 (\$90,000/year x 2 years) for salary support  
C\$250,000 (\$125,000/year x 2 years) operating grant supplement  
C\$131,225 associated Research Tools and Instruments grant  
"Equipment for Cognitive Neuroscience Experiments on Real World Objects and Actions"

### *Natural Sciences and Engineering Research Council Discovery Grant*

"The Behavioral Properties and Neural Substrates of Self-Directed Reaching and Prehension Movements" (Grant # 249877-2006 RGPIN)  
April 2006-March 2011  
C\$131,550 (C\$26,310 x 5 years) for operating expenses

### *University of Western Ontario Faculty Scholar Award*

March 2008-February 2010  
C\$14,000

### *Canadian Institutes of Health Research New Investigator Salary Support Award*

"The Neural Substrates of Object Grasping in Humans" (Grant # MSH 63611)  
July 2003-June 2008  
C\$250,000 (C\$50,000/year x 5 years) toward salary support

### *Canadian Institutes of Health Research Operating Grant*

"The Neural Substrates of Object Grasping in Humans" (Grant # MOP 62986)  
April 2003-March 2007  
C\$325,580 (\$81,395/year x 4 years) for operating expenses

### *Ontario Ministry of Enterprise, Opportunity & Innovation Premier's Research Excellence Award*

"Mapping Human Brain Areas Involved in the Control of Action" (Grant # PREA 08/3140)  
2003-2008  
C\$150,000 (over 5 years) for trainee support

***Natural Sciences and Engineering Research Council******Operating Grant***

"Neural Substrates of High-level Motion Processing" (Grant # 249877-02 RGPIN)  
 April 2002-March 2006  
 C\$112,000 (C\$28,000/year x 4 years) for operating expenses

***Canadian Foundation for Innovation/Ontario Innovation Trust******New Opportunities Funds***

"Laboratory for Functional Magnetic Resonance Imaging of Human Action"  
 2003  
 C\$224,634 (CFI \$78,254, OIT \$78,254, in-kind contributions \$68,126) for infrastructure

***Natural Sciences and Engineering Research Council******Equipment Grant***

"Hardware for fMRI Data Acquisition" (Grant # 256028-02 EQPEQ)  
 April 2002  
 C\$5,000 for fMRI surface coil construction

***McDonnell-Pew Program in Cognitive Neuroscience******Investigator-Initiated Training Grant***

"Human Neural Substrates of Visually-Guided Grasping"  
 September 1998 - August 2001  
 C\$229,000 (US\$150,000)

**RESEARCH GRANTS AND AWARDS: APPLICATIONS SUBMITTED (\$139K)*****Co-Applicant******Natural Sciences and Engineering Research Council******Research Tools and Instruments Grant***

"A Portable System for Integrated Measurement of Human Actions"  
 Submitted October 2014  
 C\$139,655 for research equipment  
 Co-applicants: Brian Corneil [Principal Investigator], Jody Culham, Mel Goodale, Paul Gribble, Andrew Pruzynski

**RESEARCH GRANTS AND AWARDS: PAST TEAM FUNDING (\$5.6M)*****Co-Applicant******Ontario Research Fund******Research Excellence Fund***

"Centre for Brain and Mind Neuroimaging Facility"  
 C\$2,300,000 for personnel funding (in addition to internal matching funds)  
 2006-2013  
 Co-applicants: Melvyn Goodale [Principal Investigator], Rob Bartha, Blaine Chronik, Jody Culham, James Danckert, Stefan Everling, Joe Gati, Marc Joanisse, Stefan Köhler, Ravi Menon, Bruce Morton, Philip Servos, & Tutis Vilis

***Co-Applicant******Natural Sciences and Engineering Research Council******Research Tools and Instruments – Category 1***

"Eye Tracking and 3 Dimensional Visualization: Synergistic and Ecologically Valid Approaches to Neuroimaging Research"  
 2012  
 \$109,066  
 Co-investigators: Derek Mitchell [Principal Investigator], Daniel Ansari, Jody Culham, Mel Goodale, Mark Joanisse, Adrian Owen

**Co-Applicant****Canadian Institutes of Health Research****Resource Grant**

“Centre for Functional and Metabolic Mapping” (Grant # PRG-82676)

C\$696,850 (\$139,370 x 5 years) for MRI facility expenses

2007-2012

Co-applicants: Ravi Menon [Principal Investigator], Blaine Chronik, Jody Culham, Gregory Dekaban, Stefan Everling, Paula Foster, Melvyn Goodale, Murray Huff, Peter Williamson

**Co-Applicant****Natural Sciences and Engineering Research Council****Research Tools and Instruments – Category 1**

“Transcranial Magnetic Stimulation for Research in Cognitive Neuroscience”

2010

\$97,178

Co-investigators: Mel Goodale [Principal Investigator], Daniel Ansari, Blaine Chronik, Jody Culham, Paul Gribble, Marc Joanisse, Stefan Köhler, Paul Minda, Derek Mitchell

**Co-Applicant****Canadian Institutes of Health Research Group Grant**

“Neural Transformations for Perception and Action” (Grant # MGC 36036)

January 2004 - September 2009

C\$2,272,200 (C\$454,440 x 5 years) for group collaboration operating funds

Co-Investigators: Melvyn Goodale [Principal Investigator], Brian Corneil, Douglas Crawford, Jody Culham, Stefan Everling, Paul Gribble, Stefan Köhler, Ravi Menon, Douglas Tweed, & Tutis Vilis

**Co-Applicant****Lawson Health Research Institute**

“Functional Organization of the Brain in Adult Epileptic Patients with Non-progressive Lesions Acquired Early in Life”

January 2004 – December 2006

C\$12,000 for operating funds

Co-Investigators: Sam Wiebe [Principal Investigator], Jody Culham, James Danckert, Seyed Mirsattari, & Susan Piggott

**Co-Applicant****Physicians’ Services Incorporated Foundation**

“Using Functional MRI to Explore the Reorganization of Cortical Functions in Patients with Intractable Epilepsy: Pre- and Post-surgical Evaluations”

July 2004- June 2006

C\$87,000 for operating funds

Co-Investigators: Seyed Mirsattari [Principal Investigator], Jody Culham, James Danckert, Susan Piggott, & Sam Wiebe

**TEACHING****University of Western Ontario Courses**

*Psychology 2220: Introduction to Behavioral and Cognitive Neuroscience* (undergraduate course)

Instructor, Winter 2015

Fall 2011: rating of course effectiveness: 5.5; rating of course components: 5.3/7

*Neuroscience 2000: Introduction to Neuroscience* (undergraduate course)

Instructor, Fall/Winter 2013/14: overall effectiveness: 6.0/7; rating of course components: 5.8/7

*Psychology 1200: Biological Foundations of Behavior* (undergraduate course)  
 Instructor, taught five times between 2002 and 2010  
 2009-10: rating of course effectiveness: 6.3/7; rating of course components: 6.0/7  
*Psychology 9223: Neuroimaging of Cognition* (graduate seminar)  
 Instructor, taught six times between 2002 and 2014  
 Winter 2013: rating of course: 5.9/7; rating of instructor: 6.4/7  
*Psychology 9224: Brain Organization and Connectivity* (graduate seminar)  
 Instructor  
 Winter 2011, rating of course: 6.0/7; rating of instructor: 6.4/7

## Awards

Nominated for Television Ontario (TVO) *Big Ideas Ontario's Best Lecturer Competition*,  
 March 2006  
 University of Western Ontario Students' Council *Teaching Honour Roll Award of Excellence*,  
 2003-2004  
 Harvard University *Certificate of Distinction in Teaching*, 1993-1994, 1994-1995

## Guest Lectures

*Neuroscience 2000*, "How to get involved in research as an undergraduate", 2012  
*Neuroscience 9500: Principles of Neuroscience* (graduate survey course)  
 Lecturer (two contact hours per year), "Why does the brain have so many visual areas?"  
 2002-2006; "Methods in cognitive neuroscience", 2005-2006; "What neuroscientists can  
 and cannot learn from brain imaging", 2007-2011; "From neurons to neuroimaging:  
 Relationship between neural activity and the fMRI BOLD signal", 2012.  
*Neuroscience Survival Skills* (first year graduate course on academia)  
 Guest lecture on "Writing successful scholarship applications", 2010-2011.  
 Graduate fMRI course, University of Maastricht, October 2009  
 Guest lecture on "Basic and Advanced Analyses for fMRI"  
 Undergraduate course on Pharmacy, University of Bologna, April 2009, "fMRI and  
 Neuropsychology"  
 Lecture to Ph.D. students, Department of Human and General Physiology, University of  
 Bologna, April 2009, "What neuroscientists can and cannot learn from brain imaging"  
*Neuroscience 506b: Statistics for Neuroscience* (graduate course)  
 Guest Lecture on "Statistics for Brain Imaging" (two contact hours per year), 2005-2008  
*Psychology 324: Neuropsychology and Cognitive Neuroscience* (undergraduate course). Guest  
 lectures on "Methods in Cognitive Neuroscience and Neuropsychology" and "Vision and  
 Visual Impairments Arising from Brain Lesions" (6 contact hours), Winter 2008.  
*Psychology 215: Introduction to Sensation and Perception* (undergraduate course)  
 Course coordinator and co-instructor (with 8 others), Winter 2002 (5.3/7)

## World Wide Web Courses

*fMRI for Newbies* (formerly known as *fMRI for Dummies*)  
<http://www.fmri4newbies.com>  
 ~10,000 hits/year

## SUPERVISION OF TRAINEES AND PERSONNEL: CURRENT

### Postdoctoral Fellow Supervisor (2)

Lucilla Cardinali (2012-present)  
 • recipient of *Fyssen Foundation* (France) Postdoctoral Fellowship  
 Jenni Karl (2014-present)  
 • recipient of NSERC Postdoctoral Fellowship

### Graduate Student Supervisor (4)

Scott Macdonald, Neuroscience PhD Program (2011-present)  
 • recipient of Ontario Graduate Scholarship

Alexander Yan, MD-PhD (Neuroscience PhD) Program (2013-present)

- recipient of CIHR MD-PhD Studentship

Ben Chang, Neuroscience PhD Program (2014-present)

Margarita Maltseva, Psychology MSc Program (2013-present)

### Staff Supervisor (3)

Tzu-ching Chiang, Research Technician (2014-present, part-time)

Derek Quinlan, Research Technician (2011-present, part-time)

Kevin Stubbs, Research Technician (2013-present, full-time)

### Honours Students and Research Project Students

Maria-Cristina Leduc, Independent Study Student (Honours equivalent), 2014-15

Alex Petrescu, Scholar's Electives Student, 2014-15

### Other

Honours Students (or equivalent): 14 completed

Scholar's Electives Supervisor: 4 completed

Visiting Scholar Supervisor: 6 completed

High School Coop Students: 2 completed

NSERC USRA Students: 4 completed

Graduate Advisory Committees: 8 ongoing, 23 completed

Graduate Examining Committees: 27 (Western) + 10 (external examiner elsewhere) completed

Ph.D. Comprehensive Examiner: 1 ongoing, 20 completed

## PLACEMENT OF PRIOR TRAINEES

### Postdoctoral Fellows (9)

Sara Fabbri (2011-2014)

- Radboud Excellence Initiative postdoctoral fellow at Donders Institute, Radboud University Nijmegen

Michael Barnett-Cowan (2011-2013)

- recipient of Banting Postdoctoral Fellowship and Ontario Ministry of Research and Innovation Postdoctoral Fellowship
- tenure-track Assistant Professor at University of Waterloo

Jacqueline Snow (Postdoctoral Fellow, 2008-2013)

- tenure-track Assistant Professor at University of Nevada Reno
- recipient of *Concepts, Actions and Objects* conference travel grant for best conference abstract, *Cognitive Neuropsychology* (journal) travel prize, *Object Perception and Memory* conference travel award

Stephanie Rossit (Postdoctoral Fellow, 2009-2011)

- tenure-track Lecturer (Assistant Professor) at University of East Anglia (U.K.)

John Zettel (Postdoctoral Fellow, 2006-2008)

- tenure-track Assistant Professor at University of Guelph

Jessica Witt (Postdoctoral Fellow, 2006-2007)

- Associate Professor at Colorado State University

Anthony Singhal (Postdoctoral Fellow, 2004-2006)

- Associate Professor at University of Alberta

Cristiana Cavina Pratesi (Postdoctoral Fellow, 2004-2006)

- Lecturer (Assistant Professor) at the University of Durham, U.K.

Greg Króliczak (Postdoctoral Fellow, 2005-2006)

- Associate Professor at Adam Mickiewicz University, Poznan Poland

### Graduate Students (9)

Teresa McAdam, Neuroscience PhD Candidate (2009-2014)

- Research technician, University of Manitoba
- recipient of CIHR PhD Scholarship

Joey Paciocco (M.Sc., Neuroscience, 2010-2012)



- Program Coordinator, Student Success Centre, Western University
- Mark Daley (M.Sc., Neuroscience, 2010-2011)
- resumed position as Associate Professor, Department of Computer Science, Western
- Jason Gallivan (M.Sc. and PhD, Neuroscience, 2005-2011)
- recipient of NSERC Banting postdoctoral fellowship with Randy Flanagan, Queen's University
  - recipient of 3 *CIHR Brain Star Awards*
  - recipient of NSERC Graduate Scholarship (PGS D) and Ontario Graduate Scholarships
- Ken Valyear (Ph.D., Neuroscience, 2006-2010)
- Lecturer (Assistant Professor) at Bangor University, Wales
  - Winner of Western *Governor General's Gold Medal* for outstanding academic achievement by a graduate student
  - Winner of *Collip Medal Award* for outstanding PhD student graduating from a basic science department in the Schulich School of Medicine & Dentistry
  - recipient of prestigious Vanier Fellowship at the Doctoral level
  - recipient of Canada Graduate Scholarship at the Master's level
  - Winner of Nellie Farthing Research Fellowship in the Medical Sciences, Schulich School of Medicine and Dentistry
  - Winner of G. Keith Humphrey Memorial Award, Western
- Charlie Pettypiece (M.Sc., Neuroscience, 2008-2010)
- law school student, University of Western Ontario
  - recipient of *Canada Graduate Scholarship* at the Master's level
- Derek Quinlan (M.Sc. and Ph.D., Neuroscience, 2001-2008)
- Research Technician in Culham Lab
  - Part-time faculty, Department of Psychology, Huron College
- Yvonne Wong (Ph.D., Neuroscience, 2005-2008, co-supervised with Tutis Vilis)
- sessional instructor at Concordia University College of Alberta
- Simona Monaco (Visiting Ph.D. student from the University of Bologna, 2005-2009; Postdoctoral fellow, 2010)
- Postdoctoral fellow at University of Trento (Italy)

#### Full- or Half-time Research Assistants (6)

- Joey Paciocco (2012-2014)
- Program Coordinator, Student Success Centre, Western University
- Paul Armstrong (2011-2012)
- Law School, Western University
- Lucia van Eimeren (2010-2011)
- Teresa McAdam (2006-2009)
- Kenneth Valyear (Research Assistant, 2002-2005)
- See Prior Trainees: Graduate Students (above)
- Stacey Danckert (Research Assistant, 1999-2002)
- Ph.D. in Psychology from the University of Waterloo
  - recipient of NSERC Graduate Scholarship (PGS D)

#### **UNIVERSITY ADMINISTRATIVE ROLES: CURRENT**

- Member, Promotion and Tenure Committee, Department of Physiology and Pharmacology, Western University, 2014-present
- Member, *Steering Committee, Brain and Mind Institute*, 2013-present
- Western University Coordinator, International training program (including NSERC CREATE-IRTG application) between York (lead institution), Western & Queen's and German universities in Marburg and Giessen.
- Director, *NSERC CREATE Grant on Computational Approaches to Sensorimotor Transformations for the Control of Action*, 2010-present
- Member, *Steering Committee*, Canadian Action and Perception Network (CAPnet), 2008-present

## ADMINISTRATIVE ROLES: PAST

Representative for Western University, Council of Ontario Universities “Research Matters” campaign, 2013-2014  
 Member, *Chair Selection Committee* (Department of Psychology), 2013-2014  
 Member, *Executive Coordinating Committee* (Department of Psychology), 2012-2014  
 Member, *Graduate Affairs Committee* (Department of Psychology), 2012-2014, 2004-2007  
 Member, *Canada Research Chair in Primate Neuroscience Search Committee*, Department of Physiology and Pharmacology (2011-2013)  
 Member, *Nominations Committee* (Department of Psychology), 2011-2013  
 Member, *Promotion and Tenure Committee* (Dept. of Psychology), 2011  
 Chair (2010-11), *Workload and Resource Planning Committee* (Dept. of Psychology); Member, 2009-2011  
 Member, *Neuroscience Curriculum Review Committee* (Graduate Program in Neuroscience), 2010-2011  
 Member, *Space Committee* (Department of Psychology), 2010-2012  
 Member, *Annual Performance Evaluation Committee* (Dept. of Psychology), 2007-2008  
 Member, *Appointments Committee* (Dept. of Psychology), 2006-2008  
 Representative, *Faculty of Social Science Education Policy Committee* (Dept. of Psychology), 2007-2008  
 Member, *Graduate Selection Committee*, Psychology, Feb. 2008  
 Member, *4 T Magnet Operating Committee* (fMRI group), 2004-2007  
 Interviewer, *Research Development & Services* (Western), 2006  
 Reviewer, *Faculty of Graduate Studies Scholarships Committee for NSERC (Natural Sciences and Engineering Research Council) & OGSST (Ontario Graduate Scholarships in Science & Technology)* (Western), 2003-2006  
 Member, *Annual Performance Evaluation Committee* (Dept. of Psychology), 2004-2006  
 Member, *Executive Coordinating Committee* (Dept. of Psychology), 2003-2005  
 Member, *Workload and Resource Planning Committee* (Dept. of Psychology), 2002-2004  
 Member, *Nominations Committee* (Dept. of Psychology), 2002-2004  
 Representative, *Faculty of Engineering meetings* (Faculty of Social Science), 2001-2003  
 Coordinator, *United Way campaign* (Dept. of Psychology), 2001-2002

## CONTRIBUTIONS

### Ongoing

Peer Review Committee Member, *Canadian Institutes of Health Research Stage 2 Foundation Scheme 1<sup>st</sup> Live Pilot*, April 2015  
 Co-organizer (with Morris Moscovitch and Marlene Behrmann)  
 “Medial Temporal Lobe Contributions to Non-Memory Functions” session (9 speakers) at *International Neuropsychological Symposium*, Collioure, France.  
 Reviewing Editor  
*eLife* (new top-tier open access biosciences journal produced by Howard Hughes Medical Institute, Wellcome Trust and Max Planck Society; 2012-present)  
*Frontiers in Integrative Neuroscience* (2008-present)  
 Co-Editor  
*Experimental Brain Research* (2008-present)  
 Peer Reviewer:  
*Vision Sciences Society* abstracts (2006-present)  
*Organization for Human Brain Mapping* abstracts (2011)  
 Scientific Society Committees  
 Program Committee, *Canadian Association for Neuroscience* (2013-present)  
 Member, *Vision Sciences Society Young Investigator Award Committee* (2013-present)  
 North American Representative (1 of 2), Executive Committee, *International Neuropsychological Symposium* (2012-present)

Ad Hoc Reviews

Ad hoc reviewer of research grant applications:

Canada:

*Canadian Institutes of Health Research (CIHR)*  
*Natural Sciences and Engineering Research Council (NSERC)*  
*CIHR-NSERC Collaborative Health Research Project (CHRP)*  
*Canada Research Chairs (CRC)*  
*Canadian Foundation for Innovation (CFI)*  
*National Centres of Excellence (NCE)*  
*MITACS (Mathematics of Information Technology and Complex Systems) Accelerate Program*  
*Manitoba Health Research Council (MHRC)*  
*Michael Smith Foundation for Health Research (MSFHR)*  
*Ontario Mental Health Foundation (OMHF)*

International:

*National Science Foundation (U.S.)*  
*Biotechnology and Biological Sciences Research Council (U.K.)*  
*Economic and Social Research Council (U.K.)*  
*Wellcome Trust (U.K.)*  
*Medical Research Council (U.K.)*  
*Israel Science Foundation*  
*Netherlands Organization for Scientific Research (Netherlands)*  
*Romanian National Research Council (Romania)*  
*University of Rome (Italy)*

Ad hoc reviewer of submitted manuscripts:

<i>Acta Psychologica</i>	<i>Journal of the Experimental Analysis of Behavior</i>
<i>Behavioral Brain Research</i>	<i>Journal of Neurophysiology</i>
<i>Biology Letters</i>	<i>Journal of Neuroscience</i>
<i>Biomedical Imaging &amp; Intervention</i>	<i>Journal of Neuroscience Methods</i>
<i>Canadian Journal of Experimental Psychology</i>	<i>Journal of Vision</i>
<i>Cerebral Cortex</i>	<i>Learning and Motivation</i>
<i>Cognitive, Affective and Behavioral Neuroscience</i>	<i>Nature Communications</i>
<i>Cognition</i>	<i>Nature Neuroscience</i>
<i>Current Biology</i>	<i>NeuroImage</i>
<i>eNeuro</i>	<i>Neuron</i>
<i>European Journal of Neuroscience</i>	<i>Neuropsychologia</i>
<i>Experimental Brain Research</i>	<i>Proceedings of the National Academy of Sciences</i>
<i>Frontiers in Human Neuroscience</i>	<i>PLOS Biology</i>
<i>Frontiers in Integrative Neuroscience</i>	<i>PLOS ONE</i>
<i>Frontiers in Movement Disorders</i>	<i>Psychiatry Research: Neuroimaging</i>
<i>Frontiers in Psychology</i>	<i>Psychological Science</i>
<i>Human Brain Mapping</i>	<i>Restorative Neurology and Neuroscience</i>
<i>Journal of Cognitive Neuroscience</i>	<i>Science</i>
<i>Journal of Experimental Psychology: General</i>	<i>Spatial Vision</i>
<i>Journal of Experimental Psychology: Human Perception &amp; Performance</i>	<i>Trends in Cognitive Sciences</i>
	<i>Vision Research</i>

Ad hoc reviewer of book chapters and book proposals:

*Attention and Performance book series*  
*Blackwell Publishers*

*MIT Press*  
*Springer Publishers*

Reviewer of tenure/promotion applications  
10 candidates (2 in Canada; 8 international)

### Formal Mentorship

Internal Peer Reviewer for CIHR Operating Grant, *Schulich School of Medicine and Dentistry*, 2014-15  
Mentor, *Alberta Innovates* Postdoctoral Fellowship (Erin Mazerolle, University of Calgary), 2014-present  
Mentor, *Schulich School of Medicine and Dentistry* Mentorship Program, 2010-present  
Mentor, *Society for Neuroscience* Mentoring Program, 2009-present

### Contributions: Past

Peer Review Committee Member  
*Canadian Institutes of Health Research* Behavioral Sciences C (May 2014, Dec. 2009)  
*Canadian Institutes of Health Research* New Investigator awards (2006-2008)

Peer Review Committee Member  
Ontario Ministry of Research and Innovation *Early Researcher Awards* (Nov. 2010)

Reviewer, Donald Hebb Student Awards  
*Canadian Society for Brain Behaviour and Cognitive Science* annual meeting, Kingston Ontario (June 2012)

Secretary (Secretary-Elect, Secretary, Past Secretary)  
*Organization for Human Brain Mapping* (2008-2011)

Organizing Committee Member  
*Canadian Physiological Society/Canadian Action and Perception Network* joint conference (February 2011)

Coordinator, Donald Hebb Student Awards  
*Canadian Society for Brain Behaviour and Cognitive Science* annual meeting, London Ontario (June 2008)

Committee Member  
*National Institutes of Health Neuroinformatics Terminology Workshop on Neurobehavior*, New York City, April 10-11, 2008

Co-organizer (with Patrizia Fattori), “From Eye to Hand: The Role of Vision in Grasping”, *Vision Sciences Society* pre-conference workshop, May 2005.

### **MEMBERSHIPS**

Elected Member (2005-present): *International Neuropsychological Symposium*

Memberships: *Vision Sciences Society*; *Society for Neuroscience*; *Canadian Society for Brain, Behavior and Cognitive Science*; *American Physiological Society*

### **YOUTH OUTREACH, MEDIA INTERVIEWS, AND COMMUNITY SERVICE**

Public Lecture, “How can the brain control machines?” Toronto Mini Maker Faire, Toronto ON, November 2014.

- Interview, “The blind woman who sees the rain, but not her daughter’s smile”, *National Public Radio* (U.S.), February 2014. <http://www.npr.org/blogs/health/2014/05/26/314621545/the-blind-woman-who-sees-rain-but-not-her-daughters-smile>
- Interview, “Does new driving technology make us worse drivers?” *Global News*, February 2014.
- Public Lecture, “How Does the Brain Control the Body”, *Research Matters What Matters Now*, Children’s Museum, London ON, November 2013.
- Interview, “The Treachery of Images”, *CBC Radio1 Spark*, October 2013. <http://www.cbc.ca/spark/episodes/2013/10/25/229-link-rot-image-vs-reality-payphone-resurgence-virtual-economies-god-and-tech/>
- Speaker, “How many brains do you have?” *Treehouse Talks*, Toronto ON, February 2012. <http://vimeo.com/37047211>
- Organizer, *The Art and Science of Brain Imaging*, one-day workshop to train 24 artists about neuroimaging, in collaboration with Subtle Technologies and with funding from the *Canada Council for the Arts*, October 2011.
- Discussant, *Quirks & Quarks* (Canadian Broadcasting Corporation science radio show), 35<sup>th</sup> anniversary program, November 2010. <http://www.cbc.ca/quirks/episode/2010/11/13/november-13-2010/>
- Presenter, Western Researchers’ Spotlight, Western Staff and Leaders Conference, February 2010.
- Youth Outreach Coordinator, Centre for Brain and Mind, 2007-2010.
- Discussant “Who Am I?”, Science in the Pub, Quantum to Cosmos (Q2C) Festival, *Perimeter Institute for Theoretical Physics*, Waterloo, Ontario, October 2009.
- Presenter, Solving the Puzzle of Brain and Mind, Western Neuroscience Program Graduate Recruitment event, October 2009.
- Hands-on workshop on “Vision and Brain” for *Creative Encounters*, July 2007.
- Commentator for Western Media Relations on Nintendo *Brain Age* gaming system (featured in *London Free Press*, *Canadian Living*, *A-Channel News*), January 2007.
- Phone interview for web feature, “Your eyes can deceive you, don’t trust them”, *New Scientist* web feature, November 2006.
- Hands-on workshop on “Vision and Brain” for *Canadian Association for Girls in Science*, November 2005.
- Faculty of Social Science *Fall Preview Day* mini-lecture to prospective Western students and their parents, “Cognitive Neuroscience: Mapping the Human Brain,” November 2004 and November 2005.
- Harvard Alumni Association (Toronto division) college admissions interviewer for London area, 2002-2008.
- Respondent for *CBC Radio*, Windsor morning show, “Why is the sound of fingernails on a blackboard so annoying?” August 2004
- Phone interview for newspaper article on brain imaging, “Universities Vie for Tool that Shows Brains at Work”, *Boston Globe*, February 2004

## PEER-REVIEWED JOURNAL ARTICLES (67)

**Publication**

*Culham Lab trainees (at the time of project) are indicated with a solid underline; Other trainees are indicated with a dotted underline.*

**Role**

27 *PI = Principal Investigator*

*(supervised research, extensively edited manuscript, funded project)*

14 *Co-I = Co-Investigator (co-supervised research, edited manuscript)*

12 *IA = First Author (conducted experiment; wrote manuscript)*

11 *C = Collaborator (advised on experimental design and/or analysis, edited manuscript)*

3 *Co-A = Co-Author (shared design and analysis equally; co-wrote manuscript)*

**IF** = Journal Impact Factor

**Cit.** = Citations from Google Scholar (September 2014)

<http://scholar.google.ca/citations?user=PnssgPwAAAAJ&hl=en>

<b>Publication</b>	<b>Role</b>	<b>IF</b>	<b>Cit.</b>
<u>Gallivan</u> , J. P., & <b>Culham</b> , J. C. (Accepted with minor revisions). Neural coding within human brain areas involved in actions. Invited review article, <i>Current Opinion in Neurobiology</i> .	Co-A	7.5	
<u>Barnett-Cowan</u> , M., <u>Snow</u> , J. C., & <b>Culham</b> , J. C. (in press). Contribution of bodily and gravitational orientation cues to face and letter recognition. <i>Multisensory Research</i> .	PI	1.1	
<u>Monaco</u> , S., <u>Sedda</u> , A., Cavina-Pratesi, C., & <b>Culham</b> , J. C. (2015). Neural correlates of object size, object location and digit positions during grasping actions. <i>European Journal of Neuroscience</i> , 41(4), 454-465.	PI	3.7	
<u>Hutchison</u> , R. M., <b>Culham</b> , J. C., Everling, S., Flanagan, J. R., & <u>Gallivan</u> , J. P. (2014). Distinct and distributed functional connectivity patterns across cortex reflect the domain-specific constraints of object, face, scene, body, and tool category-selective modules in the ventral visual pathway. <i>NeuroImage</i> .	C	7.0	
<u>Chapman</u> , C. S., <u>Gallivan</u> , J. P., <u>Wood</u> , D. K., <u>Milne</u> , J. L., Ansari, D., <b>Culham</b> , J. C., & Goodale, M. A. (2014). Counting on the motor system: Rapid action planning reveals the format-dependent extraction of numerical quantity. <i>Journal of Vision</i> , 14(3), 30.	Co-I	2.5	1
<u>Rossit</u> , S., <u>McAdam</u> , T., <u>McLean</u> , D. A., Goodale, M. A., & <b>Culham</b> , J. C. (2013). fMRI reveals a lower visual field preference for hand actions in human superior-parietal occipital cortex (SPOC) and precuneus. <i>Cortex</i> , 49, 2525-2541. <a href="http://dx.doi.org/10.1016/j.cortex.2012.12.014">http://dx.doi.org/10.1016/j.cortex.2012.12.014</a>	PI	6.1	8
<u>Gallivan</u> , J. P., <u>Chapman</u> , C. S., <u>McLean</u> , D. A., Flanagan, J. R., & <b>Culham</b> , J. C. (2013). Activity patterns in category-selective occipitotemporal cortex predict upcoming motor actions. <i>European Journal of Neuroscience</i> , 38(3), 2408-2424. <a href="http://onlinelibrary.wiley.com/doi/10.1111/ejn.12215/abstract">http://onlinelibrary.wiley.com/doi/10.1111/ejn.12215/abstract</a>	PI	3.7	7
<u>Singhal</u> , A., <u>Monaco</u> , S., <u>Kaufman</u> , L. D., & <b>Culham</b> , J. C. (2013). Human fMRI reveals that delayed action re-recruits visual perception. <i>PLOS (Public Library of Science) ONE</i> , 8(9), e73629. doi:10.1371/journal.pone.0073629	PI	3.7	1
<u>Milne</u> , J.L., <u>Chapman</u> , C.S., <u>Gallivan</u> , J.P., <u>Wood</u> , D.K., <b>Culham</b> , J.C., & Goodale, M.A. (2013). Connecting the Dots: Object connectedness deceives perception but not movement. <i>Psychological Science</i> , 24(8), 1456-1465. DOI: 10.1177/0956797612473485	C	4.8	4

- Gallivan, J. P., McLean, D. A., Valyear, K. F., & Culham, J. C. (2013). Decoding the neural mechanisms of human tool use. *eLife*, 2, e00424. <http://dx.doi.org/10.7554/eLife.00425> PI 8.5 13
- Gallivan, J. P., McLean, D. A., Flanagan, J. R., & Culham, J. C. (2013). Where one hand meets the other: Limb-specific and goal-dependent movement plans decoded from preparatory signals in single human parieto-frontal brain areas. *Journal of Neuroscience*, 33(5), 1991-2008. PI 7.3 18
- Hutchison, R. M., Gallivan, J. P., Culham, J. C., Gati, J. S., Menon, R. S., & Everling, S. (2012). Functional connectivity of the frontal eye fields in humans and macaque monkeys investigated with resting-state fMRI. *Journal of Neurophysiology*, 107(9), 2463-2474. C 3.1 17
- Valyear, K. F., Gallivan, J. P., McLean, D. A. & Culham, J. C. (2012). fMRI repetition suppression for familiar but not arbitrary actions with tools. *Journal of Neuroscience*, 32(12), 4247-4259. PI 7.3 18
- Secen, J., Culham, J., Ho, C., & Giaschi, D. (2011). Neural correlates of the multiple-object tracking deficit in amblyopia. *Vision Research*, 51(23-24), 2517-2527. C 2.3 9
- Gallivan, J. P., McLean, D. A., Smith, F. W., & Culham, J. C. (2011). Decoding effector-dependent and effector-independent movement intentions from human parieto-frontal brain activity. *Journal of Neuroscience*, 31(47), 17149-17168. PI 7.3 28
- Gallivan, J. P., McLean, D. A., Valyear, K. F., Pettypiece, C. E., & Culham, J. C. (2011). Decoding action intentions from preparatory activity in human parieto-frontal cortex. *Journal of Neuroscience*, 31(26), 9599-9610. PI 7.3 49
- Gallivan, J. P., McLean, D. A., & Culham, J. C. (2011). Neuroimaging reveals enhanced activation in a reach-selective brain area for objects located within participants' typical hand workspaces. *Neuropsychologia*, 49, 3710-3721. PI 3.9 11
- Monaco, S., Cavina-Pratesi, C., Sedda, A., Fattori, P., Galletti, C., & Culham, J. C. (2011). Functional magnetic resonance adaptation (fMRA) reveals the involvement of the dorsomedial stream in wrist orientation for grasping. *Journal of Neurophysiology*, 106(5), 2248-2263. PI 3.1 12
- Snow, J. C., Pettypiece, C., McAdam, T. D., McLean, A. D., Stroman, P. W., Goodale, M. A., & Culham, J. C. (2011). Bringing the real world into the fMRI scanner: Repetition effects for pictures versus real objects. *Scientific Reports*, 1, Article number 130. PI 5.1 13
- Wood, D. K., Gallivan, J. P., Chapman, C. S., Milne, J. L., Culham, J. C. & Goodale, M. A. (2011). Visual salience dominates early visuomotor competition in reaching behavior, *Journal of Vision*, 11 (10):16, 1-11. C 2.8 4
- Valyear, K. F., Chapman, C. S., Gallivan, J. P., Mark, R. S., & Culham, J. C. (2011). To use or to move: Goal set modulates priming when grasping real tools. *Experimental Brain Research*, 212(1), 125-142. PI 2.3 19
- Gallivan, J. P., Chapman, C. S., Wood, D. K., Milne, J. L., Ansari, D., Culham, J. C., & Goodale, M. A. (2011). One to four, and nothing more: Non-conscious parallel object individuation in action. *Psychological Science*, 22(6), 803-811. Co-I 4.8 11
- Chapman, C. S., Gallivan, J. P., Culham, J. C. & Goodale, M. A. (2011). Mental blocks: fMRI reveals top-down modulation of early visual cortex when obstacles interfere with grasp planning. *Neuropsychologia*, 49, 1703-1717. Co-I 3.9 12
- Witt, J. K., Kemmerer, D., Linkenauger, S. A., & Culham, J. C. (2010). A functional role for motor simulation in naming tools. *Psychological Science*, 21, 1215-1219. C 4.8 29

<u>Cavina-Pratesi, C., Monaco, S., Fattori, P., Galletti, C., McAdam, T. D., Quinlan, D. J., Goodale, M. A., &amp; Culham, J. C. (2010). Functional magnetic resonance imaging reveals the neural substrates of arm transport and grip formation in reach-to-grasp actions in humans. <i>Journal of Neuroscience</i>, 30, 10306-10323.</u>	PI	7.3	118
<u>Chapman, C. S., Gallivan, J. P., Wood, D. K., Milne, J. L., Culham, J. C., &amp; Goodale, M. A. (2010). Short-term motor plasticity revealed in a visuomotor decision-making task. <i>Behavioural Brain Research</i>, 214: 130-134.</u>	Co-I	3.2	9
<u>Chapman, C. S., Gallivan, J. P., Wood, D. K., Milne, J. L., Culham, J. C., &amp; Goodale, M.A. (2010). Reaching for the unknown: Multiple target encoding and real-time decision making in a rapid reach task. <i>Cognition</i>, 116(2), 168-176.</u>	Co-I	3.5	35
<u>Danckert, J. &amp; Culham, J. C. (2010). Reflections on blindsight: Neuroimaging and behavioural exploration clarify a case of reversed localization in the blind field of a patient with hemianopia. <i>Canadian Journal of Experimental Psychology</i>, 64(2), 86-101.</u>	Co-A	1.2	3
<u>Monaco, S., Fattori, P., Galletti, C., Goodale, M. A., Króliczak, G., Quinlan, D., &amp; Culham, J. C. (2010). Contribution of visual and proprioceptive information to the precision of reaching movements. <i>Experimental Brain Research</i>, 202(1), 15-32.</u>	PI	2.3	20
<u>Pettypiece, C., Goodale, M. A., &amp; Culham, J.C. (2010). Integration of haptic and visual size cues revealed through crossmodal conflict. <i>Experimental Brain Research</i>, 201, 863-873.</u>	PI	2.3	12
<u>Malfait, N., Valyear, K. F., Culham, J. C., Anton, J.-L., &amp; Gribble, P. L. (2009). fMRI activation during observation of others' reach errors. <i>Journal of Cognitive Neuroscience</i>, 22(7), 1493-1503.</u>	Co-I	5.4	26
<u>Valyear, K. F. &amp; Culham, J. C. (2009). Observing learned object-specific functional grasps preferentially activates the ventral stream. <i>Journal of Cognitive Neuroscience</i>, 22(5), 970-984.</u>	PI	5.4	46
<u>Barry, R. L., Williams, J. M., Klassen, L. M., Gallivan, J.P., Culham, J. C., &amp; Menon, R. S. (2009). Evaluation of preprocessing steps to compensate for magnetic field distortions due to body movements in BOLD fMRI. <i>Magnetic Resonance Imaging</i>, 28(2), 235-244.</u>	Co-I	2.0	16
<u>Wong, Y., Aldcroft, A., Large, M.-E., Culham, J. &amp; Vilis, T. (2009). The role of temporal synchrony as a binding cue for visual persistence in early visual areas: an fMRI study. <i>Journal of Neurophysiology</i>, 102, 3461-3468.</u>	Co-I	3.1	8
<u>Pettypiece, C., Culham, J. C., &amp; Goodale, M. A. (2009). Differential effects of delay upon visually and haptically guided grasping and perceptual judgments. <i>Experimental Brain Research</i>, 193(3), 473-479.</u>	Co-I	2.3	7
<u>Gallivan, J. P., Cavina-Pratesi, C., &amp; Culham, J. C. (2009). Is that within reach?: fMRI reveals that the human superior-parietal occipital cortex (SPOC) encodes objects reachable by the hand. <i>Journal of Neuroscience</i>, 29(14), 4381-4391.</u>	PI	7.3	81
<u>Cohen, N. J. R., Cross, E. S., Tunik, E., Grafton, S. T., Culham, J. C. (2009). Ventral and dorsal stream contributions to immediate and delayed grasping: A TMS approach. <i>Neuropsychologia</i>, 47(6), 1553-1562.</u>	PI	3.9	62
<u>Króliczak, G., McAdam, T. Quinlan, D. J., &amp; Culham, J. C. (2008). The human dorsal stream adapts to real actions and 3D shape processing: A functional magnetic resonance imaging study. <i>Journal of Neurophysiology</i>, 100, 2627-2639.</u>	PI	3.1	35
<u>Large, M.-E., Culham, J., Kuchinad, A., Aldcroft, A., &amp; Vilis, T. (2008). fMRI reveals greater within- than between-hemifield integration in the human lateral occipital cortex. <i>European Journal of Neuroscience</i>, 27(12), 3299-3309.</u>	C	3.7	16



- Large, M.-E., Cavina-Pratesi, C., Vilis, T., & Culham, J. C. (2008). The neural correlates of change detection in the face perception network. *Neuropsychologia*, 46(8), 2169-2176. PI 3.9 21
- Cavina-Pratesi, C., Goodale, M. A., & Culham, J. C. (2007). fMRI reveals a dissociation between grasping and perceiving the size of real 3D objects. *PLOS (Public Library of Science) ONE*, 2(5): e424. doi:10.1371/journal.pone.0000424. PI 3.7 90
- Singhal, A.S., Culham, J. C., Chinellato, E., & Goodale, M. A. (2007). Dual-task interference is greater in delayed grasping than visually-guided grasping. *Journal of Vision*, 7(5), 1-12. Co-I 3.5 26
- Quinlan, D. J., & Culham, J. C. (2007). fMRI reveals a preference for near viewing in the human parieto-occipital cortex. *Neuroimage*, 36(1), 167-187. PI 5.9 63
- Rice, N. J., Valyear, K. F., Goodale, M. A., Milner, A. D., & Culham, J. C. (2007). Orientation sensitivity to graspable objects: An fMRI adaptation study. *Neuroimage*, 36, T87-T93. PI 5.9 36
- Valyear, K. F., Cavina-Pratesi, C., Stiglick, A. J., & Culham, J. C. (2007). Does tool-related fMRI activity within the intraparietal sulcus reflect the plan to grasp? *Neuroimage*, 36, T94-T108. PI 5.9 61
- Króliczak, G., Cavina-Pratesi, C., Goodman, D., & Culham, J. C. (2007). What does the brain do when you fake it? An fMRI study of pantomimed and real grasping. *Journal of Neurophysiology*, 97, 2410-2422. PI 3.1 58
- Culham, J. C., Cavina-Pratesi, C., & Singhal, A. (2006). The role of parietal cortex in visuomotor control: What have we learned from neuroimaging? *Neuropsychologia*, 44, 2668-2684. 1A 3.9 238
- Ganel, T., Gonzalez, C. L. R., Valyear, K. F., Culham, J. C., Goodale, M. A., & Köhler, S. (2006). The relationship between fMRI adaptation and repetition priming. *Neuroimage*, 32, 1432-1440. Co-I 5.9 44
- Culham, J. C., & Valyear, K. F. (2006). Human parietal cortex in action. *Current Opinion in Neurobiology*, 16(2), 205-212. 1A 6.9 321
- Cavina-Pratesi, C., Valyear, K. F., Culham, J. C., Köhler, S., Obhi, S., Marzi, C. A., & Goodale, M. A. (2006). Dissociating arbitrary stimulus-response mapping from movement planning during preparatory period: Evidence from event-related fMRI. *Journal of Neuroscience*, 26(10), 2704-2713. C 7.3 60
- Steeves, J. K. E., Culham, J. C., DuChaine, B. C., Cavina Pratesi, C., Valyear, K. F., Schindler, I., Humphrey, G. K., Milner, A. D. & Goodale, M. A. (2006). The fusiform face area is not sufficient for face recognition: Evidence from a patient with dense prosopagnosia and no occipital face area. *Neuropsychologia*, 44(4), 594-609. Co-I 3.9 140
- Valyear, K.F., Culham, J.C., Sharif, N., Westwood, D.A., & Goodale, M.A. (2006). A double dissociation between sensitivity to changes in object identity and object orientation in the ventral and dorsal visual streams: a human fMRI study. *Neuropsychologia*, 44(2), 218-228. Co-I 3.9 109
- Steeves, J. K. E., Humphrey, G. K., Culham, J. C., Menon, R. S., & Goodale, M. A. (2004). Behavioural and neuroimaging evidence for a contribution of color and texture information to scene classification in a patient with visual form agnosia. *Journal of Cognitive Neuroscience*, 16, 955-965. Co-I 6.1 56
- Culham, J. C., Danckert, S. L., DeSouza, J. F. X., Gati, J. S., Menon, R. S., & Goodale, M. A. (2003). Visually guided grasping produces fMRI activation in dorsal but not ventral stream brain areas. *Experimental Brain Research*, 153(2), 158-170. 1A 2.3 420

James, T.W., <b>Culham</b> , J., Humphrey, G. K., Milner, A. D., & Goodale, M. A. (2003). Ventral occipital lesions impair object recognition but not object-directed grasping: an fMRI study. <i>Brain</i> , <i>126</i> , 2463-2475.	Co-A	9.2	368
<b>Culham</b> , J. C. & Kline, D. W. (2002). The age deficit on photopic counterphase flicker: contrast, spatial frequency, and luminance effects. <i>Canadian Journal of Experimental Psychology</i> , <i>56</i> (3), 177-186.	1A	1.2	2
<b>Culham</b> , J.C., Cavanagh, P., & Kanwisher, N.G. (2001). Attention response functions: characterizing brain areas using fMRI activation during parametric variations of attentional load. <i>Neuron</i> , <i>32</i> (4), 737-745.	1A	14.0	213
Verstraten, F. A. J., Hooge, I. T. C., <b>Culham</b> , J. C., & van Wezel, R. J. A. (2001). Systematic eye movements do not account for the perception of motion during attentive tracking. <i>Vision Research</i> , <i>41</i> , 3505-3511.	C	2.0	13
Kline, D.W., <b>Culham</b> , J. C., Bartel, P., & Lynk, L. (2001). Aging effects on Vernier hyperacuity: a function of oscillation rate but not target contrast. <i>Optometry and Vision Science</i> , <i>78</i> (9), 676-682.	C	1.6	18
<u>Dukelow</u> , S. P., DeSouza, J. F. X., <b>Culham</b> , J. C., van den Berg, A. V., Menon, R. S., & Vilis, T. (2001). Distinguishing subregions of the human MT+ complex using visual fields and pursuit eye movements. <i>Journal of Neurophysiology</i> , <i>86</i> (4), 1991-2000.	C	3.1	200
<b>Culham</b> , J.C., He, S., <u>Dukelow</u> , S., & Verstraten, F.A.J. (2001). Visual motion and the human brain: what has neuroimaging told us? <i>Acta Psychologica</i> , <i>107</i> , 69-94.	1A	2.2	84
<b>Culham</b> , J. C. & Kanwisher, N. G. (2001). Neuroimaging of cognitive functions in human parietal cortex. <i>Current Opinion in Neurobiology</i> , <i>11</i> (2), 157-163.	1A	6.9	582
<b>Culham</b> , J. C., Verstraten, F.A.J., Ashida, H., & Cavanagh, P. (2000). Independent aftereffects of attention and motion. <i>Neuron</i> , <i>28</i> (2), 607-615.	1A	14.0	67
<b>Culham</b> , J. C., <u>Dukelow</u> , S. P., Vilis, T., Hassard, F. A., Gati, J. S., Menon, R. S., & Goodale, M. A. (1999). Recovery of fMRI activation in motion area MT following storage of the motion aftereffect. <i>Journal of Neurophysiology</i> , <i>81</i> (1), 388-393.	1A	3.1	108
<b>Culham</b> , J. C., Brandt, S. A., Cavanagh, P., Kanwisher, N. G., Dale, A. M., & Tootell, R. B. H. (1998). Cortical fMRI activation produced by attentive tracking of moving targets. <i>Journal of Neurophysiology</i> , <i>80</i> , 2657-2670.	1A	3.1	437
<b>Culham</b> , J. C., & Cavanagh, P. (1996). Motion capture and visual attention: A reply to Ramachandran. <i>Vision Research</i> , <i>36</i> (1), 79-80.	1A	2.0	2
<b>Culham</b> , J. C., & Cavanagh, P. (1994). Motion capture of luminance stimuli by equiluminous color gratings and by attentive tracking. <i>Vision Research</i> , <i>34</i> (20), 2701-2706.	1A	2.0	32

## BOOK CHAPTERS, ENCYCLOPEDIA ENTRIES, AND BOOK REVIEWS (10)

Publication	Role	Cit.
<b>Culham</b> , J. C. (In press). Visuomotor integration. Entry in <i>Brain Mapping: A Comprehensive Reference</i> . (Ed. A. C. Toga). Elsevier.	1A	
<b>Culham</b> , J. C. (In press). Cortical areas engaged in movement. Entry in <i>International Encyclopedia of Social and Behavioral Sciences</i> , 2 <sup>nd</sup> ed. (Ed. J. D. Wright). Elsevier.	1A	
<u>Daley</u> , M. & <b>Culham</b> , J. C. (2011). Book review of <i>Networks of the Brain</i> by Olaf Sporns. <i>Canadian Psychology</i> .	Co-A	

- Culham, J. C.** (2009). Reaching and grasping. Entry in *Encyclopedia of Perception* (Ed. Bruce Goldstein). Thousand Oaks, CA: Sage. 1A
- Culham, J. C. & Valyear, K. F.** (2009). Tool use. Entry in *Encyclopedia of Perception* (Ed. Bruce Goldstein). Thousand Oaks, CA: Sage. Co-A
- Culham, J. C., Gallivan, J., Cavina-Pratesi, C., & Quinlan, D. J.** (2008). fMRI investigations of reaching and ego space in human superior parieto-occipital cortex. In R. L. Klatzky, M. Behrmann, & B. MacWhinney (Eds.), *Embodiment, Ego-space, and Action*. New York: Psychology Press (pp. 247-274). 1A 32
- Culham, J. C.** (2006). Functional neuroimaging: Experimental design and analysis. Book chapter in R. Cabeza and A. Kingstone (Eds.), *Handbook of Functional Neuroimaging of Cognition (2nd ed.)*. Cambridge MA: MIT Press (pp. 53-82). 1A 48
- Culham, J. C.** (2004). Human brain imaging reveals a parietal area specialized for grasping. Chapter in N. Kanwisher and J. Duncan (Eds.), *Attention and Performance XX: Functional Neuroimaging of Human Cognition*. Oxford: Oxford University Press (pp. 417-438). 1A 100
- Culham, J.C.** (2002). Parietal cortex. Entry in L. Nadel (Editor-in-Chief), *Encyclopedia of Cognitive Science* (Vol. 3, pp. 451-457). Houndmills U.K.: Macmillan 1A 4
- Culham, J. C., Nishida, S., Ledgeway, T., Cavanagh, P., von Grünau, M. W., Kwas, M., Alais, D., & Raymond, J. E.** (1998). Higher-order effects. Chapter in G. Mather, F. Verstraten & S. Anstis (Eds.), *The Motion After-effect: A Modern Prospective*. Cambridge, MA: MIT Press (pp. 84-124). 1A 24

### SUBMITTED PAPERS (3)

- Hutchison, R. M., Culham, J. C., Flanagan, J. R., Everling, S., & Gallivan, J. P. Functional subdivisions of medial parieto-occipital cortex in humans and nonhuman primates using resting-state fMRI. Submitted 2014-12-03.
- Stöttinger, E., Filipowicz, A., Valadao, D., Culham, J., Goodale, M., Anderson, B., & Danckert, J. A cortical network that marks the moment when conscious representations are updated. Submitted 2015-02-27.
- Macdonald, S. N. & Culham, J. C. Do human brain areas involved in visuomotor actions show a preference for real tools over visually similar non-tools? Submitted 2015-03-04.

### IMPACT OF PAPERS

#### Citation Counts

ORCID Author Identifier: 0000-0003-0754-2999

ISI Web of Science (<http://www.researcherid.com/>): A-9863-2013

- Citation Count: 3,425 (March 2015)
- h-index: 28 (28 papers with 28+ citations)

Google Scholar (<http://scholar.google.ca/citations?user=PnssgPwAAAAJ&hl=en>)

- Citation Count: 5,320 (March 2015)
- h-index: 33 (33 papers with 33+ citations)

#### Highlighted work:

Gallivan et al. (2013), *eLife*

- Subject of an Insight article: Mahon, B. Z. (2013). Watching the brain in action, *eLife*, 2, e00866.

Gallivan et al. (2011b), *Journal of Neuroscience* (“Decoding effector-dependent...”)

- Gallivan received a *CIHR Brain Star Award* for this work

Gallivan et al. (2011a), *Journal of Neuroscience* (“Decoding action intentions...”)

- Gallivan received a *CIHR Brain Star Award* for this work
- “Recommended” on *Faculty of 1000*, <http://f1000.com/13356062>
- Subject of Journal Club Commentary: Vesia, M. & Davare, M. (2011). Decoding action intentions in parietofrontal circuits. *Journal of Neuroscience*, 31(46), 16491-16493.

- Received considerable international media coverage, including *Canadian Broadcasting Corporation (CBC)*, *Daily Mail* (U.K.), *Reader's Digest*, and *Times of India*
- Gallivan et al. (2009), *Journal of Neuroscience*
- Gallivan received a *CIHR Brain Star Award* for this work
- Steeves et al. (2005), *Neuropsychologia*
- “Must Read” on *Faculty of 1000*, <http://www.facultyof1000.com/article/16125741>
- Culham et al., (2001), *Neuron*
- “Recommended” on *Faculty of 1000*, <http://www.facultyof1000.com/article/11719212>
- Culham et al. (2000), *Neuron*
- Subject of Preview piece: Kastner, S. (2000). Attention and motion aftereffects: Just keep on tracking! *Neuron*, 28, 314.
- Culham et al. (1999), *Journal of Neurophysiology*
- Subject of News & Views piece: Moore, C. & Engel, S. A. (1999). Visual perception: Mind and brain see eye to eye. *Current Biology*, R74-76.

## COMMENTARIES (14)

- Culham, J. C.** (2012). Motion perception: New ideas on how drivers perceive speed emerge from the fog. *eLife*, 1, e00281. (Insight: Pretto et al., 2012, *eLife*). DOI: 10.7554/eLife.00281
- Culham, J. C.** (2005). Look before you reach! *Neuron*, 48, 713-714. (Preview: Prado et al., 2005, *Neuron*).
- Culham, J. C.** (2005). Turn the other cheek: Viewpoint aftereffects for faces and objects. *Neuron*, 45, 644-645. (Preview: Fang & He, 2005, *Neuron*).
- Culham, J. C.** (2003). Attention-grabbing motion in the human brain. *Neuron*, 40, 451-452. (Preview: Claeys et al., 2003, *Neuron*).
- Culham, J. C.** (2002). Dissociations in parietal "association" cortex. *Neuron*, 33, 318-320. (Preview: Simon et al., 2002, *Neuron*).
- Culham, J. C.** (2002). Brain activity around the clock. *Trends in Cognitive Sciences*, 6, 114. (Journal Club: Sereno et al., 2001, *Science*).
- Culham, J. C.** (2001). How neurons become BOLD. *Trends in Cognitive Sciences*, 5, 416. (Journal Club: Logothetis et al., 2001, *Nature*).
- Culham, J. C.** (2001). The brain as film director. *Trends in Cognitive Sciences*, 5, 376-377. (Journal Club: Zacks et al., 2001, *Nature Neuroscience*).
- Culham, J. C.** (2001). There's Waldo! *Trends in Cognitive Sciences*, 5, 231. (Journal Club: Sheinberg & Logothetis, 2001, *Journal of Neuroscience*).
- Culham, J. C.** (2000). Just how general is 'g'? *Trends in Cognitive Sciences*, 4, 328. (Monitor: Duncan et al., 2000, *Science*).
- Culham, J. C.** (2000). Activation from neuron to brain. *Trends in Cognitive Sciences*, 4, 5. (Monitor: Scannell & Young, 1999, *Proceedings of the Royal Society London B*).
- Culham, J. C.** (1999). Discordant views on the Mozart effect. *Trends in Cognitive Sciences*, 3, 409. (Monitor: Steele et al, 1999, *Nature*; Chabris, 1999, *Nature*).
- Culham, J. C.** (1999). What you see is what you get activated. *Trends in Cognitive Sciences*, 3, 126. (Monitor: Tong et al., 1998, *Neuron*).
- Culham, J. C.** (1998). Timing in the visual hierarchy. *Trends in Cognitive Sciences*, 2, 473. (Monitor: Schmolesky et al., 1988, *Journal of Neurophysiology*).

## INVITED TALKS AND \*TEACHING WORKSHOPS (97)

- Culham, J. C.** (October 2014). The treachery of images”: Human neuroimaging of real objects and real actions. Brain Research Centre, University of British Columbia, Vancouver, British Columbia.

- Culham, J. C.** (July 2014). Reaching, grasping and feeding actions in humans. Canadian Centre for Behavioural Neuroscience, *University of Lethbridge*, Lethbridge, Alberta.
- Culham, J. C.**, (March 2014). "The treachery of images": Human neuroimaging of real objects and real actions. *Perceptual Expertise Network Workshop*, Denver, Colorado.
- Culham, J. C.**, (March 2014). "The treachery of images": Human neuroimaging of real objects and real actions. Department of Cognitive Science, *Johns Hopkins University*, Baltimore, Maryland.
- Culham, J. C.** (September 2013). Decoding human hand and tool actions using functional magnetic resonance imaging. *Karolinska Institute*, Stockholm, Sweden.
- Culham, J. C.** (October 2013). "The treachery of images": Action and perception in the real world. *University of Michigan Functional MRI Laboratory*, Ann Arbor, Michigan.
- Culham, J. C.** (September 2013). Decoding of human hand and tool actions using functional magnetic resonance imaging. *Penn State University*, State College Pennsylvania.
- Culham, J. C.** (June 2013). Decoding of human hand and tool actions using functional magnetic resonance imaging. Marie Curie Network meeting on Brain Plasticity, *Oxford University*.
- Culham, J. C.** (May 2013). "The treachery of images": Why the brain responds differently to photos than real objects. Graduate Conference in Philosophy of Mind, Language, and Cognitive Science (PhilMilCog), *Western University*, London, Ontario.
- Culham, J. C.** (May 2013). "The treachery of images": How real objects affect human brain processing during action, perception and cognition tasks. *Banff Annual Seminar in Cognitive Science (BASiCS)*, Banff, Alberta.
- Culham, J. C.** (March 2013). Bringing the real world into the fMRI scanner: Human neuroimaging of real actions. Department of Psychology, *Concordia University*, Montreal, Quebec.
- Culham, J. C.** (March 2013). "The treachery of images": Human neuroimaging of real object recognition processes. Department of Psychology, *Concordia University*, Montreal, Quebec.
- Culham, J. C.** (March 2013). Bringing the real world into the fMRI scanner: Human neuroimaging of real objects and actions. Neural Systems and Plasticity Research Group, *University of Saskatchewan*, Saskatoon, Saskatchewan.
- Culham, J. C.** (March 2013). "The treachery of images": Action and perception in the real world. Department of Psychology colloquium (in honour of promotion to Full Professor), *Western University*, London, Ontario.
- Culham, J. C.** (November 2012). Decoding of human hand and tool actions using functional magnetic resonance imaging. Institute of Biophysics, *Chinese Academy of Sciences*, Beijing, China.
- Culham, J. C.** (November 2012). Decoding of human hand and tool actions using functional magnetic resonance imaging. Department of Psychology, *Peking University*, Beijing, China.
- Culham, J. C.** (November 2012). Decoding of human hand and tool actions using functional magnetic resonance imaging. Department of Biological Science and Medical Engineering, *Beihang University*, Beijing, China.
- \***Culham, J. C.** (November 2012). Tutorial: Brain machine interfaces. Department of Biological Science and Medical Engineering, *Beihang University*, Beijing, China
- \***Culham, J. C.** (November 2012). Tutorial: Human brain imaging methods. Department of Biological Science and Medical Engineering, *Beihang University*, Beijing, China
- Culham, J. C.** (June 2012). How does the human brain use tools?: From observation and pantomiming to real tool use in the fMRI scanner. *International Neuropsychological Symposium*, Bonifacio, Corsica, France.
- Culham, J. C.** (June 2012). What has neuroimaging revealed about the two visual streams in the human brain? *Canadian Society for Brain, Behaviour and Cognitive Science*, Kingston, Ontario.
- Culham, J. C.** (April 2012). Behavioral and neuroimaging investigations of residual vision in a patient with extensive bilateral occipitotemporal lesions. *Ophthalmology Grand Rounds, St. Joseph's Hospital*, London, Ontario.
- Culham, J. C.**, & Gallivan, J. P. (March 2012). Decoding action-related fMRI signals in the two visual streams. *Radboud University Nijmegen*, Netherlands.
- Culham, J. C.**, & Gallivan, J. P. (March 2012). Decoding of human hand actions using functional magnetic resonance imaging. Mini-symposium: Visuomotor processing in the parietal lobe. Neuroimaging Research Group, *Utrecht University*.
- Culham, J. C.**, & Gallivan, J. P. (March 2012). Decoding of human hand actions using neuroimaging. *University College London*.

- Culham, J. C.** (December 2011). Neuroimaging of human tool use. *SISSA* (Scuola Internazionale Superiore di Studi Avanzati = International School for Advanced Studies), Trieste, Italy.
- Culham, J. C.** (June 2011). Neural coding of hand actions in the human brain. *Organization for Human Brain Mapping*, Quebec City, Quebec.
- Culham, J. C. & Gollivan, J. P.** (May 2011). Decoding of human hand actions using functional magnetic resonance imaging. *Center for Mind/Brain Sciences (CIMeC)*, University of Trento, Rovereto, Italy.
- Culham, J. C.** (May 2011). Bringing the real world into the brain scanner: Functional magnetic resonance imaging of perception and action for real objects. *Workshop on Concepts, Actions and Objects (CAOS)*, Center for Mind/Brain Sciences, Rovereto, Italy.
- Culham, J. C. & Gollivan, J. P.** (April 2011). Decoding of human hand actions using functional magnetic resonance imaging. Department of Psychology, *York University*, Toronto.
- Culham, J. C. & Gollivan, J. P.** (January 2011). Decoding of human hand actions using functional magnetic resonance imaging. *Federation of European Neuroscience Societies – International Brain Research Organization (FENS-IBRO) Hertie Winter School*. Obergurgl, Austria.
- Culham, J. C.** (October 2010). Bringing the real world into the brain scanner: Functional magnetic resonance imaging of perceiving and acting upon real objects. Neuroscience and Applied Cognitive Science seminar, Department of Psychology, *University of Guelph*, Guelph, Ontario.
- Culham, J. C.** (October 2010). Bringing the real world into the brain scanner: Functional magnetic resonance imaging of perceiving and acting upon real objects. Center for Motor Control, *Penn State University*, State College, Pennsylvania.
- Culham, J. C., Monaco, S., & Gollivan, J. P.** (September 2010). Parietal coding of movement components and object properties in reaching and grasping. *International Conference on Parietal Lobe Function*, Artis Zoo, Amsterdam, Netherlands.
- Culham, J. C.** (February 2010). “The treachery of images”: Action and perception in the real world. Centre for Neuroscience Studies, *Queen’s University*, Kingston, Ontario.
- Culham, J. C.** (June 2009). Perception and action interactions: Evidence from neuropsychology, neuroimaging and transcranial magnetic stimulation. *Smith-Kettlewell Eye Research Institute*, San Francisco, California.
- Culham, J. C.** (May 2009). Neuroimaging of reaching actions in the human brain. Department of Human and General Physiology, *University of Bologna*, Italy.
- Culham, J. C.** (May 2009). Actions and perception in the real world. Centre for Studies and Research in Cognitive Neuroscience, *University of Bologna*, Italy.
- Culham, J. C.** (March 2009). Perception and action interactions: Evidence from neuropsychology, neuroimaging and transcranial magnetic stimulation. *Ben Gurion University of the Negev*, Be’er Sheva, Israel.
- Culham, J. C.** (March 2009). Neural coding within human brain regions involved in reaching and grasping. “The Functions of the Parietal Lobes”, Institute for Advanced Studies, *The Hebrew University*, Jerusalem, Israel.
- Culham, J. C.** (March 2009). Perception and action interactions: Evidence from neuropsychology, neuroimaging and transcranial magnetic stimulation. *Weizmann Institute*, Rehovot, Israel.
- Culham, J. C.** (March 2009). Perception and action interactions: Evidence from neuropsychology, neuroimaging and transcranial magnetic stimulation. *University of Glasgow*, Glasgow, Scotland.
- Culham, J. C.** (February 2009). Perception and action interactions: Evidence from neuropsychology, neuroimaging and transcranial magnetic stimulation. *University of Bangor*, Bangor, Wales.
- Culham, J. C.** (February 2009). Neural coding within human brain regions involved in reaching and grasping. *University of Parma*, Parma, Italy.
- Culham, J. C.** (February 2009). Grasping what you cannot see: Dissociations between action and perception in patients with brain damage. Public lecture, Institute of Advanced Studies, *University of Bologna*, Bologna, Italy.
- Culham, J. C.** (December 2008). Neuroimaging of hand actions in parietal and temporal cortex. Symposium on Parietal Cortex in Human and Non-Human Primates. *Katholieke Universiteit Leuven*, Leuven, Belgium.
- Culham, J. C.** (December 2008). The human neural substrates of grasping and reaching. *Hertie-Institute for Clinical Brain Research*. Tübingen, Germany.

- Culham, J. C.** (November 2008). Neuroimaging of perception and action in normal subjects and a neuropsychological patient with bilateral occipitotemporal lesions. *Université Catholique de Louvain*, Louvain-la-Neuve and Brussels, Belgium.
- \***Culham, J. C.** (November 2008). Experimental design and analysis of fMRI data. Two-day workshop at *Université Catholique de Louvain*, Louvain-la-Neuve, Belgium.
- Culham, J. C.** (October 2008). Imaging of sensorimotor functions – overview. Methods and Applications of Diffusion Tensor and Functional Magnetic Resonance Imaging, Umeå Neuroscience Society and Umeå Center for Functional Brain Imaging, *Umeå University*, Umeå, Sweden.
- Culham, J. C.** (October 2008). Imaging of visual functions – overview. Methods and Applications of Diffusion Tensor and Functional Magnetic Resonance Imaging, Umeå Neuroscience Society and Umeå Center for Functional Brain Imaging, *Umeå University*, Umeå, Sweden.
- Culham, J. C.** (October 2008). Neural coding within human brain regions involved in reaching and grasping. Colloquium, *Katholieke Universiteit Leuven*, Leuven, Belgium.
- Culham, J. C.** (October 2008). Neural coding within human brain regions involved in reaching and grasping. Colloquium, *Maastricht Brain Imaging Centre*, Maastricht, Netherlands.
- Culham, J. C.** (September 2008). Do graspable objects automatically convey affordances?: fMRI and behavioral pilot data. Harvard Vision Lab meeting, Department of Psychology, *Harvard University*, Cambridge, Massachusetts
- Culham, J. C. & Quinlan, D. J.** (September 2008). From Hand to Mouth: The kinematics of human feeding actions. Harvard Vision Lab, Department of Psychology, *Harvard University*, Cambridge, Massachusetts.
- Culham, J. C.** (September 2008). Neural coding within human brain regions involved in reaching and grasping. Colloquium for the Department of Brain and Cognitive Science, *Massachusetts Institute of Technology*, Cambridge, Massachusetts.
- Culham, J. C., & Valyear, K. F.** (July 2008). Neuroimaging investigations of tool-selective regions in the human dorsal and ventral streams. *Asia Pacific Conference on Vision*, Brisbane, Australia.
- Culham, J. C.** (May 2008). Using visual information to guide actions: Insights from functional imaging. *Canadian Association for Neuroscience* meeting, Montréal, Quebec.
- Culham, J. C.,** (November 2007). Neuroimaging of hand actions in human parietal cortex. Centre for Neuroscience Studies, *Queen's University*, Kingston, Ontario.
- Culham, J. C.** (October 2007). Human neuroimaging of reaching and reachable objects. Department of Physiology at the *Université de Montréal*, Montréal, Quebec.
- Culham, J. C.** (July 2007). Neuroimaging of human brain regions involved in reaching and grasping. Summer Institute of Cognitive Neuroscience, *National Central University*, Jhongli City, Taiwan.
- Culham, J. C.** (July 2007). Neuroimaging of reaching, reachable objects, and tool use. Summer Institute of Cognitive Neuroscience, *National Central University*, Jhongli City, Taiwan.
- Culham, J. C.** (June 2007). Neural coding of reaching and reachability in human occipital and parietal cortex. *Centre for Vision Research Conference on Cortical Mechanisms of Vision*, York University, Toronto, Ontario.
- Culham, J. C.** (May 2007). What does the brain do when you fake it?: fMRI investigations of delayed and pantomimed grasping. *Canadian Association for Neuroscience*, Toronto, Ontario.
- Culham, J. C.** (October 2006). The control of actions in the human brain. *Adam Mickiewicz University*, Poznan, Poland.
- Culham, J. C.** (October 2006). The control of actions in the human brain. *Nencki Institute*, Warsaw, Poland.
- Culham, J. C.** (June 2006). The neural substrates of reaching and grasping. *University of Nottingham*, U.K.
- Culham, J. C., Quinlan, D. J., Cavina-Pratesi, C., & Gallivan, J. P.** (June 2006). Interactions in action: Brain systems for visually guided actions. *34th Carnegie Symposium on Cognition: Embodiment, Ego-space, and Action*. Pittsburgh, Pennsylvania.
- Culham, J. C.** (February 2006). Interactions in action: Relationships between systems and brain regions in grasping, reaching, and feeding behaviours. *Lake Ontario Visionary Establishment (L.O.V.E.)* annual meeting, Niagara Falls, Ontario.

- Culham, J. C., Cavina Pratesi, C. & Singhal, A.** (December 2005). Grasp-related fMRI activation in dorsal and ventral streams. Workshop on Object Manipulation from a Perception-Action Perspective, *Netherlands Organization for Scientific Research*, Nijmegen, The Netherlands.
- Culham, J. C.** (September 2005). Informal talk at the *Leverhulme Trust group meeting* (to support collaborations between Western, Durham, Oxford and INSERM-Lyon), Durham, U.K.
- Culham, J. C.** (August 2005). fMRI reveals dissociations and interactions between dorsal and ventral stream brain areas in immediate and delayed grasping. Perception and Action Workshop, Rauischholzhausen Castle. *Giessen and Marburg Universities*, Germany.
- Culham, J. C.** (May 2005). Imaging the brain during reaching and grasping. Centre for Vision Research. *York University*, Toronto, Ontario.
- \***Culham, J. C.** (May 2005). Experimental design and analysis of fMRI data. Workshop at *Dalhousie University*, Halifax, Nova Scotia.
- Culham, J. C.** (April 2005). Grasp-related fMRI activation in the dorsal and ventral streams. *Vision Sciences Society Satellite Symposium, From Eye to Hand: The Role of Vision in Grasping*. Sarasota, Florida.
- \***Culham, J. C.** (April 2005). Experimental design and fMRI statistics. Workshop at the Bergen fMRI Group, *University of Bergen*, Bergen Norway.
- Culham, J. C.** (March 2005). fMRI dissociations between perceiving and grasping objects. Department of Psychology, *Indiana University*, Bloomington, Indiana.
- Culham, J. C.** (February 2005). fMRI dissociations between perceiving and grasping objects. Cognition Brown Bag, Department of Psychology, *University of Western Ontario*, London, Ontario.
- Culham, J. C.** (December 2004). fMRI research on action & perception and its challenges. *Siemens MRI Division*, Erlangen, Germany.
- Culham, J. C.** (November 2004). fMRI dissociations between perceiving and grasping objects. Ebbinghaus Empire series, Department of Psychology, *University of Toronto*, Toronto, Ontario.
- Culham, J. C.** (September 2004). fMRI of human parietal cortex during visually-guided grasping: An update. Informal talk at the *Leverhulme Trust group meeting* (to support collaborations between Western, Durham, Oxford and INSERM-Lyon), London, Ontario.
- Culham, J. C.** (October 2003). Object grasping without object recognition: fMRI studies of normal subjects and a patient with visual form agnosia. *West Virginia University*, Morgantown, West Virginia.
- Culham, J. C.** (October 2003). Dissociations between grasping and perceiving objects: Evidence from fMRI on normal subjects and a patient with visual form agnosia. Cognition/Perception seminar, Department of Psychology, *McMaster University*, Hamilton, Ontario.
- Culham, J. C.** (August 2003). fMRI of human parietal cortex during visually-guided grasping. Informal talk at the *Leverhulme Trust group meeting* (to support collaborations between Western, Durham, Oxford and INSERM-Lyon), Lyon, France.
- Culham, J. C. James, T. W., Steeves, J. K. E., Humphrey, G. K., Milner, A. D., & Goodale, M. A.** (June 2003). fMRI investigations of spared visual abilities in a patient with visual form agnosia. *International Neuropsychological Symposium*, Mondello Sicily.
- Culham, J. C.** (September 2002). Human neural substrates of visually-guided grasping. *The Neural Bases of Visuomotor Control*, La Londe, France.
- Culham, J. C.** (August 2002). Brain imaging of human parietal cortex: A call to "action". *Massachusetts Institute of Technology*, Department of Brain and Cognitive Sciences, Cambridge, Massachusetts.
- Culham, J. C.** (July 2002). fMRI investigations of visually-guided grasping. *Attention and Performance XX: Functional Brain Imaging of Visual Cognition*, Erice, Sicily.
- Culham, J. C.** (May 2002). Human brain imaging reveals a parietal area specialized for grasping. *Eye Hand Coordination Workshop*, Queen's University, Kingston, Ontario.
- Culham, J. C.** (March 2001). Neuroimaging of human parietal cortex: fMRI Investigations of motion, attention, eye movements and action. *McGill University* Department of Psychology, Montreal, Quebec.
- Culham, J. C.** (February 2001). Neuroimaging of human parietal cortex: fMRI Investigations of motion, attention, eye movements and action. *University of California, Davis Center for Neuroscience*, Davis, California.



- Culham, J. C.** (January 2001). Neuroimaging of human parietal cortex: fMRI Investigations of motion, attention, eye movements and action. *University of Western Ontario Department of Psychology, London, Ontario.*
- Culham, J.C., DeSouza, J. F. X., Osu, R., Milner, A.D., Gati, J. S., Menon, R. S., & Goodale, M.A.** (July 2000). Grasping produces fMRI activation in human anterior intraparietal sulcus. Joint meeting of the *Canadian Society for Brain, Behaviour and Cognitive Science and the Experimental Psychology Society (UK)*. Cambridge, U.K.
- Culham, J. C., DeSouza, J. F. X., Quinlan, D., Woodward, S., & Goodale, M. A.** (June 2000). Human neural substrates of visually-guided grasping. Invited poster at the annual meeting of the *McDonnell-Pew Program in Cognitive Neuroscience*, Durham, North Carolina.
- Culham, J.C.** (June 2000). Parietal activation for attention and action revealed by fMRI. *Southern Ontario Neuroscience Association*. London, Ontario.
- Culham, J.C.** (December, 1998). More than a one track mind: fMRI studies of attention to multiple moving targets. Keynote speech at the *Nederlandse Vereniging voor Psychonomie Symposium*, Kijken naar het Actieve Brein ("Looking at the Active Brain"), Utrecht University, Netherlands.
- Culham, J.C.** (February, 1998). More than a one-track mind: fMRI studies of attention to multiple moving targets. *Center for the Neural Basis of Cognition (Carnegie-Mellon/University of Pittsburgh)*, Pittsburgh, Pennsylvania.

## CONFERENCE PRESENTATIONS (135)

*Abstracts are published in conference proceedings unless otherwise specified.*

- Karl, J. M., Quinlan, D. J., Stubbs, K. M., Whishaw, I. Q., Culham, J. C. (February 2015). Fake Feeding: Kinematic differences between real vs. pantomime hand-to-mouth actions suggest dual routes from somatosensation to action. Talk at the *Canadian Spring Conference on Brain and Behaviour*, Fernie, BC.
- Karl, J. M., Quinlan, D. J., Whishaw, I. Q., & Culham, J. C. (May 2014). Does behavioral dissociation of real vs. pantomime movements only apply to visually guided actions or is it a general feature of motor control? *Vision Sciences Society*, St. Pete Beach FL.
- Fabrizi, S., Stubbs, K., Cusack, R., & Culham, J. C. (November 2014). Similarity of representations in human dorsal- and ventral-stream brain regions during object viewing and grasping. Poster presented at the *Society for Neuroscience*, Washington, DC.
- Squires, S. D., Macdonald, S. N., Quinlan, D. J., Paciocco, J. U., Culham, J. C., & Snow, J. C. (2014). Do real tools prime hand actions more than photographs of tools? *Canadian Society for Brain, Behavior and Cognitive Science*, Toronto, ON.
- Squires, S. D., Macdonald, S. N., Quinlan, D. J., Paciocco, J. U., Culham, J. C., & Snow, J. C. (2014). Do real tools prime hand actions more than photographs of tools? *Southern Ontario Neuroscience Association*, London, ON.
- Barnett-Cowan, M., Buckingham, G., & Culham, J. C. (May 2014). The "Verge-Weight" Illusion. Poster presented at the *Vision Sciences Society*, St. Pete Beach, FL.
- Snow, J. C., Rangel, A., & Culham, J. C. (November 2013). Bringing the real world into the fMRI scanner: Real objects amplify the neural correlates of valuation compared to photos. Poster presented at the *Society for Neuroscience*, San Diego, CA.
- Vesia, M., Barnett-Cowan, M., Elahi, B., Neva, J. L., Davare, M., Staines, W. R., Culham, J. C., & Chen, R. (November 2013). Selective modulation of interactions between areas of the dorsomedial pathway during the transport and grip formation of goal-directed hand actions. Poster presented at the *Society for Neuroscience*, San Diego, CA.
- Macdonald, S. N., & Culham, J. C. (November 2013). Do human brain areas involved in visuomotor actions show a preference for real tools over visually similar non-tools? Poster presented at the *Society for Neuroscience*, San Diego, CA.
- Fabrizi, S., Cusack, R., & Culham, J. C. (November 2013). Decoding the representations of grasp types and object properties in the human brain. Poster presented at the *Society for Neuroscience*, San Diego, CA.
- Cardinali, L., Roy, A. C., Culham, J. C., & Farné, A. (November 2013). The tool ownership illusion: Motor experience facilitates incorporation of a tool. Poster presented at the *Society for Neuroscience*, San Diego, CA.

- Wood, D. K., Chapman, C. S., Gallivan, J. P., Milne, J. L., Culham, J. C., & Goodale, M. A. (November 2013). The influence of bottom-up visual salience decays linearly in a compelled reaching paradigm. Poster presented at the *Society for Neuroscience*, San Diego, CA.
- Macdonald, S. N., & Culham, J. C. (May 2013). Do human brain areas involved in visuomotor actions show a preference for certain tool orientations? Poster presented at the *Canadian Association for Neuroscience*, Toronto ON.
- Culham, J. C., Snow, J. C., & Rangel, A. (May 2013). Bringing the real world into the fMRI scanner: Real objects amplify the neural correlates of valuation compared to photos. Poster presented at the *Vision Sciences Society*, Naples, FL.
- Culham, J. C., Gallivan, J. P., McLean, D. A., & Valyear, K. F. (October 2012). Is a tool an extension of the body in the brain?: Decoding separate and shared representations for the hand and tool from human brain activity. Talk presented at *Society for Neuroscience*, New Orleans, LA.
- Barnett-Cowan, M., Snow, J. C., & Culham, J. C. (October 2012). Gravity dependent recognition of objects through active touch. Talk presented at *Society for Neuroscience*. New Orleans, LA.
- Snow, J. C., Goodale, M. A., & Culham, J. C. (October 2012). The lateral occipital cortex is not necessary for shape perception. Talk presented at *Society for Neuroscience*. New Orleans, LA.
- Gallivan, J. P., Snow, J. C., Pettypiece, C. E., & Culham, J. C. (October 2012). Haptic shape decoding in primary visual cortex. Talk presented at *Society for Neuroscience*. New Orleans, LA.
- McAdam, T. D., Gallivan, J. P., McLean, D. A., & Culham, J. C. (October 2012). Grasping with a twist: Decoding action intentions in the human brain using fMRI. Poster presented at *Society for Neuroscience*. New Orleans, LA.
- Paciocco, J. U., McLean, D. A., & Culham, J. C. (October 2012). The human neural correlates of real vs. pantomimed tool use revealed using fMRI. Poster presented at *Society for Neuroscience*. New Orleans, LA.
- Hutchison, R., Gallivan, J. P., Culham, J. C., Gati, J. S., Menon, R. S., & Everling, S. (October 2012). Homologous functional connectivity architecture of the monkey and human saccade-related networks. Talk presented at *Society for Neuroscience*. New Orleans, LA.
- Wood, D. K., Milne, J. L., Chapman, C. S., Gallivan, J. P., Culham, J. C., & Goodale, M. A. (June 2012). A reaching task reveals the rapid extraction of probability information from arbitrary colour cues. Poster presented at the *European Conference on Visual Perception*, Alghero Italy.
- Barnett-Cowan, M., Culham, J. C., & Snow, J. C. (June 2012). Haptic object recognition is influenced by the orientation of the body relative to gravity. Poster presented at *International Multisensory Research Forum*, Oxford, U.K. [Abstract published in *Seeing and Perceiving*, 2012, 25, 122].
- Snow, J. C., Goodale, M. A., & Culham, J. C. (June 2012). The lateral occipital area is not necessary for haptic shape representation. Talk presented at the *Canadian Society for Brain, Behaviour and Cognitive Science*. Kingston, ON.
- Gallivan, J. P., McLean, D. A., Valyear, K. F., & Culham, J. C. (June 2012). Decoding the neural mechanisms of human tool use. Talk presented at the *Canadian Society for Brain, Behaviour and Cognitive Science*. Kingston, ON.
- McAdam, T. D., McLean, D. A., Gallivan, J. P., & Culham, J. C. (June 2012). Grasping with a twist: fMRI decoding of object orientation and intended hand actions. Poster presented at the *Canadian Society for Brain, Behaviour and Cognitive Science*. Kingston, ON.
- Barnett-Cowan, M., Culham, J. C., & Snow, J. C. (June 2012). The haptic perceptual upright. Poster presented at the *Canadian Society for Brain, Behaviour and Cognitive Science*. Kingston, ON.
- Wood, D. K., Milne, J. L., Chapman, C. S., Gallivan, J. P., Culham, J. C., & Goodale, M. A. (June 2012). A reaching task reveals the rapid extraction of probability information from arbitrary colour cues. Poster presented at the *Canadian Society for Brain, Behaviour and Cognitive Science*. Kingston, ON.
- Snow, J. C., Strother, L., Coros, A., & Culham, J. C. (May 2012). How independent are form and color in the ventral visual pathway? Poster presented at *Vision Sciences Society*, Naples, FL.
- Rossit, S., McAdam, T., McLean, D. A., Goodale, M. A., & Culham, J. C. (January 2012). Lower visual field preference for action in human superior parieto-occipital cortex (SPOC). Poster presented at the *Experimental Psychology Society*, London, U.K.
- Snow, J., & Culham, J. (November 2011). Is the lateral occipital complex necessary for haptic object recognition? Object shape representation in a visual agnostic with bilateral occipito-temporal lesions. Talk presented at the

*Object Perception, Attention, and Memory* conference. Seattle, WA. [Abstract published in *Visual Cognition*, 19(10), 1318-1322].

Arcaro, M. J., McLean, D. A., Quinlan, D. J., Dutton, G. N., Goodale, M. A., Kastner, S., & Culham, J. C. (November 2011). Cortical and subcortical response properties in a patient with visual cortex lesions. Poster presented at the *Society for Neuroscience*, Washington, D. C.

Gallivan, J. P., McLean, D. A., Smith, F. W., & Culham, J. C. (November 2011). Decoding effector-dependent and effector-independent movement intentions from human parieto-frontal brain activity. Talk presented at the *Society for Neuroscience*, Washington, D. C.

Cavina-Pratesi, C., McLean, D. A., van Eimeren, L., Monaco, S., & Culham, J. C. (November 2011). Dorso-lateral versus dorso-medial streams in reach to grasp actions: Grip and transport components or amount of online control? Evidence from event-related fMRI. Talk presented at the *Society for Neuroscience*, Washington, D. C.

Thaler, L., Paciocco, J., Daley, M., Lesniak, Purcell, Goodale, M. A. & Culham, J. C. (November 2011). A selective impairment of auditory perception of motion direction in peripheral space: A case study. Poster presented the *Society for Neuroscience*, Washington, D. C.

Al Abdlseaed, A., Hamilton, R., Culham, J., & McColloch, D. L. (June 2011). Residual short-latency VEPs in a case of widespread occipital infarction. *British Society for Clinical Electrophysiology of Vision*, Newcastle, UK.

Gribble, P. L., Mattar, A. A., Brown, L. E., Malfait, N., Wilson, E.T., Obhi, S.S., Valyear, K.F., Culham, J.C., Anton, J. L., Williams, A. (May 2011) Motor learning by observing. Poster presented at the *Society for Neural Control of Movement*, San Juan, Puerto Rico.

Monaco, S., Sedda, A., Cavina-Pratesi, C., & Culham, J. C. (May 2011). fMRI adaptation reveals the neural substrates of size and location processing for three-dimensional objects during grasping. Poster presented at the *Concepts, Actions and Objects Workshop*, Rovereto, Italy.

Snow, J., Pettypiece, C., McAdam, T., McLean, A., Stroman, P., Goodale, M. A., & Culham, J. (May 2011). Bringing the real world into the fMRI scanner: Robust release from adaptation for 2D pictures but not 3D objects. Poster presented at the *Vision Sciences Society*, Naples, Florida.

Rossit, S., McAdam, T., McLean, A., Goodale, M., & Culham, J. (May 2011). fMRI reveals a lower visual field preference in dorsal stream regions during hand actions. Talk presented at the *Vision Sciences Society*, Naples, Florida.

Gallivan, J. P., McLean, A., Smith, F. W., & Culham, J.C. (February 2011). Decoding effector-specific and effector-independent movement intentions from human parieto-frontal brain activity. Talk presented at the *Canadian Physiological Society/Canadian Action and Perception Network Conference*, Sainte Adele, Quebec.

Rossit, S., McAdam, T., McLean, A., Goodale, M., & Culham, J. (February 2011). fMRI reveals a lower visual field preference in dorsal stream regions during hand actions. Talk presented at the *Canadian Physiological Society/Canadian Action and Perception Network Conference*, Sainte Adele, Quebec.

Milne, J. L., Chapman, C. S., Gallivan, J. P., Wood, D. K., Culham, J. C., & Goodale, M. A. (February 2011). Object connectedness influences perceptual comparisons but not the planning or control of rapid reaches to multiple goals. Talk presented at the *Canadian Physiological Society/Canadian Action and Perception Network Conference*, Sainte Adele, Quebec.

Gallivan, J. P., McLean, A., Valyear, K. F., Pettypiece, C., & Culham, J. C. (November 2010). Decoding movement intentions from preparatory activity in human parietal and premotor cortex. Talk presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.

Valyear, K. F., Gallivan, J. P., McLean, A., Chapman, C. S. & Culham, J. C. (November 2010). Neural priming of tool use. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.

Wood, D. K., Chapman, C. S., Gallivan, J. P., Milne, J. L., Culham, J. C., & Goodale, M. A. (November 2010). Visual salience of potential targets overrides spatial probabilities in a rapid reaching task. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.

Chapman, C. S., Gallivan, J. P., Wood, D. K., Milne, J. L., Culham, J. C., Ansari, D., & Goodale, M. A. (November 2010). Rapid reaching task 'points' toward different representations of number. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.

Monaco, S., Sedda, A., Cavina-Pratesi, C., & Culham, J. C. (November 2010). Where is it? How big is it? Different brain areas answer different questions about graspable three-dimensional object properties in an fMRI adaptation experiment. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.

- Monaco, S., Sedda, A., Fattori, P., Galletti, C., & Culham, J. C. (January 2010). Cortical circuits processing wrist orientation for grasping: a functional magnetic resonance adaptation study. Poster presented at the annual meeting of the *European Workshop on Cognitive Neuropsychology*, Bressanone, Italy.
- Culham, J. C., Roebroek, A., Pullens, W. L. P. M., Jones, C. K., Khan, S. A., Dutton, G. N., Goodale, M. A., & Goebel, R. (October 2009). Anatomical and functional connectivity in a patient with preserved motion awareness and visuomotor functions despite large bilateral occipitotemporal lesions. Poster presented at *Society for Neuroscience*, Chicago, Illinois.
- Valyear, K. F., Chapman, C. S., Gallivan, J. P., & Culham, J. C. (October 2009). Tool identity can prime grasping, but only when the goal is to use. Submitted to *Society for Neuroscience*, Chicago, Illinois.
- Secen, J., Culham, J. C., & Giaschi, D. (October 2009). The cortical basis of multiple-object tracking deficits in amblyopia: An fMRI study. Poster presented at *Society for Neuroscience*, Chicago, Illinois.
- Snow, J., Pettypiece, C. E., McAdam, T. D., McLean, A. D., Stroman, P. W., & Culham, J. C. (October 2009). No fMRI repetition suppression for real 3D objects, only 2D pictures of objects: An unexpected result. Talk presented at *Society for Neuroscience*, Chicago, Illinois.
- Pettypiece, C. E., Goodale, M. A., & Culham, J. C. (October 2009). Incongruent haptic information is automatically incorporated into visually guided grasps and perceptual estimations. Poster presented at *Society for Neuroscience*, Chicago, Illinois.
- Monaco, S., Sedda, A., Fattori, P., Galletti, C., & Culham, J. C. (October 2009). Functional magnetic resonance adaptation (fMRA) reveals the involvement of the dorsomedial stream in wrist orientation for grasping. Talk presented at *Society for Neuroscience*, Chicago, Illinois.
- Chapman, C. S., Gallivan, J. P., Culham, J. C., & Goodale, M. A. (October 2009). Mental blocks: Using fMRI to reveal the encoding of obstacles during reach-to-grasp movements. Talk presented at *Society for Neuroscience*, Chicago, Illinois.
- Gallivan, J. P. & Culham, J. C. (October 2009). fMRI shows that the extent of reachable space encoded within superior parieto-occipital cortex depends on handedness. Talk presented at *Society for Neuroscience*, Chicago, Illinois.
- Wood, D.K., Monaco, S., McAdam, T. D., Dutton, G. N., Culham, J. C., & Goodale, M. A. (October 2009). Impaired selection of wrist posture in a patient with a parieto-occipital lesion. Talk presented at *Society for Neuroscience*, Chicago, Illinois.
- Gallivan, J. P., Chapman, C. S., Wood, D. K., Milne, J. L., Culham, J. C., & Goodale, M. A. (May 2009). Stuck in the middle: Kinematic evidence for optimal reaching in the presence of multiple potential reach targets. Poster presented at the *Vision Sciences Society*, Naples, Florida.
- Chapman C.S., Gallivan J.P., Wood D.K., Milne J., Culham J.C., & Goodale M.A. (May 2009) Dynamic Target Acquisition: Rapid reach responses in the presence of multiple potential reach targets. Canadian Neuroscience Meeting, Vancouver, BC.
- Malfait, N., Valyear, K. F., Culham, J. C., Brown, L. E., Anton, J.-L., & Gribble, P. L. (November 2008). fMRI activation during observation of others' reach errors. Poster presented at the annual meeting of the *Society for Neuroscience*, Washington, District of Columbia.
- Monaco, S., McAdam, D. T., McLean, A. D., Culham, J. C., Singhal, A. (November 2008). fMRI reactivation in the Lateral Occipital Complex during action execution and action imagery toward visually and haptically explored objects. Talk presented at the annual meeting of the *Society for Neuroscience*, Washington, District of Columbia.
- Valyear, K.F., Witt, J.K., Goodale, M.A., & Culham, J.C. (November 2008). Activation for viewing meaningful and meaningless tool actions in a patient with large bilateral lesions of occipito-temporal cortex. Poster presented at the annual meeting of the *Society for Neuroscience*, Washington, District of Columbia.
- Pettypiece, C.E., Goodale, M.A., & Culham, J.C. (November 2008). Kinematic differences between grasps based on visual and haptic information. Poster presented at the annual meeting of the *Society for Neuroscience*, Washington, District of Columbia.
- Culham, J. C., Wolf, M. E., Whitwell, R. L., Brown, L. E., Khan, S. A., Cant, J. S., Monaco, S., Dutton, G. N., & Goodale, M. A. (June 2008). fMRI and behavioral testing reveal preserved motion processing and visuomotor control in a patient with extensive occipitotemporal lesions. Talk presented at the Annual Meeting of the *Canadian Society for Brain, Behaviour and Cognitive Science*, London, Ontario, Canada.

- Monaco, S., Quinlan, D., Fattori, P., Galletti, C., Goodale, M. A., & Culham, J. C. (June 2008). How do vision and proprioception contribute to the precision of reaching? Poster presented at the annual meeting of the *Canadian Society for Brain, Behaviour and Cognitive Science*, London, Ontario, Canada.
- Gallivan, J.P., Chapman, C.S., & Culham, J.C. (May 2008). Do objects within reach prime the visuomotor system for action? *Canadian Association for Neuroscience*, Montreal, Quebec.
- Culham, J. C., Witt, J. K., Valyear, K. F., Dutton, G. N., & Goodale, M. A. (May 2008). Preserved processing of motion and dorsal stream functions in a patient with large bilateral lesions of occipitotemporal cortex. Talk presented at the annual meeting of the *Vision Sciences Society*, Naples, Florida. [Abstract published in *Journal of Vision*, 8(6), 372]
- Goodale, M. A., Wolf, M. E., Whitwell, R. L., Brown, L. E., Cant, J.S., Chapman, C., Witt, J. K., Arnott, S. R., Khan, S. A., Chouinard, P. A., Culham, J. C., & Dutton, G. N. (May 2008). Preserved motion processing and visuomotor control in a patient with large bilateral lesions of occipitotemporal cortex. Talk presented at the annual meeting of the *Vision Sciences Society*, Naples, Florida [Abstract published in *Journal of Vision*, 8(6), 371]
- Wolf, M. E., Whitwell, R. L., Brown, L. E., Cant, J. S., Chapman, C., Witt, J. K., Arnott, S. R., Khan, S. A., Chouinard, P. A., Culham, J. C., Dutton, G. N., & Goodale, M. A. (May 2008). Preserved visual abilities following large bilateral lesions of occipitotemporal cortex. Poster presented at the annual meeting of the *Vision Sciences Society*, Naples, Florida. [Abstract published in *Journal of Vision*, 8(6), 624]
- Brown, L. E., Culham, J. C., Króliczak, G., & Goodale, M. A. (May 2008). Improved blindsight near the hand is associated with increased fMRI activation in the superior parietal-occipital cortex. Poster presented at the annual meeting of the *Vision Sciences Society*, Naples, Florida. [Abstract published in *Journal of Vision*, 8(6), 52]
- Barry, R. L., Williams, J. M., Klassen, L. M., Culham, J. C., & Menon, R. S. (May 2008). Preprocessing pipeline considerations to compensate for paradigm-related subject movement. Poster presented at the annual meeting of the *International Society for Magnetic Resonance in Medicine*, Toronto, Canada.
- Gallivan, J.P., Chapman, C.S., & Culham, J.C. (2008). Do objects within reach prime the visuomotor system for action? *Canadian Neuroscience Meeting*, Montreal, Quebec.
- Malfait, N., Valyear, K. F., Culham, J. C., Anton, J.-L., & Gribble, P. L. (April/May 2008). fMRI activation during observation of others' reach errors. Poster presented at the annual meeting of the *Society for the Neural Control of Movement*, Naples, Florida.
- Gallivan, J. P. Cavina Pratesi, C., & Culham, J. C. (November 2007). Is that within reach? The human superior parieto-occipital cortex (SPOC) shows greater fMRI activation for reachable objects. Talk presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Cavina Pratesi, C., Monaco, S., McAdam, T. Milner, D., Schenk, T., & Culham, J. C. (November 2007). Which aspects of hand-preshaping does human AIP compute during visually guided actions? Evidence from event-related fMRI. Talk presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Monaco, S., Quinlan, D., Fattori, P., Galletti, C., Goodale, M. A. & Culham, J. C. (November 2007). Visual and proprioceptive guidance of reaching movements. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Zettel, J. L., Culham, J. C., Vilis, T., & Crawford, J. (November 2007). A comparison of saccade and pointing topography in the human posterior parietal cortex. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Large, M.-E., Cavina-Pratesi, C., Vilis, T., & Culham, J. C. (August 2007). The fate of 'unseen' faces: an fMRI investigation of awareness in the face perception network. Talk presented at the *European Conference on Visual Perception*, Arezzo, Italy.
- Large, M.-E., Cavina-Pratesi, C., Vilis, T., & Culham, J. C. (July 2007). The neural correlates of awareness in the face perception network. Poster presented at the *Experimental Psychology Society and Psychonomic Society Meeting*, Edinburgh, Scotland.
- Zettel, J., Vilis, T., Culham, J., & Crawford, D. (June 2007). A comparison of saccade and pointing topography between medial and lateral areas in the human posterior parietal cortex. Poster presented at the inaugural meeting of the *York Centre for Vision Research Conference: Cortical Mechanisms of Vision*, Toronto Ontario.
- Zettel, J., Vilis, T., Culham, J., & Crawford, D. (May 2007). A comparison of saccade and pointing topography between medial and lateral areas in the human posterior parietal cortex. Poster presented at the inaugural meeting of the *Canadian Association for Neuroscience*, Toronto Ontario.

- Valyear, K. F., & Culham, J. C. (May 2007). Grasping the function of tools: fMRI suggests that the ventral but not the dorsal stream codes the functional significance of objects. Poster presented at the inaugural meeting of the *Canadian Association for Neuroscience*, Toronto Ontario.
- Gallivan, J. P., Cavina-Pratesi, C., & Culham, J. C. (May 2007). The effects of reachability and tool use on fMRI activation in human brain regions involved in hand actions. Poster presented at the inaugural meeting of the *Canadian Association for Neuroscience*, Toronto Ontario.
- Valyear, K.F., & Culham, J.C. (May 2007). Grasping the function of tools: fMRI suggests that the ventral but not the dorsal stream codes the functional significance of familiar objects. Talk at the *Vision Sciences Society*, Sarasota, Florida.
- Gallivan, J. P., Cavina Pratesi, C., & Culham, J. C. (October 2006). Do objects within reach activate human brain regions involved in hand actions? An fMRI study. Poster presented at the *Society for Neuroscience*, Atlanta, Georgia.
- Wong, Y.J., Large, M.E., Aldcroft, A.J., Culham, J.C. & Vilis, T. (October 2006). The lateral occipital area does not require awareness to adapt binding cues. Poster presented at the *Society for Neuroscience*, Atlanta, Georgia.
- Króliczak, G., Quinlan, D. J., McAdam, T. D., & Culham, J. C. (October 2006). AIP shows grasp-specific fMRI adaptation for real actions. Talk presented at the *Society for Neuroscience*, Atlanta, Georgia.
- Cavina Pratesi, C., Fattori, P., Galletti, C., Quinlan, D., Goodale, M., & Culham, J. (October 2006). Event-related fMRI reveals a dissociation in the parietal lobe between transport and grip components in reach-to-grasp movements. Talk presented at the *Society for Neuroscience*, Atlanta, Georgia.
- Króliczak, G., Cavina Pratesi, C., Goodman, D., & Culham, J.C. (June 2006). Does the brain know when you fake it? Neural basis of pantomimed and real grasping. Talk presented at the 6<sup>th</sup> Congress of the *Federation of European Psychophysiology Societies*, Budapest, Hungary.
- Cavina-Pratesi, C., Galletti, C., Fattori, P., Quinlan, D., Goodale, M., & Culham, J. (May 2006). Dissociating the neural correlates of the transport and grip components of reach-to-grasp actions: Evidence from event-related fMRI. Poster presented at the Symposium on *Cortical Control of Higher Motor Cognition*, Lübeck, Germany.
- Valyear, K. F., Cavina-Pratesi, C., Stiglick, A. J., & Culham, J. C. (May 2006). Left posterior parietal activity associated with the naming of tools does not appear to reflect the 'graspability' of the stimuli. Poster presented at the Symposium on *Cortical Control of Higher Motor Cognition*, Lübeck, Germany.
- Quinlan, D. J., Goodale, M. A., & Culham, J. C. (May 2006). Forks vs. fingers: A comparison of hand and mouth kinematics during feeding. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2006, 6(6), 937a]
- Króliczak, G., Cavina Pratesi, C., Goodman, D. & Culham, J. C. (May 2006). What does the brain do when you fake it? An fMRI study of pantomimed and real grasping. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2006, 6(6), 940a]
- Monaco, S., Fattori, P., Galletti, C., Goodale, M. A., Króliczak, G., Quinlan, D., & Culham, J. C. (May 2006). The contribution of visual and proprioceptive information to the precision of reaching movements. Talk presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2006, 6(6), 397a]
- Large, M.-E., Kuchinad, A., Aldcroft, A., Culham, J., & Vilis, T. (May 2006). Visual field representation in the lateral occipital complex. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2006, 6(6), 539a]
- Ganel, T., Gonzalez, C. L. R., Valyear, K. F., Culham, J. C., Goodale, M. A., & Kohler, S. (May 2006). The relationship between fMRI adaptation and repetition priming of visually presented objects. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2006, 6(6), 26a]
- Wong, Y. J., Large, M. E., Aldcroft, A. J., Culham, J. C., & Vilis, T. (November 2005). Perceptual persistence in the lateral occipital cortex to temporal asynchronous presentations of figure and ground. Poster presented at the annual meeting of the *Society for Neuroscience*. Washington, District of Columbia.
- Singhal, A., Kaufman, L., Valyear, K. & Culham, J. C. (November 2005). fMRI reactivation of the human lateral occipital complex during delayed actions to remembered objects. Talk selected for presentation at the annual *Workshop on Object Perception and Memory*, Toronto, Ontario. [Abstract published in *Visual Cognition*, 2006, 14(1), 122-125].

- Steeves, J. K. E., **Culham**, J. C., & Goodale, M. A. (July 2005). Holistic scene and face processing: evidence from a patient without the parts. Talk presented at the annual meeting of the *Canadian Society for Brain, Behaviour and Cognitive Science*, Montreal, Quebec.
- Monaco, S., Kroliczak, G., Quinlan, D., Fattori, P., Galletti, C., Goodale, M. & **Culham**, J. (June 2005). Somatosensory information improves the accuracy of reaching when vision is limited. Poster presented at the annual meeting of the *International Multisensory Research Forum*, Rovereto Italy.
- Quinlan, D. J., Bell, I. E., Servos, P., Klassen, L. M., Gati, J. S., Menon, R. S., & **Culham**, J. C. (June 2005). Gradient distortion correction enables raising and tilting the head for direct hand viewing during visuomotor fMRI experiments. Poster presented at the annual meeting of the *Organization for Human Brain Mapping*, Toronto, Ontario.
- Singhal, A., Valyear, K. & **Culham**, J. C. (June 2005). Distinguishing between delayed actions and the termination of action preparation. Poster presented at the annual meeting of the *Organization for Human Brain Mapping*, Toronto, Ontario.
- Singhal, A., Chinellato, E., **Culham**, J. & Goodale, M. (April 2005). Dual-task interference is greater in memory-guided grasping than in visually guided grasping. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2005, 5(8), 361a].
- Quinlan, D. J., Goodale, M. A. & **Culham**, J. C. (April 2005). Don't bite the hand that feeds you: A comparison of mouth and hand kinematics. Talk presented to the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2005, 5(8), 382a].
- Quinlan, D. J., Goodale, M. A., & **Culham**, J. C. (October 2004). fMRI reveals a preference for near vs. far vergence in human superior parieto-occipital cortex. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Culham**, J. C., Cavina Pratesi, C. & Goodale, M. A. (October 2004). Object size matters for grasping but not perception in the human anterior intraparietal area. Talk presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Cavina Pratesi, C., Goodale, M. A., & **Culham**, J. C. (June 2004). Does size matter to a grasp-related brain region when no action is required? Poster presented at the annual meeting of the *Canadian Society for Brain, Behaviour and Cognitive Science*, St. John's, Newfoundland.
- Culham**, J. C., Valyear, K., F. & Stiglick, A. J. (May 2004). fMRI activation in grasp-related regions during naming of tools and other graspable objects. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2004, 4(8), 410a].
- Valyear, K., **Culham**, J. C., & Goodale, M. (April 2004). The use of fMRI adaptation to dissociate visual processing of object orientation and form in the dorsal and ventral pathways. Poster presented at *Computational Neuroimaging: Adaptation & Priming* conference, University of Minnesota, Minneapolis, Minnesota.
- Quinlan, D. J., **Culham**, J. C., & Goodale, M. A. (May 2003). fMRI investigation of depth specificity in human posterior parietal cortex. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2003, 3(9), 801a].
- Goodale, M. A., Jamès, T. W., **Culham**, J. C., Humphrey, G. K., & Milner, A. D. (May 2003). fMRI confirmation of a neurological dissociation between perceiving objects and grasping them. Talk presented at *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2003, 3(9), 128a].
- Culham**, J. C., Danckert, S. L., & Goodale, M. A. (May 2002). fMRI reveals a dissociation between object-directed grasping and object recognition. Talk presented at the annual meeting of the *Canadian Society for Brain, Behaviour and Cognitive Science*, Vancouver, British Columbia.
- Culham**, J. C., Danckert, S. L., & Goodale, M. A. (May 2002). fMRI reveals a dissociation of visual and somatomotor responses in human AIP during delayed grasping. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2002, 2(7), 701a].
- Steeves, J. K. E., Humphrey, G. K., **Culham**, J. C., Menon, R. S., & Goodale, M.A. (May 2002). Scene classification and parahippocampal place area activation in an individual with visual form agnosia. Poster presented at the annual meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2002, 2(7), 495a].

- Culham, J. C., Woodward, S. L., Milner, A. D., Gati, J. S., Menon, R. S., & Goodale, M. A.** (November 2001). Laterality of fMRI activation in area AIP during grasping and imagined grasping of visual targets. Talk presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Goltz, H. C., Dukelow, S. P., DeSouza, J. F. X., Culham, J. C., van den Berg, A. V., Goossens, H. H. L. M., Menon, R. S., & Vilis, T.** (November 2001). A putative homologue of monkey area VIP in humans. Poster presented at the annual meeting of the *Society for Neuroscience*, San Diego, California.
- Quinlan, D. J., & Culham, J. C.** (May 2001). Flicker motion aftereffect produces fMRI activation in MT. Poster presented at the inaugural meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2001, 1(3), 241a].
- Culham, J. C., DeSouza, J. F. X., Woodward, S., Kourtzi, Z., Gati, J. S., Menon, R. S., & Goodale, M. A.** (May 2001). Visually-guided grasping produces fMRI activation in dorsal but not ventral stream brain areas. Talk presented at the inaugural meeting of the *Vision Sciences Society*, Sarasota, Florida. [Abstract published in *Journal of Vision*, 2001, 1(3), 495a]
- Culham, J.C., Danckert, J., Hassard, F.A., Nicolle, D. & Goodale, M.A.** (August 2000). Reversed localization in a patient with blindsight. Poster presented at the annual meeting of the *European Conference on Visual Perception*, Groningen, Netherlands.
- Culham, J.C., Morland, A.B., Quinlan, D., & Goodale, M.A.** (May 2000). fMRI reveals no motion aftereffect in MT+ of a human hemianope without striate cortex. Talk presented at the annual meeting of the *Association for Research in Vision and Ophthalmology*, Ft. Lauderdale, Florida.
- Culham, J.C., Danckert, J., Hassard, F.A., Nicolle, D.A., & Goodale, M.A.** (April 2000). Reflections on blindsight: Reversed localization in the blind visual field of a human hemianope. Poster presented at the annual meeting for the *Cognitive Neuroscience Society*, San Francisco, California.
- Dukelow, S., DeSouza, J., Culham, J., vandenBerg, A. V., Menon, R., & Vilis, T.** (April 2000). Ipsilateral motion stimuli dissociate MST from MT in humans using fMRI. Poster presented at the annual meeting for the *Cognitive Neuroscience Society*, San Francisco, California.
- Dukelow, S.P., Culham, J.C., Vilis, T., Hassard, F.A., Gati, J.S., Menon, R.S., & Goodale, M.A.** (June 1999). Recovery of fMRI activation in the motion area MT following storage of the motion aftereffect. Poster presented at the annual meeting for the *Association for the Scientific Study of Consciousness*, London, Ontario.
- Dukelow, S. P., Culham, J. C., Vilis, T., Hassard, F. A., Gati, J. S., Menon, R. S., & Goodale, M. A.** (November 1998). Recovery of fMRI activation in motion area MT following storage of the motion aftereffect. Poster presented at the annual meeting for the *Society for Neuroscience*, Los Angeles, California.
- Connolly, J. D., DeSouza, J. F. X., Culham, J. C., Gati, J. S., Menon, R. S., Goodale, M. A., & Vilis, T.** (November 1998). Distinct parietal and frontal eye field activation during antisaccades using BOLD fMRI. Poster presented at the annual meeting for the *Society for Neuroscience*, Los Angeles, California.
- Culham, J., Cavanagh, P., Kanwisher, N., Intriligator, J., & Nakayama, K.** (October 1997). Varying attentional load produces different fMRI task response functions in occipitoparietal cortex and frontal eye fields. Talk presented at the annual meeting of the *Society for Neuroscience*, New Orleans, Louisiana.
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