



Updated: 26.01.2023

CURRICULUM VITAE

Prof. Maurizio Corbetta

Personal information

Date of birth: February 3, 1961

Place of birth: Como, Italy

Citizenship

Italian & US

Address and Telephone numbers

Department of Neuroscience

University of Padova

Via Giustiniani, 5

37128 Padova, Italy

Washington University School of Medicine

Department of Neurology and Neurological Surgery

660 South Euclid Avenue, Box 8111

St. Louis, Missouri 63110

Work: +39 (049) 8213601 (Padova)

E-mail: maurizio.corbetta@unipd.it

mcorbetta@wustl.edu

Present Position

Professor and Chair of Neurology, University of Padua, Italy

Director Clinica Neurologica, Azienda Ospedale-Università Padova, Italy

Founding Director Padova Neuroscience Center, University of Padua, Italy

Principal Investigator, Venetian Institute of Molecular Medicine, VIMM, Padova, Italy

Emeritus Professor of Neurology, Radiology, Neuroscience, and Biomedical Engineering Washington

University St. Louis, MO, USA

Education

1979-1985 M.D. Summa cum laude

University of Pavia School of Medicine, Italy

1986-1990 Residency in Neurology

Institute of Neurology, University of Verona, Italy

1990-1992 Fellowship in Neuroimaging

Barnes Hospital, Washington University School of Medicine,

St. Louis, MO

1992-1993 Internship in Internal Medicine



1993-1996 Jewish Hospital, Washington University School of Medicine
Residency in Neurology
Barnes Hospital, Washington University School of Medicine

Academic Positions

1990-1996 Instructor in Neurology, Department of Neurology and Neurological Surgery,
Washington University School of Medicine, St. Louis, MO
1996-2001 Assistant Professor in Neurology, Department of Neurology and Neurological Surgery,
Washington University School of Medicine, St. Louis, MO
1997-2001 Assistant Professor in Radiology, Mallinckrodt Institute of Radiology, Washington
University School of Medicine, St. Louis, MO
1997-2001 Assistant Professor of Neurobiology, Department of Anatomy and Neurobiology,
Washington University School of Medicine, St. Louis, MO
2001-2005 Associate Professor in Neurology, Radiology, Anatomy, and Neurobiology, Washington
University School of Medicine, St. Louis, MO
2002-2016 Director of Stroke and Brain Injury Rehabilitation, The Rehabilitation Institute of St.
Louis
2005-present Professor of Neurology, Radiology, Neuroscience, Washington University School of
Medicine, St. Louis, MO
2014-present Professor of Biomedical Engineering
2005-2016 *Norman J. Stupp* Chair Professor of Neurology
2011-2016 Chief, Division of Neurorehabilitation, Department of Neurology
2015-present Professor of Neurology, Department of Neuroscience, University of Padua, Italy
2015-present Chair of Neurology & Director of Clinica Neurologica, Azienda Ospedale Università-
Padova, Italy
2016-present Principal Investigator, Venetian Institute of Molecular Medicine, VIMM, Padova, Italy
2017-present Founding Director Padova Neuroscience Center, University of Padova, Italy

University Hospital and Appointments

1996-present Staff Neurologist, Barnes-Jewish Hospital
Staff Neurologist, Children Hospital
Staff Neurologist, St. Louis Regional Medical Center
2016-present Chief of Neurology, Azienda Ospedale Università Padova, Italy

Medical Licensure and Board Certification

1990 Board Certified in Neurology, Italian Association of Physicians and Surgeons.
1992 Missouri Medical License: MD 103397
1997-2007 Board Certified in Neurology, Academy of Neurology, USA

Honors and Awards

1988 FIDIA Foundation Fellowship
1994 Irwin Levy Award for Pre-graduate teaching in Neurology, Washington University School of
Medicine, St. Louis, MO.
1994 Honorary Alpha Omega Alpha Association for outstanding staff physician Barnes Hospital,
Washington University School of Medicine, St. Louis, MO.
1996 Physician Scientist Award National Eye Institute, NIH



- 2000 J.S. McDonnell Foundation Award in Cognitive Sciences
2005 Norman J. Stupp Professor of Neurology, Washington University, St. Louis, MO
2005 Marie Curie Chair in Cognitive Neuroscience, European Union
2006 Norman Geschwind Award in Behavioral Neurology, Academy of Neurology
2008 Distinguished Senior Investigator Award, Washington University
2010 American Neurological Association 2010 F.E. Bennett Memorial Lectureship
2010 Top 100 Italian Scientists
2013-2015 America's Top Doctors, Castle Connolly: top 1% of all nominated physicians
2015 Outstanding Neurorehabilitation Clinician-Scientist Award from the American Society of Neurorehabilitation.
2012-2022 Highly Cited Researcher from Thompson Reuters in Neuroscience/Behavior

Patents

2019: System and Method for Task-less Mapping of Brain Activity. United states patent application 20190239818. Inventors: C. Hacker, A.Z. Snyder, M. Corbetta, E.C. Leuthardt. This is a patent to develop novel methodology for human brain parcellation in clinical populations based on resting state fMRI.

2022: A new prognostic index of survival in glioblastoma multiforme based on cerebral white matter alterations measured with diffusion MRI. Italy/EU patent. Inventors: L. Pini, A. Salvalaggio, M. Corbett. This is a patent to classify patients with long or short survival in GBM based on the degree of infiltration of white matter tracts measured in atlases.

Service

- Reviewer: Special panel Behavioral and Biobehavioral Processes IRG (BBBP3)(1999)
Reviewer: Parkinson Disease Center of Excellence, NINDS (1999).
Reviewer: DBS RFA review Panel (2000)
Reviewer: Human Science Frontier Organization, Strasbourg, France (1998-present);
Reviewer: National Science Foundation, USA (1998-present).
Reviewer: Italian Ministry of Education and Research (1999-present)
Reviewing Board: German Federal Ministry of Education and Research, and German Research Association (2001-present).
Reviewer: Special Emphasis Panel, IFCN-5 (2002)
Reviewer: Special Emphasis Panel, Council ZNS1 SRB-R (2006)
Reviewer: Special Emphasis Panel, ZMH1 ERB-A (2006)
Reviewer: FO2B National Research Service Award Study Section (2008)
American Academy of Neurology Faculty: 'Behavioral neurology and Cogn.Neuroscience' (2000-2004)
American Academy of Neurology Faculty: 'Scientific Frontiers in Neurology' (2003)
American Society Neuro-rehabilitation Long Term Planning Committee (2005)
Permanent Member Sensory & Cognitive Processes NIH study section (2010-2016)
Scientific Board Institute of Advanced Biomedical Imaging (ITAB), University of Chieti (2015-current)
Chair of the Clinical Advisory Board of the Human Brain Project, European Commission (2017-2019)
Founder Padova Neuroscience Center PhD Program in Neuroscience 2017-2018
Scientific Board Connect2Brain Synergy ERC grant 2019-2025 (Ilmoniemi, Romani, Zieman)
Board Neuroscience PhD Program University of Padova 2017-current
Committee for National Platforms for Research at Human Technopole (Human Imaging), 2021



Editorial Responsibilities

Associate Editor: Cortex (2001-2015)

Associate Editor: Cognitive and Behavioral Neurology (2005-2008)

Associate Editor: Neurorehabilitation and Neural Repair (2005-present)

Associate Editor: Restorative Neurology and Neuroscience (2005-2008)

Associate Editor: Annals of Neurology (2006-2015)

Associate Editor: Neuropsychologia (2009-present)

Associate Editor: NeuroImage Clinical (2012-present)

Editorial Board: eLife (2015-2017)

Professional Societies and Meeting Organizations

Society for Neuroscience, since 1990

American Academy of Neurology, since 1996

Society of Cognitive Neuroscience, since 1999

Human Brain Mapping Society, since 2001

American Association Advancement of Science, since 2003

International Neuropsychological Symposium, elected in 2003

American Neurological Association, elected in 2003

Advisory Council, Attention and Performance, elected in 2003

Organization Human Brain Mapping, Council, elected in 2004

The American Physiological Society 2005

Organization Human Brain Mapping, Program Committee 2004-2006

Organization Human Brain Mapping, elected Chair Program Committee 2006

Organization Human Brain Mapping, elected Chair of Organization, 2010-12

Societa' Italiana di Neurologia, 2016-present

Brain Hack Global on Brain Evolution, Padova, Nov 5-7th, 2018

(<https://www.brainhack.org/2018/12/04/brainhackpadova.html>)

Organization Human Brain Mapping, Local Organizing Committee, 2019

Organization Summer School in Computational and Theoretical Models in Neuroscience, Venice, 2019

(<http://neuroschool19.liphlab.com>)

Brain Hack Global on Brain Asymmetries, Padova, Nov 12-15, 2019

(http://www.bcblab.com/BCB/Events/Entries/2019/11/12_BrainHack_GLOBAL_in_Padova__Brain_Asymmetries_edition.html)

Selected Invited National and International Lectureships (from over 120)

1991 "Exploring brain functional anatomy with positron emission tomography", Ciba Foundation Symposium N. 163, London (United Kingdom), March 11-14.

1991 "Anatomic exploration of mind: Imaging studies of normal human cognition with positron emission tomography", 3rd IBRO World Congress of Neuroscience, Montreal, Canada, August 4-9.

1994 "Attentional control of human behavior", inaugural meeting of Cognitive Neuroscience Society, San Francisco, CA, March 27-29.

1997 "Visuospatial and visuomotor function of the dorsal stream", Cognitive Neuroscience Society, Boston, MA, March 23-25, 1997.

1997 "Neuroimaging of the human brain function", Colloquium of the National Academy of Science, Irvine, CA, May 29-31, 1997.



- 1997 “Brain mechanisms of selective perception and action”, Royal Society, London, England, November 19-20, 1997.
- 1998 “School of Cognitive Neuroscience”, Cognitive Neuroscience Society, organized by Mike Gazzaniga, Lake Taos, July 7-8.
- 1998 “Prefrontal Cortex and Working Memory” symposium organized by Fondazione “Salvatore Maugeri” University of Pavia, Italy, November 23, Pavia.
- 1999 “Hemispheric Specialization and Compensatory Strategies in Brain Disorders” European Brain and Behavior Society workshop, February 28-March 3rd, Ascona, CH
- 1999 “Neural Circuitries and Visual Attention”, workshop organized by California Institute of Technologia and Office of Naval Research, Catalina Island, January 6-10.
- 1999 “Neural mechanisms of spatial attention”, Society for Neuroscience symposium, Miami, October 27.
- 2001 International Neuropsychological Society”, Chicago, invited symposium on ‘Attentional deficits in Alzheimer’s Disease’, February 12th.
- 2001 ESCOP (European Society of Cognitive Psychology), Edinburgh, UK, invited symposium on ‘Neuroimaging of Cognition’, September 7th.
- 2001 Societa’ Italiana di Neuroscienze, Torino, Italy, invited symposium on ‘Neural mechanisms of attention’, September 10th.
- 2002 National Institute Speech and Communication Disorders (NISCD) workshop on; “The role of functional neuroimaging in the study of aphasia recovery and treatment”, Washington, D.C., May 13, 2002.
- 2002 ‘Attention and Performance’ Symposium, Erice, Italy, July 1st-7th
- 2002 European Conference Visual Perception, Symposium on “Visual Awareness”, Glasgow Aug 23-26
- 2002 NIH Neuroscience Series, Washington D.C., October 21
- 2003 Winter Brain Conference, Snowbird Utah, Symposium on: “Behavioral Performance and BOLD fMRI”, Jan 25-31.
- 2003 Symposium on the "Convergence and divergence between lesion studies and functional neuroimaging of cognition", Bonn, Germany May 22-25.
- 2003 International meeting on Attention, June 12-16, San Miniato Italy.
- 2003 Plenary Symposium: “Cognitive Neuroscience of Attention”, Psychonomics, Vancouver, Canada, November 6-10.
- 2004 International Symposium on Neuroimaging of Stroke Recovery, Columbia University, New York, Feb 2-3rd
- 2004 International Conference on New Perspective in Vision, Isle of Mull, Scotland, April 14-16
- 2004 International Conference Functional Imaging of Cognition, Montreal, May 2-3rd
- 2004 Italian Neuroradiological Association, Keynote lecture, Milan, September 24
- 2004 Neurological Institute Besta, Milan, September 28
- 2005 Rothman Research Institute, "The Center of Attention: Theoretical Advances and Implications for Rehabilitation", March 21-23
- 2005 "Imaging Recovery from Stroke", Warburg-Haus, Hamburg, Germany May 23-24
- 2005 University of Lund, Sweden, Symposium on "Brain Plasticity: Change and Control", October 10
- 2006 International Neuropsychological Society, Symposium, February 3
- 2006 Norman Geschwind Award Lecture, Academy of Neurology, April 4



- 2006 Organization for Human Brain Mapping Symposium on "Neuromodulation for promoting recovery from stroke: are there neuroimaging markers to direct individualized interventions?" Florence, Italy, June 12
- 2006 Symposium on Stroke and Brain Recovery, Montalcino, Italy. June 16
- 2006 John Merck Summer Institute on the Biology of Developmental disabilities, Princeton University, June 25-30
- 2006 Keynote lecture Symposium on Attention, Vision, and Awareness. University of California, Davis, July 7th
- 2006 Keynote lecture International Society of Brain Topography, Chieti, September 28th
- 2006 Keynote lecture 1st Sino-American Conference of Cognitive Neuroscience, Beijing, October 25-27th
- 2006 Symposium 'Journet Signoret on Spatial Neglect', Hopital Pite la Salpetrie, Paris, November 13th
- 2006 Italian Society of Psychophysiology, Symposium on 'Visual Awareness', Pisa December 1-2nd
- 2007 Colloquium Brain and Cognitive Science Unit MRC, Cambridge, UK, March 2nd
- 2007 Inauguration Symposium Center for Mind & Cognition, University of Trento, Rovereto, Italy, March 15th
- 2007 International Symposium on Cognitive Neurosurgery, Tubingen, Germany, March 19-20
- 2007 International Symposium on Brain Trauma Repair, Hong Kong, May 4-5
- 2007 Keynote lecture, Societa' Neurofisiologia Clinica, Palermo, Italy, May 26th
- 2007 Keynote lecture, Organization for Human Brain Mapping, Chicago, USA, June 14
- 2007 Keynote lecture, FIDDCAT Neurorehabilitation Advances, Toronto, Canada, June 18
- 2007 Keynote lecture, Italian Society of Neuroscience, Verona, September 28
- 2007 Invited Workshop American Society of Neurorehabilitation on 'Inter-hemispheric interactions in functional recovery', Washington DC, Oct 4th
- 2007 Invited Symposium American Society of Neurorehabilitation on 'Novel views on spatial neglect', Washington DC, Oct 6th
- 2007 Student Invited Lectureship in Neuroscience, Yale Neuroscience Program, Yale University, New Haven Dec 9th.
- 2008 Marie Curie European Union Winter School in Neuroscience "Large-scale interactions in brain networks and their breakdown in brain diseases", Santo Stefano di Sessanio, March 26-31.
- 2008 Keynote lecture, The Cognitive Neuroscience of Attention: from basic research to clinical applications, DFG, Aachen, Germany, November 21-22
- 2009 International Stroke Conference, Symposium on Spatial Neglect, San Diego, February 19th
- 2009 RETA, Keynote Lecture, Grenada, Spain, April 23-24
- 2009 Ernst Strungmann Symposium, Frankfurt, Germany, August 16-21
- 2010 Neurocognitive Networks, NFS funded conference, Florida Atlantic University, Boca Raton, Jan 29-30
- 2010 Eli Robins Lectureship, Department of Psychiatry, Washington University, March 2
- 2010 Joint research conference of the Institute for Advanced Studies and the Israel Science Foundation: *Selection and control mechanisms in perception and action*. Jerusalem, April 11-16.
- 2010 NYU Neurology Grand Rounds, NYC, May 25
- 2010 Weil-Cornell Neurology Grand Rounds NYC, May 26
- 2010 7th Federation European Neurosciences Symposium: 'Large Scale Interactions in Brain Networks' Pascal Fries Organizer, Amsterdam, July 2-4
- 2010 FC Bennett Lecture at the American Neurological Association Symposium: Network Function and



Dysfunction in Brain Disorders, Brain Networks and Brain Diseases, San Francisco, Sept 12-14
2011 Neurology Grand Rounds, Medical University of South Carolina, January 12
2011 Symposium on Neuronal Variability & Cortical Computation, Banbury Center, Cold Spring Harbur, Schwartz Foundation, April 3-6
2011 Lecture at Seaver Autism Center, Mount Sinai Medical Center, New York, April 6
2011 British Neuroscience Association, Keynote on “Spontaneous activity: a key toward understanding the mind’ Harrogate, UK, April 16
2011 International Society Magnetic Resonance Imaging, Symposium on ‘Functional Brain Connectivity’, Montreal, May 9
2011 Natl. Academy of Sciences: Workshop on Brain Cognition and Cancer, Washington, D.C. May 10
2011 Festival Internazionale della Scienza, Plenary Lecture on the: ‘Future of Neuroscience”, Genova, Italy, October 22
2011 BrainTree Neuro-Rehabilitation Conference, Keynote on: Action: From Systems Neuroscience to Neurological Rehabilitation. Boston, November 11-12
2011 Symposium: Multi-site communication in the brain“--Andreas Engel and Christian Gerloff, Hamburg, Germany December 2-3
2012 Keynote 7th World Congress of Neurorehabilitation, Melbourne, Australia, May 16-19
2012 Keynote BioMag Conference, Paris, France, August 24-27
2012 NINDS Grand Rounds, Bethesda, MD, Sept 16
2013 British Neuropsychological Society, London, March 20th
2013 Beth Israel and Harvard Medical School GrandRound, Boston, April 6
2013 Summer Institute of Cognitive Neuroscience, Lake Tahoe, June 27-28
2013 Istituto Scientifico Biomedico Europeo Mediterraneo, Mesagne, Italy, July 16,
2013 Quebec Bioimaging School, Montreal Neurological Institute, Montreal, August 21-22
2013 Colloquium Brown University, Providence, October 1st
2013 American Neurological Association Workshop on Behavioral Neurology, New Orleans, October 11-12
2013 American Society NeuroRehabilitation Symposium, San Diego, November 7th
2014 Workshop at 30th International Congress of Clinical Neurophysiology (ICCN) of the IFCN, Berlin, March 19-23
2014 Keynote at Behavioral Neurology Symposium, Luzern, March 28-29
2014 International Neuropsychological Symposium, Lido di Camaiore, June 24-28
2014 4th Conference on Resting State/Brain Connectivity, Boston Sept 11-13
2015 Colloquium Neuroscience Institute of Neuroscience, Geneva, February 24
2015 Helmholtz Lecture Utrecht University, March 12
2015 Colloquium Neuroscience, UTSW, Dallas May 29
2015 Neuroscience Distinguished Traveling Scientist, Wake Forest University, May 7
2015 Neuroscience Distinguished Host, University of Nanterre, Paris June 23
2015 Neuroscience Colloquium La Salpetrie, Paris June 26
2015 Workshop on Computational Neuroscience, EU funded INDIREA training network, Barcelona, September 17
2015 Festschrift in honor of Giovanni Berlucchi , University of Verona, September 22
2105 American Neurological Association, Lunch workshop and Behavioral Neurology Special Interest group, Chicago September 27
2016 Emory University, Neurology Grand Rounds, Atlanta February 14
2016 Royal Society London, Applying computational modelling to clinical neuroscience, April 6-7



- 2016 Rehabilitation Institute of Chicago Colloquium, Chicago June 3
 2016 Italian Society of Psychophysiology, Keynote lecture, Milan October 28
 2017 Italian Institute of Technology, Genova, January 27
 2017 Istituto Neurologico Mondino, Pavia, March 16
 2017 Lecture Campus Biotech Geneva, May 23
 2017 Symposium on science and Mathematics, Zagabria, Croatia June 3-6
 2017 Keynote ACRM Atlanta, Oct 22-28
 2018 Keynote Winter Brain Meeting Champéry, France, Jan 12-18
 2018 ICM Paris Lecture, May 14
 2018 Advance Neuroscience School on Consciousness, Venice July 2-4
 2018 FENS Satellite meeting, Berlin, July 5
 2018 One Hundred Year Anniversary Istituto Besta, Milano, September 27
 2019 LOC Symposium OHBM, Roma, June 10
 2019 National Research Council Italy-Royal Society London Workshop, June 26
 2019 Neuroscience School of Advance Studies, Course Director: Giulio Tononi, July 2-4
 2020 Festival della Salute Globale, Padova, November 15, 2020
 (<https://www.facebook.com/festivalsaluteglobale/videos/maurizio-corbetta-la-sfida-delle-neuroscienze-dalla-comprensione-dei-circuiti-ce/416861286160903/>)
 2021 Academia dei Lincei, Intelligenza artificiale, Robotica e macchine intelligenti, April 23,
 2021(<https://www.srmedia.info/2021/03/02/lincei-intelligenza-artificiale-robotica-e-macchine-intelligenti-ricadute-etiche-e-sociali/>)
 2021 NetNeuro, International satellite Conference to Networks 2021, July 2nd, 2021
 (<https://easychair.org/cfp/NetNeuro2021>)
 2021 14th International Conference on Brain Informatics, Keynote, Padova Sept 17, 2021
 (<https://www.bi2021.org>)
 2022 Society of Cognitive Neuroscience Symposium, 24.04.2022
 2022 Keynote Italian Society of Neurology, Milan 04.12.2022
 2023 Betreff: Symposium, Understanding changes in connectivity after stroke, Freiburg i. Br., 3-4.2.2023

Research Support (direct costs)

Active Grants

- | | |
|--|-----------------------|
| CARIPARO FOUNDATION Excellence grant 2018 (Agreement N.55403) | 04/01/2019-03/31/2022 |
| Maurizio Corbetta (PI) | € 398,000 |
| The brain's dark energy: observation, perturbation, and disruption studies of brain networks to understand cognition and stroke recovery | |
| The goal is to study the function and organization of spontaneous brain activity through multi-modal observational and causal imaging studies. | |
| MINISTRY OF HEALTH ITALY | 01/01/2020-31/12/2023 |
| Brain connectivity measured with high-density electroencephalography: | € 450,000 |
| a novel neurodiagnostic tool for stroke (RF-2008 -12366899) | € 273,500 (Padova) |
| Dante Mantini (PI) | |
| Maurizio Corbetta (co-PI) | |
| The goal of this project is to examine the neurophysiological mechanisms of network abnormalities in stroke. | |



H2020-MSCA-ITN-2019 01/10/2019-30/09/2021
 Andreas Engel (PI) € 3,966,875
 Maurizio Corbetta (Local Coordinator) € 261,499 (Padova)
 EUSNN: European School of Network Neuroscience (grant n. 860563)
 The goal is to train the next generation PhD students in network neuroscience

H2020-SC5-2018-2019-2020 / H2020-SC5-2019-2- INNOVATION ACTION 01/09/2020- 31/08/2025
 Raffaella Cavalli (PI) € 645,187
 Maurizio Corbetta (co-PI) € 249,356 (Padova)
 “Visionary Nature Based Actions For Health, Wellbeing & Resilience in Cities (VARCITIES)” (grant n. 869505)

MINISTRY OF HEALTH ITALY 01/06/2021-31/05/2024
 Eye-movement dynamics during free viewing as biomarker for assessment of visuospatial functions and for closed-loop rehabilitation in stroke a novel neurodiagnostic tool for stroke (RF-2008 -12366899) € 450,00
 € 200,000 (Padova)
 Marco Zorzi (PI)
 Maurizio Corbetta (co-PI)
 The goal of this project is to examine the neurological mechanisms underlying eye movement exploration and their application for prognosis and rehabilitation in stroke.

ERC-2022-SYG 01/10/2023-30/09/2029
 Number: 101071900 €9,927,253.75
 Maurizio Corbetta (Coordinator) with Marcello Massimini, Mavi Sanchez-Vivez, Gustavo Deco
 NEMESIS (NEurological MEchanismS of Injury and Sleep like cellular mechanisms)
 The goal of this project is to characterize the effects of focal brain injury at multiple spatial and temporal scales in humans and animal models; build in-silicon models of individual lesioned brains; use these models to develop novel non-invasive brain stimulation interventions to be tested in a proof-of-concept clinical study.

Grants Completed

DEPARTMENTS OF EXCELLENCE ITALIAN MINISTRY OF RESEARCH (MIUR)
 Maurizio Corbetta (PI) 05/01/2018-04/30/20
 Neuro-DIP: Precision Neuroinformatics in Clinical Neuroscience Eur 8,000,000
 The goal of this grant is to enhance the research infrastructure of the Department of Neuroscience at the University of Padova

CELEGHIN FOUNDATION Padova 01/01/2020-12/31/2023
 Maurizio Corbetta (PI) € 142,000
 Neuro-Imaging studies of Oncological patients for Planning outcome and surgery" (Neuro-Onco Plan)
 The goal of this project is to develop a multi-modal imaging assessment of brain tumors to improve surgical navigation and outcome.



BIAL FOUNDATION Grant Maurizio Corbetta (PI) When style matters: do oculomotor fingerprint and brain dynamics explain visual exploration and memory strategies? The goal is to study individual differences in visual exploration and relation with cognition and personality.	09/15/2019-06/15/2021 € 50,000
FLAG-ERA JTC 2017 Maurizio Corbetta (PI) Alterations of functional connectivity in the human brain after focal lesion and cognitive function: empirical and modeling studies (Brain-Synch HIT) The goal is to develop a computational model of stroke that includes dynamics and directional interactions.	01/12/2017-30/11/2021 Eur 290,000
FC-Neuro Progetto Strategico University of Padova Maurizio Corbetta, PI University of Padova The goal is to develop a Systems Neuroscience research program in Padova	10/01/15 – 9/30/20 Eur 500,000
National Institute of Neurological Disorders (NINDS) NS095741 Maurizio Corbetta, PI Stroke, Brain Networks, and Behavior The goal is to understand the relationship between stroke, behavioral deficits and recovery, and structural/functional correlates of focal damage.	9/30/15 – 6/30/20 \$558,553/year for 5 years
National Institute of Neurological Disorders (NINDS) NS071780-03A1 Thomas Van Vleet, Ph.D. (PI) Maurizio Corbetta M.D. (co-PI) Amplified Attention Training for the Treatment of Hemispatial Neglect The goal of this RCT is to test the efficacy of a home-based computer training intervention for hemispatial neglect	07/01/13-06/30/15 \$202,738
National Institute of Mental Health R01 MH096482-01 Maurizio Corbetta, M.D. (PI) Eric Leuthardt, M.D. Ph.D (co-PI) Electrophysiological studies of human attention fMRI measures of network organization are combined with electrocorticographic (ECoG) signals recorded from invasively monitored human subjects. We apply these novel methods to study the dynamics and interactions of cortical networks involved in spatial attention.	12/01/11-11/30/16 \$ 2,917,439 (5 years)
National Institute of Health (NIH) 1U54MH091657 David Van Essen, Ph.D. (PI) Maurizio Corbetta, M.D. (co-PI) The Human Connectome Project The goal of this grant is to understand the anatomical and physiological connectivity of the human brain and relate it to behavior and genetics.	09/01/10-08/30/15 \$30,000,000
NICDH R01 HD061117-05A2	07/01/09-06/30/14



Maurizio Corbetta, M.D. (PI)	\$482,366 (direct cost/5 years)
Understanding the effects of stroke using functional connectivity MRI	
The goal of this grant is to understand the anatomical and physiological correlates of stroke deficits and their recovery using state-of-the-art MRI methods.	
J.S. McDonnell Foundation	04/01/09-03/30/12
Maurizio Corbetta, M.D. (co-PI)	\$367,804 (direct cost/year x 3 years)
Attention Dynamics Consortium in TBI: ADC-TBI	
The goal of this grant is to understand the anatomical and physiological correlates of mild TBI in relation to large-scale neural networks for attention and working memory.	
National Institute of Mental Health R01 MH71920-0	09/01/04-06/30/10
Maurizio Corbetta, M.D. (PI)	\$332,158 (per year)
Functional MRI studies of visual attention	
The goal of this project is to explore the functional significance of attention control signals in the human brain.	
NINDS R01 NS48013	07/01/04-06/30/10
Maurizio Corbetta, M.D. (PI)	\$373,516 (per year)
Cognitive and neural bases of spatial neglect	
The goal of this grant is to understand the pathophysiology of spatial neglect and its recovery.	
European Union FP7: Collaborative projects	02/01/08-01/31/11
Maurizio Corbetta, M.D. (Coordinator)	Eur 2.95 milioni (total)
In collaboration with GL Romani, University of Chieti; Guy Orban & Wim Vanduffel, KU Leuven; Pascal Fries, Radboud University; JP Lachaux, INSERM Lyon; Jon Driven, UCL; Gustavo Deco, Fundacio Barcelona; Milan Palus, Academy Sciences Czech; Andreas Engel, UKE.	
BrainSynch: Large-scale interactions in brain networks and their breakdown in brain diseases.	
The goal of this project is to study large-scale neuronal interactions at different spatio-temporal scales (neurons, neuronal assemblies, whole brain with fMRI, MEG, intracortical recordings) during rest and attention tasks in healthy and individuals with different neurological conditions that affect neuronal communication including stroke, MS, and schizophrenia.	
Marie Curie Chair in Cognitive Neuroscience, European Union	03/01/05-02/28/08
Maurizio Corbetta, M.D. (PI)	Eur 672,000 (total)
IBSEN: Imaging Brain Sciences and Educational Network	
The goal of this project was the establishment of a new cognitive neuroscience program at the University of Chieti and the organization of a summer school in neuroscience.	
McDonnell Foundation Award in Cognitive Sciences	01/01/00-12/31/09
Maurizio Corbetta (PI)	\$ 300,000 (total)
Investigations of Human Cognition	
NINDS (P50 NS06833-34)	04/01/00-03/31/05
Marcus E. Raichle, M.D. (PI)	\$ 4,766,699
The Brain and Its Vasculature	



Maurizio Corbetta, M.D. (PI project 3) \$ 253,418 (per year)
Functional Imaging Studies of Aphasia Recovery
The goal of this grant is to understand the neurological correlates of aphasia recovery.

J.S. McDonnell Foundation 07/01/98-06/30/04
Maurizio Corbetta, M.D. (co-PI) Project 3-4 \$ 40,000
Alex Dromerick, M.D. and Carolyne Baum, Ph.D. (PI) \$ 150,000 (total)
Improving cognitive performance: cognition, neurobiological mechanisms, treatment, community reintegration.
The goal of this interdisciplinary grant is to pilot behavioral, functional imaging, and rehabilitation studies in patients with unilateral spatial neglect.

National Eye Institute (1R01EY12148-01) 04/01/98-03/31/04
Maurizio Corbetta, M.D. (PI) \$ 243,725 (per year)
fMRI studies of visual motion and attention
The major goal of this grant is to study visual motion processing and related attentional modulations in the human brain.

National Eye Institute (K8EY00379A) 07/01/97-06/30/00
Maurizio Corbetta, (PI) \$ 105,699 (per year)
fMRI studies of visual attention
The major goal of this grant is to study attentional influences on visual processing in the human brain.

McDonnell Center for Studies of Higher Brain Function 07/01/98-06/30/00
Maurizio Corbetta, M.D. (co-PI) \$ 30,000 (total)
Randy Buckner, Ph.D. (PI) \$ 60,000
Development, validation, and application of novel event-related fMRI methods toward studies of higher brain function
This project aims to develop and validate new methods of analysis for fMRI studies of cognition.

McDonnell Center for Studies of Higher Brain Function 07/01/98-06/30/00
Maurizio Corbetta, M.D. (co-PI) \$ 40,000 (total)
Alex Dromerick, M.D. (PI) \$100,000
Mechanisms of Learning and Cognitive Rehabilitation
The goal of this interdisciplinary grant is to organize a clinical core for the characterization of patients with brain injury, and test how the core can provide experimental subjects for various studies on the recovery and rehabilitation of brain injury.

McDonnell Center for Studies of Higher Brain Function 07/01/96-06/30/99
Maurizio Corbetta, M.D. (PI) \$ 30,000 (total)
Functional Imaging Studies of Aphasia Recovery.
The goal of this grant was to explore the neural correlates of speech production recovery after left frontal lesions.

Peer-reviewed publications

H index Scopus=85 on January 26, 2023
H index Google Scholar=99 on January 26, 2023



1. Corbetta M, Aglioti S. Residual visual abilities in man after a lesion in the occipital lobe. *Ann.Ist.Super.Sanita.* 1988;24(4):587-9.
2. Corbetta M, Marzi CA, Tassinari G, Aglioti, S. Effectiveness of different task paradigms in revealing blindsight. *Brain.* 1990 June;113: 603-616.
3. Corbetta M, Miezin FM, Dobmeyer S, Shulman GL, Petersen SE. Attentional modulation of neural processing of shape, color and velocity in humans. *Science.* 1990 June 22;248:1556-1559.
4. Corbetta M, Miezin FM, Dobmeyer SM, Shulman GL, Petersen SE. Selective and divided attention during visual discriminations of shape, color, and speed: functional anatomy by positron emission tomography. *The Journal of Neuroscience.* 1991 Aug;11(8): 2383-2402.
5. Corbetta M, Miezin FM, Shulman GL, Petersen SE. A PET study of visuospatial attention. *The Journal of Neuroscience.* 1993 March 1;13(3): 1202-1226.
6. Corbetta M. Positron emission tomography as a tool to study human vision and attention. *Proceedings National Academy of Science, USA.* 1993 Dec 1;90(23):10901-10903. PMID: PMC47888
7. Petersen SE, Corbetta M, Miezin FM, Shulman GL. PET studies of parietal involvement in spatial attention: comparison of different task types. *Canadian Journal of Experimental Psychology.* 1994 Jun;48(2): 319-338.
8. Humphrey GK, Goodale MA, Corbetta M, Aglioti S. The McCollough effect reveals orientation discrimination in a case of cortical blindness. *Current Biology.* 1995 May 1;5(5): 545-551.
9. Corbetta M, Shulman GL, Miezin FM, Petersen SE. Superior parietal cortex activation during spatial attention shifts and visual feature conjunction. *Science.* 1995 Nov 3;270(5237): 802-805.
10. Chelazzi L, Biscaldi M, Corbetta M, Peru A, Tassinari G, Berlucchi G. Oculomotor activity and visual spatial attention. *Behavioural Brain Research.* 1995 Nov;71:81-88.
11. Buckner RL, Corbetta M, Schatz J, Raichle ME, Petersen SE. Preserved speech abilities and compensation following prefrontal damage. *Proceedings National Academy Science, USA.* 1996 Feb 6;93(3):1249-1253. PMID: PMC40065
12. Aglioti S, Beltramello A, Bonazzi A, Corbetta M. Thumb-pointing in humans after damage to somatic sensory cortex. *Experimental Brain Research.* 1996 Apr;109(1):92-100.
13. Aglioti S, Smania N, Barbieri C, Corbetta M. Influence of stimulus salience and attentional demands on visual search patterns in hemispatial neglect. *Brain and Cognition.* 1997 Aug;34(3):388-403.
14. Shulman, GL, Corbetta M, Fiez JA, Buckner RL, Miezin FM, Raichle ME, Petersen SE. Top-down modulation of early sensory cortex. *Cerebral Cortex.* 1997;7(3):193-206.
15. Shulman GL, Corbetta M, Buckner RL, Fiez JA, Miezin FM, Raichle ME, Petersen SE. Common blood flow changes across visual tasks: I. Increases in subcortical structures and cerebellum, but not in non-visual cortex. *Journal of Cognitive Neuroscience.* 1997;9(5):624-647.
16. Shulman GL, Fiez JA, Corbetta M, Buckner RL, Miezin FM, Raichle ME, Petersen SE. Common blood flow changes across visual tasks: II. Decreases in cerebral cortex. *Journal of Cognitive Neuroscience.* 1997 Oct 1;9(5):648-663.
17. Shulman GL, Corbetta M, Fiez JA, Buckner RL, Miezin FM, Raichle ME, Petersen SE. Searching for activations that generalize over tasks. *Human Brain Mapping.* 1997;5(4): 317-322.
18. Corbetta M. Frontoparietal cortical networks for directing attention and the eye to visual locations: Identical, independent, or overlapping neural systems? *Proceedings National Academy Science, USA.* 1998 Feb 3;95(3): 831-838.



19. Corbetta M, Akbudak E, Conturo TE, Drury HA, Linenweber M, Ollinger JM, Petersen SE, Raichle ME, Van Essen DC, Snyder AZ, Shulman GL. A common network of functional areas for attention and eye movements. *Neuron*. 1998 Oct;21(4): 761-773.
20. Corbetta M, Shulman GL. Human cortical mechanisms of attention during visual orienting and search. *Philosophical Transactions of the Royal Society (London)*. 1998 Aug 29;353(1373): 1353-1362. PMID: PMC1692334
21. Shulman GL, Ollinger JM, Akbudak E, Conturo TE, Snyder AZ, Petersen SE, Corbetta M. Areas involved in encoding and applying directional expectations to moving objects. *Journal of Neuroscience*. 1999 Nov 1;19(21): 9480-9496.
22. Corbetta M, Kincade JM, Ollinger JM, McAvoy MP, Shulman GL. Voluntary orienting is dissociated from target detection in human posterior parietal cortex. *Nature Neuroscience*. 2000 Mar;3(3): 292-297.
23. Rosen HJ, Petersen SE, Linenweber MR, Snyder AZ, White DA, Chapman L, Dromerick AW, Fiez JA, Corbetta M. Neural correlates of recovery from aphasia after damage to left inferior frontal cortex. *Neurology*. 2000 Dec 26;55(12): 1883-1894.
24. Ollinger JM, Shulman GL, Corbetta M. Separating processes within a trial in event-related functional MRI. I: The method. *Neuroimage*: 13, 210-217, (2001).
25. Ollinger JM, Corbetta M, Shulman GL. Separating Processes within a trial in event-related functional MRI. *Neuroimage*. 2001 Jan;13(1):218-229.
26. Shulman GL, Ollinger JM, Linenweber MR, Petersen SE, Corbetta M. Multiple neural correlates of detection in the human brain. *Proceedings National Academy Science, USA*. 2001 Jan 2;98(1): 313-318.
27. Corbetta M, Shulman GL. Control of goal-directed and stimulus-driven attention in the brain. *Nature Review Neuroscience*. 2002 March;3: 201-215.
28. Corbetta M, Kincade JM, Shulman GL. Neural systems for visual orienting and their relationship to spatial working memory. *Journal of Cognitive Neuroscience*. 2002 Apr 1;14(3): 508-523.
29. Shulman GL, Tansy AP, Kincade M, Petersen SE, McAvoy MP, Corbetta M. Reactivation of networks involved in preparatory states. *Cerebral Cortex*. 2002 Jun;12(6): 590-600.
30. Blasi V, Young AC, Tansy AP, Petersen SE, Snyder AZ, Corbetta M. Word retrieval learning modulates right frontal cortex in patients with left frontal damage. *Neuron*. 2002 Sep 26;36(1): 159-170.
31. Shulman GL, d'Avossa G, Corbetta M. Two attentional processes in the parietal lobe. *Cerebral Cortex*. 2002 Nov;12(11): 1124-1131.
32. Corbetta M, Burton H, Sinclair RJ, Conturo TE, Akbudak E, McDonald JW. Functional reorganization and stability of somatosensory-motor cortical topography in a tetraplegic subject with late recovery. *Proceedings National Academy Science*. 2002 Dec 24;99(26):17066-71. PMID: PMC139270
33. d'Avossa G, Shulman GL, Corbetta M. Identification of cerebral networks by classification of the shape of BOLD responses. *Journal of Neurophysiology*. 2003 Jul;90(1): 360-371.
34. Astafiev SV, Shulman GL, Stanley CM, Snyder AZ, Van Essen DC, Corbetta M. Functional organization of human intraparietal and frontal cortex for attending, looking, and pointing. *Journal of Neuroscience*. 2003 Jun 1;23(11):4689-99.
35. Shulman GL, McAvoy MP, Cowan MC, Astafiev SV, Tansy AP, d'Avossa G, Corbetta M. Quantitative analysis of attention and detection signals during visual search. *Journal of Neurophysiology*. 2003 Nov;90(5):3384-3397.



36. Astafiev SV, Stanley CM, Shulman GL, Corbetta M. Extrastriate body area in human occipital cortex responds to the performance of motor actions. *Nat.Neurosci.* 2004 May;7:542-8. Epub 2004 Apr 25.
37. Shimony JS, Snyder AZ, Conturo TE, Corbetta M. The study of neural connectivity using diffusion tensor tracking cortex. *Cortex.* 2004 Feb;40:213-5.
38. Corbetta M, Tansy AP, Stanley CM, Astafiev SV, Snyder AZ, Shulman GL. A functional MRI study of preparatory signals for spatial location and objects. *Neuropsychologia.* 2005;43(14): 2041-2056. Epub 2005 Apr 26.
39. Kincade M, Abrams R, Astafiev SV, Shulman GL, Corbetta M. An event-related functional magnetic resonance imaging study of voluntary and stimulus-driven orienting of attention. *Journal of Neuroscience.* 2005 May 4;25(18):4593-4604.
40. Fox MD, Snyder AZ, Vincent J, Corbetta M, Van Essen DC, Raichle M. The human brain is intrinsically organized into dynamic, anticorrelated functional networks. *Proceedings National Academy of Science.* 2005 July 5;102(27): 9673-9678. Epub 2005 June 23.
41. Corbetta M, Kincade JM, Lewis CM, Snyder AZ, Sapir A. Neural basis and recovery of spatial attention deficits in spatial neglect. *Nature Neuroscience.* 2005 Nov;8(11): 1603-1610. Epub 2005 Oct 23.
42. Astafiev SV, Stanley CM, Shulman GL, Corbetta M. Is the extrastriate body area involved in motor action. *Nature Neuroscience.* 2005 Feb;8(2), 125-126.
43. Fucetola R, Tucker F, Blank K, Corbetta M. A process for translating evidence-based aphasia treatment into clinical practice. *Aphasiology.* 2005;19(3): 411-422.
44. Sapir A, d'Avossa G, McAvoy M, Shulman GL, Corbetta M. Brain signals for spatial attention predict performance in a motion discrimination task. *Proceedings National Academy of Science.* 2005 Dec 6;102(49): 17810-17815. Epub 2005 Nov 23. PMID: PMC1308888
45. Astafiev SV, Shulman GL, Corbetta M. Short communication visuospatial reorienting signals in the human temporoparietal junction are independent of response selection. *European Journal of Neuroscience.* 2006 Jan;23(2): 591-96.
46. Baker JT, Patel GH, Corbetta M, Snyder L. Distribution of activity across monkey cerebral cortical surface, thalamus, and midbrain during rapid, visually guided saccades. *Cerebral Cortex.* 2006 Apr;16(4): 447-59. Epub 2005 Jun 15.
47. Connor LT, DeShazo B, Snyder T, Snyder AZ, Lewis CM, Blasi V, Corbetta M. Cerebellar activity switches hemispheres with cerebral recovery in aphasia. *Neuropsychologia.* 2006;44(2): 171-177.
48. Jack AI, Sylvester CM, Corbetta M. Losing our brainless minds: how neuroimaging informs cognition. *Cortex.* 2006 Apr; 42(3): 418-21; discussion 422-7.
49. Fox MD, Corbetta M, Snyder AZ, Vincent JL, Raichle ME. Spontaneous neuronal activity distinguishes human dorsal and ventral attention systems. *Proceedings National Academy of Science.* 2006 Jun 27;103(26): 10046-51.
50. Jack AI, Shulman GL, Snyder AZ, McAvoy M, Corbetta M. Separate modulations of human V1 associated with spatial attention and task structure. *Neuron.* 2006 Jul 6;51(1):135-47.
51. d'Avossa G, Shulman GL, Snyder AZ, Corbetta M. Attentional selection of moving objects by a serial process. *Vision Research.* 2006 Oct;46(20): 3403-3412. Epub 2006 Jul 20.
52. Sylvester CM, d'Avossa G, Corbetta M. Models of human visual attention should consider trial-by-trial variability in preparatory neural signals. *Neural Networks.* 2006 Nov;19(9): 1447-1449. Epub 2006 Oct 12. PMID: PMC1855207



53. Fucetola R, Connor LT, Perry J, Lao P, Tucker FM, Corbetta M. Aphasia severity, semantics, and depression predict functional communication in acquired aphasia. *Aphasiology*. 2006;20(5): 449-461.
54. Shulman GL, Astafiev SV, McAvoy MP, d'Avossa G, Corbetta M. Right TPJ deactivation during visual search: functional significance and support for a filter hypothesis. *Cerebral Cortex*. 2007 Nov;17(11): 2625-2633. Epub 2007 Jan 30.
55. He BJ, Snyder AZ, Vincent JL, Epstein A, Shulman GL, Corbetta M. Breakdown of functional connectivity in frontoparietal networks underlies behavioral deficits in spatial neglect. *Neuron*. 2007 Mar 15;53(6): 905-18.
56. Sapir A, Kaplan JB, He BJ, Corbetta M. Anatomical correlates of directional hypokinesia in patients with hemispatial neglect. *Journal of Neuroscience*. 2007 Apr 11;27(15): 4045-51.
57. Vincent JL, Patel GH, Fox MD, Snyder AZ, Baker JT, Snyder LH, Corbetta M, Raichle ME. Intrinsic functional architecture in the anaesthetized monkey brain. *Nature*. 2007 May 3;447(7140): 83-6.
58. Jack AI, Patel GH, Astafiev SV, Snyder AZ, Akbudak E, Shulman GL, Corbetta M. Changing human visual field organization from early visual to extra-occipital cortex. *PLOS One*. 2007 May 16;2(5):e452. PMID: PMC1866221
59. Mantini D, Petrucci MG, Del Gratta C, Romani GL, Corbetta M. Electrophysiological signatures of resting state networks in the human brain. *Proceedings National Academy of Science U S A*. 2007;104(32): 13170-5.
60. He BJ, Shulman GL, Snyder AZ, Corbetta M. The role of impaired neuronal communication in neurological disorders. *Current Opinion in Neurology*. 2007 Dec;20(6): 655-60.
61. Sylvester C, Shulman GL, Jack AI, Corbetta M. Asymmetry of anticipatory activity in visual cortex predicts the locus of attention and perception. *Journal of Neuroscience*. 2007 Dec 26;27(52):14424-14433.
62. Sestieri C, Pizzella V, Cianflone V, Romani GL, Corbetta M. Sequential activation of human oculomotor centers during planning of visually-guided eye movements: a combined fMRI-MEG study. *Frontiers in Human Neurosciences*. 2007;1:1 Epub 2008 Mar 28. PMID: PMC2525985
63. Corbetta M, Patel GH, Shulman GL. The reorienting system of the human brain: from environment to theory of mind. *Neuron*. 2008 May 8;58(3): 306-324.
64. Sestieri C, Sylvester CM, Jack AI, d'Avossa G, Shulman GL, Corbetta M. Independence of anticipatory signals for spatial attention from number of distracters in the visual field. *Journal of Neurophysiology*. 2008 Aug;100(2):829-38. PMID: PMC2525703
- Sylvester C, Jack AI, Corbetta M, Shulman GL. Anticipatory suppression of non-attended locations in visual cortex marks target location and predicts perception. *Journal of Neuroscience*. 2008 Jun 25;28(26): 6549-56. PMID: PMC2587329
65. Mantini D, Corbetta M, Perrucci MG, Romani GL, Del Gratta C. Large-scale brain networks account for sustained and transient activity during target detection. *Neuroimage*. 2009 Jan 1;44(1): 265-74. Epub 2008 Aug 28.
66. Fair DA, Snyder AZ, Connor LT, Nardos B, Corbetta M. Task-evoked BOLD responses are normal in areas of diaschisis after stroke. *Neurorehabilitation and Neural Repair*. 2009 Jan;23(1):52-7. Epub 2008 Sep 16.
67. Bressler SL, Tang W, Sylvester CM, Shulman GL, Corbetta M. Top-down control of human visual cortex by frontal and parietal cortex in anticipatory visual spatial attention. *Journal of Neuroscience*. 2008 Oct 1;28(40):10056-61. PMID: PMC2583122



68. Tosoni A, Galati G, Romani GL, Corbetta M. Sensory-motor mechanisms in human parietal cortex underlie arbitrary visual decisions. *Nature Neuroscience*. 2008 Dec;11(12):1446-1453. Epub 2008 Nov 9.
69. Shulman GL, Astafiev SV, Franke D, Pope DL, Snyder AZ, McAvoy MP, Corbetta M. Interaction of stimulus-driven reorienting and expectation in ventral and dorsal frontoparietal and basal ganglia-cortical networks. *Journal of Neuroscience*. 2009 Apr 8;29(14):4392-407. PMID: PMC2743562
70. Capotosto P, Babiloni C, Romani GL, Corbetta M. Frontoparietal cortex controls spatial attention through modulation of anticipatory alpha rhythms. *Journal of Neuroscience*. 2009 May 6;29(18):5863-72. PMID: PMC2692025
71. Sylvester CM, Shulman GL, Jack AI, Corbetta M. Anticipatory and stimulus-evoked BOLD modulations related to spatial attention reflect a common additive signal. *Journal of Neuroscience*. 2009 Aug 26;29(34):10671-82. PMID: PMC3417151
72. Lewis CM, Baldassarre A, Committeri G, Romani GL, Corbetta M. Learning sculpts the spontaneous activity of the resting human brain. *Proceedings National Academy of Science USA*. 2009 Oct 13;106(41):17558-63. PMID: PMC2762683
73. Rengachary J, d'Avossa G, Sapir A, Shulman GL, Corbetta M. Is the Posner reaction time test more accurate than clinical tests in detecting left neglect in acute and chronic stroke? *Archives of Physical Medicine and Rehabilitation*. 2009 Dec;90(12): 2081-8.
74. Fucetola R, Connor LT, Strube MJ, Corbetta M. Unravelling nonverbal cognitive performance in acquired aphasia. *Aphasiology*. 2009 Oct 28;23(12): 1418-1426.
75. Mantini D, Marzetti L, Corbetta M, Romani GL, Del Gratta C. Multimodal integration of fMRI and EEG data for high spatial and temporal resolution analysis of brain networks. *Brain Topogr*. 2010 Jun;23(2):150-8. Epub 2010 Jan 6.
76. Patel GH, Shulman GL, Baker JT, Akbudak E, Snyder AZ, Snyder LH, Corbetta M. Topographic organization of macaque area LIP. *Proceedings National Academy of Science USA*. 2010 Mar 9;107(10):4728-33. Epub 2010 Feb 19. PMID: PMC2842044
77. Shulman GL, Pope DLW, Astafiev SV, McAvoy MP, Snyder A.Z. and Corbetta M. Right hemisphere dominance for spatial selective attention and target detection occurs outside the dorsal fronto-parietal network. *Journal of Neuroscience*. 2010 Mar 10;30(10):3640-51. PMID: PMC2872555
78. de Pasquale F, Della Penna S, Snyder AZ, Mantini D, Marzetti L, Lewis CM, Belardinelli P, Ciancetta L, Pizzella V, Romani GL, Corbetta M. Temporal dynamics of spontaneous MEG activity in brain networks. *Proceedings National Academy of Science USA*. 2010 Mar 30;107(13):6040-5. Epub 2010 Mar 16. PMID: PMC2851876
79. Carter AR, Astafiev SV, Lang C, Connor LT, Struna J, Strube M, Pope D, Shulman GL, Corbetta M. Resting interhemispheric fMRI connectivity predicts performance after stroke. *Annals of Neurology*. 2010 Mar;67(3): 365-75. PMID: PMC2927671
80. Astafiev SV, Snyder AZ, Shulman GL, Corbetta M. Comment on "Modafinil shifts human locus coeruleus to low-tonic, high-phasic activity during functional MRI" and "Homeostatic sleep pressure and responses to sustained attention in the suprachiasmatic area." *Science*. 2010 Apr 16;328(5976):309; author reply 309.
81. Sestieri C, Shulman GL, Corbetta M. Attention to memory and the environment: functional specialization and dynamic competition in human posterior parietal cortex. *Journal of Neuroscience*. 2010 Jun 23;30(25):8445-56. PMID: PMC2906749
82. Corbetta M, Shulman GL. Attention networks: past, present, and future. In: Luo L, Rodriguez E, Jerbi K, Lachaux JP, Martinerie J, Corbetta M, Shulman GL, Piomelli D, Turrigiano GG, Nelson



- SB, Joëls M, de Kloet ER, Holsboer F, Amodio DM, Frith CD, Block ML, Zecca L, Hong JS, Dantzer R, Kelley KW, Bud Craig AD. Ten years of Nature Review Neuroscience: insights from the highly cited. *Nature Review Neuroscience*. 2010 Oct;11(10):718-26.
83. Corbetta, M. Functional connectivity and neurological recovery. *Dev Psychobiol*. 2010 Apr;54(3):239-53. Epub 2010 Nov 17.
84. Hlinka J, Paluš M, Vejmelka M, Mantini D, Corbetta M. Functional connectivity in resting-state fMRI: is linear correction sufficient? *Neuroimage*. 2011 Feb 1;54(3):2218-25. Epub 2010 Aug 25.
85. Deco G, Corbetta M. The dynamic balance of the brain at rest. *The Neuroscientist*. 2011 Feb;17(1):107-23. Epub 2010 Dec 31.
86. Sestieri C, Corbetta M, Romani GL, Shulman GL. Episodic memory retrieval, parietal cortex, and the Default Mode Network: functional and topographic analyses. *Journal of Neuroscience*. 2011 Mar 23;31(12):4407-20. PMID: PMC3098040
87. Hartman D, Hlinka J, Paluš M, Mantini D, Corbetta M. The role of nonlinearity in computing graph-theoretical properties of resting-state functional magnetic resonance imaging brain networks. *Chaos*. 2011 Mar;21(1):013119.
88. Rengachary J, He BJ, Shulman GL, Corbetta M. A behavioral analysis of spatial neglect and its recovery after stroke. *Frontiers in Human Neuroscience*. 2011 Apr 4;5:29. PMID: PMC3075878
89. Corbetta M, Fitzpatrick SM. Neural rehabilitation: action and manipulation. *Neurorehabilitation Neural Repair*. 2011 Jun;25(5 Suppl):3S-5S.
90. Frey SH, Fogassi L, Grafton S, Picard N, Rothwell JC, Schweighofer N, Corbetta M, Fitzpatrick SM. Neurological principles and rehabilitation of action disorders: computation, anatomy, and physiology (CAP) model. *Neurorehabilitation Neural Repair*. 2011 Jun;25(5 Suppl):6S-20S.
91. Sathian K, Buxbaum LJ, Cohen LG, Krakauer JW, Lang CE, Corbetta M, Fitzpatrick SM. Neurological principles and rehabilitation of action disorders: common clinical deficits. *Neurorehabilitation Neural Repair*. 2011 Jun;25(5 Suppl):21S-32S.
92. Pomeroy V, Aglioti SM, Mark VW, McFarland D, Stinear C, Wolf SL, Corbetta M, Fitzpatrick SM. Neurological principles and rehabilitation of action disorders: rehabilitation interventions. *Neurorehabilitation Neural Repair*. 2011 Jun;25(5 Suppl):33S-43S.
93. Capotosto P, Babiloni C, Romani GL, Corbetta M. Differential contribution of right and left parietal cortex to the control of spatial attention: A simultaneous EEG-rTMS study. *Cerebral Cortex*. 2012 Feb;22(2):446-54 Epub 2011 Jun 10. PMID: PMC3256411
94. Roland J, Miller K, Freudenburg Z, Sharma M, Smyth M, Gaona C, Breshears J, Corbetta M, Leuthardt EC. The effect of age on human motor electrocorticographic signals and implications for brain-computer interface applications. *Journal of Neural Engineering*. 2011 Aug;8(4):046013. Epub 2011 Jun 10.
95. Corbetta M, Shulman GL. Spatial neglect and attention networks. *Annual Review of Neuroscience*. 2011; 34:569-99.
96. Carter AR, Patel KR, Astafiev SV, Snyder AZ, Rengachary J, Strube MJ, Pope A, Shimony JS, Lang CE, Shulman GL, Corbetta M. Upstream dysfunction of somatomotor functional connectivity after corticospinal damage in stroke. *Neurorehabilitation and Neural Repair*. 2012 Jan;26(1):7-19 Epub 2011 Jul 29.
97. Lang CE, Bland MD, Connor LT, Fucetola R, Whitson M, Edmiaston J, Karr C, Sturmoski A, Baty J, Corbetta M. The Brain Recovery Core: Building a system of organized stroke rehabilitation across the continuum of care. *Journal of Neurologic Physical Therapy*. 2011 Dec;35(4):194-201.
98. Callejas A, Shulman GL and Corbetta M. False belief vs. false photographs: a test of theory of mind or working memory? *Front Psychology*. 2011;2:316. Epub 2011 Nov 4. PMID: PMC3208388



99. Hawellek DJ, Hipp JF, Lewis CM, Corbetta M, Engel AK. Increased functional connectivity indicates the severity of cognitive impairment in multiple sclerosis. *Proceedings of the National Academy of Sciences USA*. 2011 Nov 22;108(47):19066-71. Epub 2011 Nov 7. PMID: PMC3223469
100. Mantini D, Hasson U, Betti V, Perrucci MG, Romani GL, Corbetta M, Orban GA, Vanduffel W. Interspecies activity correlates reveal functional correspondence between monkey and human brain areas. *Nat. Methods*. 2012 Feb 5;9(3):277-82. PMID: PMC3438906
101. Baldassarre A, Lewis CM, Committeri G, Snyder AZ, Romani GL, Corbetta M. Individual variability in functional connectivity predicts performance of a perceptual task. *Proceedings of the National Academy of Sciences USA*. 2012 Feb 28;109(9):3516-21. Epub 2012 Feb 6. PMID: PMC3295318
102. Van Essen DC, Ugurbil K, Auerbach E, Barch D, Behrens TE, Bucholz R, Chang A, Chen L, Corbetta M, Curtiss SW, Della Penna S, Feinberg D, Glasser MF, Harel N, Heath AC, Larson-Prior L, Marcus D, Michalareas G, Moeller S, Oostenveld R, Petersen SE, Prior F, Schlaggar BL, Smith SM, Snyder AZ, Xu J, Yacoub E; WU-Minn HCP Consortium. The Human Connectome Project: A data acquisition perspective. *Neuroimage*. 2012 Oct 1;62(4):2222-31. Epub 2012 Feb 17.
103. Carter AR, Shulman GL, Corbetta M. Why use a connectivity-based approach to study stroke and recovery of function? *Neuroimage*. 2012 Oct 1;62(4):2271-80. Epub 2012 Mar 5.
104. Corbetta M. Functional connectivity and neurological recovery. *Dev Psychobiol*. 2012 Apr;54(3):239-53. doi: 10.1002/dev.20507. Epub 2010 Nov 17.
105. Bland MD, Sturmoski A, Whitson M, Connor LT, Fucetola R, Huskey T, Corbetta M, Lang CE. Prediction of discharge walking ability from initial assessment in a stroke inpatient rehabilitation facility population. *Arch Phys Med Rehabil*. 2012 Aug;93(8):1441-7. Epub 2012 Mar 20.
106. Tosoni A, Shulman GL, Pope AL, McAvoy MP, Corbetta M. Distinct representations for shifts of spatial attention and changes of reward contingencies in the human brain. *Cortex*. 2012 Apr 10. [Epub ahead of print] PMID: PMC3419793
107. Hipp JF, Hawellek DJ, Corbetta M, Siegel M, Engel AK. Large-scale cortical correlation structure of spontaneous oscillatory activity. *Nature Neurosci*. 2012 Jun;15(6):884-90.
108. Bundy DT, Wronkiewicz M, Sharma M, Moran M, Corbetta M, Leuthardt EC. Using ipsilateral motor signals in the unaffected cerebral hemisphere as a signal platform for brain computer interfaces in hemiplegic stroke survivors. *Journal of Neural Engineering* 2012 Jun;9(3):036011. Epub 2012 May 22. PMID: PMC3402181
109. de Pasquale F, Della Penna S, Snyder AZ, Marzetti L, Pizzella V, Romani GL, Corbetta M. A cortical core for dynamic integration of functional networks in the resting human brain. *Neuron*. 2012 May 24;74(4):753-64. PMID: PMC3361697
110. Tang W, Bressler S, Sylvester CM, Shulman GL, Corbetta M. Measuring Granger causality between cortical regions From voxelwise fMRI BOLD signals with LASSO. *PLOS Computational Biology*. 2012;8(5):e1002513. Epub 2012 May 24. PMID: PMC3359965
111. Sylvester CM, Corbetta M, Raichle ME, Rodebaugh TL, Schlaggar BL, Sheline YI, Zorumski CF, Lenze EJ. Functional network dysfunction in anxiety and anxiety disorders. *Trends Neurosci*. 2012 Sep;35(9):527-35. Epub 2012 Jun 2. PMID: PMC3432139
112. Lee M.H., Hacker C.D., Snyder A.Z., Corbetta M., Zhang, D. Leuthardt E.C., Shimony J.S. Clustering of resting state networks. *PLoS One*. 2012;7(7):e40370. Epub 2012 Jul 9.
113. Capotosto P, Corbetta M, Romani GL, Babiloni C. Electrophysiological correlates of stimulus-driven reorienting deficits after interference with right parietal cortex during a spatial attention task: A TMS-EEG Study. *J Cogn. Neurosci*. 2012 Dec;24(12):2363-71. Epub 2012 Aug 20.



114. Mantini D, Corbetta M, Romani GL, Orban GA, Vanduffel W. Data-driven analysis of analogous brain networks in monkeys and humans during natural vision. *Neuroimage*. 2012 Nov 15;63(3):1107-18. Epub 2012 Aug 21. PMID: PMC3472137
115. Sestieri C, Capotosto P, Tosoni A, Luca Romani G, Corbetta M. Interference with episodic memory retrieval following transcranial stimulation of the inferior but not the superior parietal lobule. *Neuropsychologia*. 2013 Feb 4;51(5):900-906. doi: 10.1016/j.neuropsychologia.2013.01.023. [Epub ahead of print]
116. Bland MD, Sturmoski A, Whitson M, Harris H, Connor LT, Fucetola R, Edmiaston J, Huskey T, Carter A, Kramper M, Corbetta M, Lang CE. Clinician Adherence to a Standardized Assessment Battery Across Settings and Disciplines in a Poststroke Rehabilitation Population. *Arch Phys Med Rehabil*. 2013 Feb 13. doi:pii: S0003-9993(13)00119-6. 10.1016/j.apmr.2013.02.004. [Epub ahead of print]
117. Mantini D, Corbetta M, Romani GL, Orban GA, Vanduffel W. Evolutionarily novel functional networks in the human brain? *J Neurosci*. 2013 Feb 20;33(8):3259-75. doi: 10.1523/JNEUROSCI.4392-12.2013.
118. Capotosto P, Tosoni A, Spadone S, Sestieri C, Perrucci MG, Romani GL, Della Penna S, Corbetta M. Anatomical segregation of visual selection mechanisms in human parietal cortex. *J Neurosci*. 2013 Apr 3;33(14):6225-9.
119. Marzetti L, Della Penna S, Snyder AZ, Pizzella V, Nolte G, de Pasquale F, Romani GL, Corbetta M. Frequency specific interactions of MEG resting state activity within and across brain networks as revealed by the multivariate interaction measure. *Neuroimage*. 2013 Oct 1;79:172-83. doi: 10.1016/j.neuroimage.2013.04.062. Epub 2013 Apr 28.
120. Barch DM, Burgess GC, Harms MP, Petersen SE, Schlaggar BL, Corbetta M, Glasser MF, Curtiss S, Dixit S, Feldt C, Nolan D, Bryant E, Hartley T, Footer O, Bjork JM, Poldrack R, Smith S, Johansen-Berg H, Snyder AZ, Van Essen DC; WU-Minn HCP Consortium. Function in the human connectome: Task-fMRI and individual differences in behavior. *Neuroimage*. 2013 Oct 15;80:169-89.
121. Van Essen DC, Smith SM, Barch DM, Behrens TE, Yacoub E, Ugurbil K; WU-Minn HCP Consortium. The WU-Minn Human Connectome Project: an overview. *Neuroimage*. 2013 Oct 15;80:62-79.
122. Larson-Prior LJ, Oostenveld R, Della Penna S, Michalareas G, Prior F, Babajani-Feremi A, Schoffelen JM, Marzetti L, de Pasquale F, Di Pompeo F, Stout J, Woolrich M, Luo Q, Bucholz R, Fries P, Pizzella V, Romani GL, Corbetta M, Snyder AZ; WU-Minn HCP Consortium. Adding dynamics to the Human Connectome Project with MEG. *Neuroimage*. 2013 Oct 15;80:190-201.
123. Hutchison RM, Womelsdorf T, Allen EA, Bandettini PA, Calhoun VD, Corbetta M, Della Penna S, Duyn JH, Glover GH, Gonzalez-Castillo J, Handwerker DA, Keilholz S, Kiviniemi V, Leopold DA, de Pasquale F, Sporns O, Walter M, Chang C. Dynamic functional connectivity: Promise, issues, and interpretations. *Neuroimage*. 2013 Oct 15;80:360-78.
124. Hacker CD, Laumann TO, Szrama NP, Baldassarre A, Snyder AZ, Leuthardt EC, Corbetta M. Resting state network estimation in individual subjects. *Neuroimage*. 2013 Jun 2;82C:616-633.
125. Deco G, Ponce-Alvarez A, Mantini D, Romani GL, Hagmann P, Corbetta M Resting-State Functional Connectivity Emerges from Structurally and Dynamically Shaped Slow Linear Fluctuations *J Neurosci*. July 3, 2013 • 33(27):11239–11252
126. Betti V, Della Penna S, de Pasquale F, Mantini D, Marzetti L, Romani GL, Corbetta M. Natural Scenes Viewing Alters the Dynamics of Functional Connectivity in the Human Brain. *Neuron*. 2013 Jul 24. doi:pii: S0896-6273(13)00538-2. 10.1016/j.neuron.2013.06.022. [Epub ahead of print]



127. Roland JL, Hacker CD, Breshears JD, Gaona CM, Hogan RE, Burton H, Corbetta M, Leuthardt EC. Brain mapping in a patient with congenital blindness - a case for multimodal approaches. *Front Hum Neurosci*. 2013 Jul 31;7:431. doi: 10.3389/fnhum.2013.00431. Print 2013.
128. Capotosto P, Babiloni C, Romani GL, Corbetta M Resting-state Modulation of Alpha Rhythms by Interference with Angular Gyrus Activity. *J Cogn Neurosci*. 2014 Jan;26(1):107-19. doi: 10.1162/jocn_a_00460. Epub 2013 Aug 12.
129. Callejas A, Shulman GL, Corbetta M. Dorsal and ventral attention systems underlie social and symbolic cueing. *J Cogn Neurosci*. 2014 Jan;26(1):63-80. doi: 10.1162/jocn_a_00461. Epub 2013 Aug 12.
130. Maccotta L, He BJ, Snyder AZ, Eisenman LN, Benzinger TL, Ances BM, Corbetta M, Hogan RE. Impaired and facilitated functional networks in temporal lobe epilepsy. *Neuroimage Clin*. 2013 Jun 25;2:862-72. doi: 10.1016/j.nicl.2013.06.011.
131. Sestieri C, Corbetta M, Spadone S, Romani GL, Shulman GL. Domain-general Signals in the Cingulo-opercular Network for Visuospatial Attention and Episodic Memory. *J Cogn Neurosci*. 2013 Oct 21. [Epub ahead of print]
132. Daitch AL, Sharma M, Roland JL, Astafiev SV, Bundy DT, Gaona CM, Snyder AZ, Shulman GL, Leuthardt EC, Corbetta M. Frequency-specific mechanism links human brain networks for spatial attention. *Proceedings National Academy of Science USA* 2013 Nov 26;110(48):19585-90. doi: 10.1073/pnas.1307947110. Epub 2013 Nov 11.
133. Mitchell TJ, Hacker CD, Breshears JD, Szrama NP, Sharma M, Bundy DT, Pahwa M, Corbetta M, Snyder AZ, Shimony JS, Leuthardt EC. A novel data-driven approach to preoperative mapping of functional cortex using resting-state functional magnetic resonance imaging. *Neurosurgery*. 2013 Dec;73(6):969-83.
134. Sylvester CM, Barch DM, Corbetta M, Power JD, Schlaggar BL, Luby JL. Resting state functional connectivity of the ventral attention network in children with a history of depression or anxiety. *J Am Acad Child Adolesc Psychiatry*. 2013 Dec;52(12):1326-1336.e5. doi: 10.1016/j.jaac.2013.10.001. Epub 2013 Oct 11.
135. Tosoni A, Corbetta M, Calluso C, Committeri G, Pezzulo G, Romani GL, Galati G. Decision and action planning signals in human posterior parietal cortex during delayed perceptual choices. *Eur J Neurosci*. 2014 Mar 11
136. Sestieri C, Tosoni A, Mignogna V, McAvoy MP, Shulman GL, Corbetta M, Romani GL. Memory accumulation mechanisms in human cortex are independent of motor intentions. *J Neurosci*. 2014 May 14;34(20):6993-7006.
137. Deco G, Ponce-Alvarez A, Hagmann P, Romani GL, Mantini D, Corbetta M. How local excitation-inhibition ratio impacts the whole brain dynamics. *J Neurosci*. 2014 Jun 4;34(23):7886-98.
138. Strappini F, Pitzalis S, Snyder AZ, McAvoy MP, Sereno MI, Corbetta M, Shulman GL. Eye position modulates retinotopic responses in early visual areas: a bias for the straight-ahead direction. *Brain Struct Funct*. 2014 Jun 19. [Epub ahead of print]
139. Baldassarre A, Ramsey L, Hacker CL, Callejas A, Astafiev SV, Metcalf NV, Zinn K, Rengachary J, Snyder AZ, Carter AR, Shulman GL, Corbetta M. Large-scale changes in network interactions as a physiological signature of spatial neglect. *Brain* 2014 Dec;137(Pt 12):3267-83. doi: 10.1093/brain/awu297. Epub 2014 Nov 2.
140. Siegel JS, Snyder AZ, Metcalf NV, Fucetola RP, Hacker CD, Shimony JS, Shulman GL, Corbetta M. The circuitry of abulia: Insights from functional connectivity MRI. *Neuroimage Clin*. 2014 Sep 23;6:320-6. doi: 10.1016/j.nicl.2014.09.012. eCollection 2014.
141. Lang CE, Bland MD, Cheng N, Corbetta M, Lee JM. A case-control study of the effectiveness of



- tissue plasminogen activator on 6 month patients-reported outcomes and health care utilization. *J Stroke Cerebrovasc Dis.* 2014 Nov-Dec;23(10):2914-9.
142. Bland MD, Whitson M, Harris H, Edmiaston J, Connor LT, Fucetola R, Carter A, Corbetta M, Lang CE. Descriptive Data Analysis Examining How Standardized Assessments Are Used to Guide Post-Acute Discharge Recommendations for Rehabilitation Services After Stroke. *Phys Ther.* 2014 Dec 11. [Epub ahead of print]
143. Corbetta M. Hemispatial neglect: clinic, pathogenesis, and treatment. *Semin Neurol.* 2014 Nov;34(5):514-23.
144. Capotosto P, Spadone S, Tosoni A, Sestieri C, Romani GL, Della Penna S, Corbetta M. Dynamics of EEG rhythms support distinct visual selection mechanisms in parietal cortex: a simultaneous transcranial magnetic stimulation and EEG study. *J Neurosci.* 2015 Jan 14;35(2):721-30.
145. Ponce-Alvarez A, Deco G, Hagmann P, Romani GL, Mantini D, Corbetta M. Resting-state temporal synchronization networks emerge from connectivity topology and heterogeneity. *PLoS Comput Biol.* 2015 Feb 18;11(2):e1004100. doi: 10.1371/journal.pcbi.1004100.
146. Corbetta M, Ramsey L, Callejas A, Baldassarre A, Hacker CD, Siegel JS, Astafiev SV, Rengachary J, Zinn K, Lang CE, Connor LT, Fucetola R, Strube M, Carter AR, Shulman GL. Common behavioral clusters and subcortical anatomy in stroke. *Neuron* 2015 Mar 4;85(5):927-41. doi: 10.1016/j.neuron.2015.02.027.
147. Astafiev SV, Shulman GL, Metcalf NV, Rengachary J, Mac Donald CL, Harrington DL, Maruta J, Shimony J, Ghajar J, Diwakar M, Huang M, Lee RR, Corbetta M. Abnormal white matter BOLD signals in chronic mild traumatic brain injury. *J Neurotrauma* 2015 Mar 10.
148. Spadone S, Della Penna S, Sestieri C, Betti V, Tosoni A, Perrucci MG, Romani GL, Corbetta M. Dynamic reorganization of human resting-state networks during visuospatial attention. *Proc Natl Acad Sci U S A.* 2015 Jun 30;112(26):8112-7.
149. Diwakar M, Harrington DL, Maruta J, Ghajar J, El-Gabalawy F, Muzzatti L, Corbetta M, Huang MX, Lee RR. Filling in the gaps: Anticipatory control of eye movements in chronic mild traumatic brain injury. *Neuroimage Clin.* 2015 Apr 22;8:210-23.
150. Guidotti R, Del Gratta C, Baldassarre A, Romani GL, Corbetta M. Visual Learning Induces Changes in Resting-State fMRI Multivariate Pattern of Information. *J Neurosci.* 2015 Jul 8;35(27):9786-98.
151. Patel GH, Yang D, Jamerson EC, Snyder LH, Corbetta M, Ferrera VP. Functional evolution of new and expanded attention networks in humans. *Proc Natl Acad Sci U S A.* 2015 Jul 28;112(30):9454-9. doi: 10.1073/pnas.1420395112. Epub 2015 Jul 13. Erratum in: *Proc Natl Acad Sci U S A.* 2015 Sep 22;112(38):E5377.
152. de Pasquale F, Della Penna S, Sporns O, Romani GL, Corbetta M. *Cereb Cortex.* 2015 [Epub ahead of print] A Dynamic Core Network and Global Efficiency in the Resting Human Brain.
153. Siegel JS, Snyder AZ, Ramsey L, Shulman GL, Corbetta M. The effects of hemodynamic lag on functional connectivity and behavior after stroke. *J Cereb Blood Flow Metab.* 2015 Nov 4. pii: 0271678X15614846. [Epub ahead of print] PMID: 26661223
154. Astafiev SV, Zinn KL, Shulman GL, Corbetta M. Exploring the physiological correlates of chronic mild traumatic brain injury symptoms. *Neuroimage Clin.* 2016 Jan 6;11:10-9. doi: 10.1016/j.nicl.2016.01.004. eCollection 2016. PMID: 26909324
155. Baldassarre A, Ramsey L, Rengachary J, Zinn K, Siegel JS, Metcalf NV, Strube MJ, Snyder AZ, Corbetta M, Shulman GL. Dissociated functional connectivity profiles for motor and attention deficits in acute right-hemisphere stroke. *Brain.* 2016 May 25. pii: aww107. [Epub ahead of print] PMID: 27225794



156. Ramsey LE, Siegel JS, Baldassarre A, Metcalf NV, Zinn K, Shulman GL, Corbetta M. Normalization of network connectivity in hemispatial neglect recovery. *Ann Neurol.* 2016 Jun 9. doi: 10.1002/ana.24690. [Epub ahead of print] PMID: 27277836
157. Patel KR, Ramsey LE, Metcalf NV, Shulman GL, Corbetta M. Early diffusion evidence of retrograde transsynaptic degeneration in the human visual system. *Neurology.* 2016 Jun 15. pii: 10.1212/WNL.0000000000002841. [Epub ahead of print] PMID: 27306632
158. Siegel JS, Ramsey LE, Snyder AZ, Metcalf NV, Chacko RV, Weinberger K, Baldassarre A, Hacker CD, Shulman GL, Corbetta M. Disruptions of network connectivity predict impairment in multiple behavioral domains after stroke. *Proc Natl Acad Sci U S A.* 2016 Jul 11. pii: 201521083. [Epub ahead of print] PMID: 27402738
159. Siegel JS, Mitra A, Laumann TO, Seitzman BA, Raichle M, Corbetta M, Snyder AZ. Data Quality Influences Observed Links Between Functional Connectivity and Behavior. *Cereb Cortex.* 2016 Aug 22. [Epub ahead of print] PMID: 27550863
160. Baldassarre A, Capotosto P, Committeri G, Corbetta M. Magnetic stimulation of visual cortex impairs perceptual learning. *Neuroimage.* 2016 Aug 31. pii: S1053-8119(16)30456-6. doi: 0.1016/j.neuroimage.2016.08.063. [Epub ahead of print] PMID: 27591920
161. Capotosto P, Baldassarre A, Sestieri C, Spadone S, Romani GL, Corbetta M. Task and Regions Specific Top-Down Modulation of Alpha Rhythms in Parietal Cortex. *Cereb Cortex.* 2016 Sep 6. [Epub ahead of print] PMID: 27600845
162. Baldassarre A, Ramsey LE, Siegel JS, Shulman GL, Corbetta M. Brain connectivity and neurological disorders after stroke. *Curr Opin Neurol.* 2016 Dec;29(6):706-713.
163. Carter AR, McAvoy MP, Siegel JS, Hong X, Astafiev SV, Rengachary J, Zinn K, Metcalf NV, Shulman GL, Corbetta M. Differential white matter involvement associated with distinct visuospatial deficits after right hemisphere stroke. *Cortex.* 2016 Dec 20;88:81-97. doi: 10.1016/j.cortex.2016.12.009. [Epub ahead of print] PMID: 28081452
164. Meehan TP, Bressler SL, Tang W, Astafiev SV, Sylvester CM, Shulman GL, Corbetta M. Top-down cortical interactions in visuospatial attention. *Brain Struct Funct.* 2017 Mar 20. doi: 10.1007/s00429-017-1390-6. [Epub ahead of print]
165. Quaglio G, Corbetta M, Karapiperis T, Amunts K, Koroshetz W, Yamamori T, Draghia-Akli R. Understanding the brain through large, multidisciplinary research initiatives. *Lancet Neurol.* 2017 Mar;16(3):183-184.
166. Sestieri C, Shulman GL, Corbetta M. The contribution of the human posterior parietal cortex to episodic memory. *Nat Rev Neurosci.* 2017 Feb 17;18(3):183-192.
167. Hacker CD, Snyder AZ, Pahwa M, Corbetta M, Leuthardt EC. Frequency-specific electrophysiologic correlates of resting state fMRI networks. *Neuroimage.* 2017 Apr 1;149:446-457.
168. Adhikari MH, Hacker CD, Siegel JS, Griffa A, Hagmann P, Deco G, Corbetta M. Decreased integration and information capacity in stroke measured by whole brain models of resting state activity. *Brain* 2017 Apr 1;140(4):1068-1085.
169. Siegel JS, Shulman GL, Corbetta M. Measuring functional connectivity in stroke: Approaches and considerations. *J Cereb Blood Flow Metab.* 2017 Jan 1:271678X17709198. doi: 10.1177/0271678X17709198. [Epub ahead of print]
170. Kim D, Kay K, Shulman GL, Corbetta M. A new modular brain organization of the BOLD signal during natural vision. *Cereb Cortex.* 2017 Jul 13:1-17. doi: 10.1093/cercor/bhx175. [Epub ahead of print] PMID:28981593
171. Saenger, Adhikari M, Hagmann P, Deco G, Corbetta M. Linking Entropy at Rest with the Underlying Structural Connectivity in the Healthy and Lesioned Brain. *Cereb Cortex.* 2017 Jul 13:1-



11. doi: 10.1093/cercor/bhx176. [Epub ahead of print]
172. Siegel JS, Mitra A, Laumann TO, Seitzman BA, Raichle M, Corbetta M, Snyder AZ. Data Quality Influences Observed Links Between Functional Connectivity and Behavior. *Cereb Cortex*. 2017 Sep 1;27(9):4492-4502. doi: 10.1093/cercor/bhw253.
173. Ramsey LE, Siegel JS, Lang CE, Strube M, Shulman GL, Corbetta M. Behavioural clusters and predictors of performance during recovery from stroke. *Nat Hum Behav*. 2017;1. pii: 0038. doi: 10.1038/s41562-016-0038. Epub 2017 Feb 17.
174. Cecchin D, Palombit A, Castellaro M, Silvestri E, Bui F, Barthel H, Sabri O, Corbetta M, Bertoldo A. Brain PET and functional MRI: why simultaneously using hybrid PET/MR systems? *Q J Nucl Med Mol Imaging*. 2017 Dec;61(4):345-359. doi: 10.23736/S1824-4785.17.03008-4. Epub 2017 Jul 27.
175. de Pasquale F, Corbetta M, Betti V, Della Penna S. Cortical cores in network dynamics. *Neuroimage*. 2018 Oct 15;180(Pt B):370-382. doi: 10.1016/j.neuroimage.2017.09.063. Epub 2017 Sep 30. Review.
176. Gilson M, Deco G, Friston KJ, Hagmann P, Mantini D, Betti V, Romani GL, Corbetta M. Effective connectivity inferred from fMRI transition dynamics during movie viewing points to a balanced reconfiguration of cortical interactions. *Neuroimage*. 2018 Oct 15;180(Pt B):534-546. doi: 10.1016/j.neuroimage.2017.09.061. Epub 2017 Oct 9. Review.
177. Corbetta M, Siegel JS, Shulman GL. On the low dimensionality of behavioral deficits and alterations of brain network connectivity after focal injury. *Cortex*. 2018 Oct;107:229-237. doi: 10.1016/j.cortex.2017.12.017. Epub 2018 Jan 2. Review.
178. Chacko RV, Kim B, Jung SW, Daitch AL, Roland JL, Metcalf NV, Corbetta M, Shulman GL, Leuthardt EC. *Neuroimage*. 2018 Jul 15;175:111-121. doi: 10.1016/j.neuroimage.2018.03.003. Epub 2018 Mar 5. Distinct phase-amplitude couplings distinguish cognitive processes in human attention.
179. Betti V, Corbetta M, de Pasquale F, Wens V, Della Penna S. Topology of Functional Connectivity and Hub Dynamics in the Beta Band As Temporal Prior for Natural Vision in the Human Brain. *J Neurosci*. 2018 Apr 11;38(15):3858-3871. doi: 10.1523/JNEUROSCI.1089-17.2018. Epub 2018 Mar 19.
180. Tu C, Rocha RP, Corbetta M, Zampieri S, Zorzi M, Suweis S. Warnings and caveats in brain controllability. *Neuroimage*. 2018 Aug 1;176:83-91. doi: 10.1016/j.neuroimage.2018.04.010. Epub 2018 Apr 12.
181. Lin LY, Ramsey L, Metcalf NV, Rengachary J, Shulman GL, Shimony JS, Corbetta M. Stronger prediction of motor recovery and outcome post-stroke by cortico-spinal tract integrity than functional connectivity. *PLoS One*. 2018 Aug 23;13(8):e0202504. doi: 10.1371/journal.pone.0202504. eCollection 2018.
182. Siegel JS, Seitzman BA, Ramsey LE, Ortega M, Gordon EM, Dosenbach NUF, Petersen SE, Shulman GL, Corbetta M. Re-emergence of modular brain networks in stroke recovery. *Cortex*. 2018 Apr;101:44-59. doi: 10.1016/j.cortex.2017.12.019. Epub 2018 Jan 5.
183. Demirtaş M, Ponce-Alvarez A, Gilson M, Hagmann P, Mantini D, Betti V, Romani GL, Friston K, Corbetta M, Deco G. Distinct modes of functional connectivity induced by movie-watching. *Neuroimage*. 2018 Sep 17;184:335-348. doi: 10.1016/j.neuroimage.2018.09.042. [Epub ahead of print]
184. Cona G, Koçillari L, Palombit A, Bertoldo A, Maritan A, Corbetta M. Archetypes of human cognition defined by time preference for reward and their brain correlates: An evolutionary trade-off approach. *Neuroimage*. 2019 Jan 15;185:322-334. doi: 10.1016/j.neuroimage.2018.10.050. Epub 2018 Oct 21.



185. Rocha RP, Kocillari L, Suweis S, Corbetta M, Maritan A Homeostatic plasticity and emergence of functional networks in a whole-brain model at criticality. *Scientific Reports* 8:15682 | DOI:10.1038/s41598-018-33923-9
186. Baldassarre A, Metcalf NV, Shulman GL, Corbetta M. Brain networks' functional connectivity separates aphasic deficits in stroke. *Neurology*. 2019 Jan 8;92(2):e125-e135. Epub 2018 Dec 5.
187. Patel GH, Sestieri C, Corbetta M. The evolution of the temporoparietal junction and posterior superior temporal sulcus. *Cortex*. 2019 Sep;118:38-50. doi: 10.1016/j.cortex.2019.01.026. Epub 2019 Feb 7.
188. Astafiev SV, Wen J, Brody DL, Cross AH, Anokhin AP, Zinn KL, Corbetta M, Yablonskiy DA. A Novel Gradient Echo Plural Contrast Imaging Method Detects Brain Tissue Abnormalities in Patients With TBI Without Evident Anatomical Changes on Clinical MRI: A Pilot Study. *Mil Med*. 2019 Mar 1;184(Suppl 1):218-227. doi: 10.1093/milmed/usy394.
189. Karolis VR, Corbetta M, Thiebaut de Schotten M. The architecture of functional lateralisation and its relationship to callosal connectivity in the human brain. *Nat Commun*. 2019 Mar 29;10(1):1417. doi: 10.1038/s41467-019-09344-1.
190. Suweis S, Tu C, Rocha RP, Zampieri S, Zorzi M, Corbetta M. Brain controllability: Not a slam dunk yet. *Neuroimage*. 2019 Oct 15;200:552-555. doi: 10.1016/j.neuroimage.2019.07.012. Epub 2019 Jul 7.
191. Fortuna A, Gizzi M, Bello L, Martinelli I, Bertolin C, Pegoraro E, Corbetta M, Sorarù G; Edaravone Study Group. Safety and efficacy of edaravone compared to historical controls in patients with amyotrophic lateral sclerosis from North-Eastern Italy. *J Neurol Sci*. 2019 Sep 15;404:47-51. doi: 10.1016/j.jns.2019.06.006. Epub 2019 Jun 6.
192. Ferguson MA, Lim C, Cooke D, Darby RR, Wu O, Rost NS, Corbetta M, Grafman J, Fox MD. A human memory circuit derived from brain lesions causing amnesia. *Nat Commun*. 2019 Aug 2;10(1):3497. doi: 10.1038/s41467-019-11353-z.
193. Chauhan S, Vig L, De Filippo De Grazia M, Corbetta M, Ahmad S, Zorzi M. A Comparison of Shallow and Deep Learning Methods for Predicting Cognitive Performance of Stroke Patients From MRI Lesion Images. *Front Neuroinform*. 2019 Jul 31;13:53. doi: 10.3389/fninf.2019.00053. eCollection 2019.
194. Griffis JC, Metcalf NV, Corbetta M, Shulman GL. Structural Disconnections Explain Brain Network Dysfunction after Stroke. *Cell Rep*. 2019 Sep 3;28(10):2527-2540.e9. doi: 10.1016/j.celrep.2019.07.100.
195. Padmanabhan JL, Cooke D, Joutsa J, Siddiqi SH, Ferguson M, Darby RR, Soussand L, Horn A, Kim NY, Voss JL, Naidech AM, Brodtmann A, Egorova N, Gozzi S, Phan TG, Corbetta M, Grafman J, Fox MD. A Human Depression Circuit Derived From Focal Brain Lesions. *Biol Psychiatry*. 2019 Nov 15;86(10):749-758. doi: 10.1016/j.biopsych.2019.07.023. Epub 2019 Aug 2. PMID:31561861
196. Arbula S, Ambrosini E, Della Puppa A, De Pellegrin S, Anglani M, Denaro L, Piccione F, D'Avella D, Semenza C, Corbetta M, Vallesi A. Focal left prefrontal lesions and cognitive impairment: A multivariate lesion-symptom mapping approach. *Neuropsychologia*. 2020 Jan;136:107253. doi: 10.1016/j.neuropsychologia.2019.107253. Epub 2019 Nov 7. PMID:31706982
197. Della Penna S, Corbetta M, Wens V, de Pasquale F. The Impact of the Geometric Correction Scheme on MEG Functional Topology at Rest. *Front Neurosci*. 2019 Oct 25;13:1114. doi: 10.3389/fnins.2019.01114. eCollection 2019. PMID: 31708725
198. Prando G, Zorzi M, Bertoldo A, Corbetta M, Zorzi M, Chiuso A. Sparse DCM for whole-brain effective connectivity from resting-state fMRI data. *Neuroimage*. 2020 Mar;208:116367. doi:



- 10.1016/j.neuroimage.2019.116367. Epub 2019 Dec 6. PMID: 31812714
199. Griffis JC, Metcalfe NV, Corbetta M, Shulman GL. Damage to the shortest structural paths between brain regions is associated with disruptions of resting-state functional connectivity after stroke. *Neuroimage*. 2020 Apr 15;210:116589. doi: 10.1016/j.neuroimage.2020.116589. Epub 2020 Jan 30. PMID: 32007498
200. Salvalaggio A, Cagnin A, Marson P, Ferracci F, Cortelli P, Corbetta M, Briani C. Posterior reversible encephalopathy syndrome associated with Guillain-Barré syndrome: Case report and clinical management considerations. *J Clin Apher*. 2020 Jun;35(3):231-233. doi: 10.1002/jca.21783. Epub 2020 Apr 14. PMID: 32289176
201. Monai E, Bernocchi F, Bisio M, Bisogno AL, Salvalaggio A, Corbetta M. Multiple Network Disconnection in Anosognosia for Hemiplegia. *Front Syst Neurosci*. 2020 Apr 29;14:21. doi: 10.3389/fnsys.2020.00021. eCollection 2020. PMID: 32410965
202. Gilson M, Zamora-López G, Pallarés V, Adhikari MH, Senden M, Campo AT, Mantini D, Corbetta M, Deco G, Insabato A. Model-based whole-brain effective connectivity to study distributed cognition in health and disease. *Netw Neurosci*. 2020 Apr 1;4(2):338-373. doi: 10.1162/netn_a_00117. eCollection 2020. PMID: 32537531.
203. Betti V, Della Penna S, de Pasquale F, Corbetta M Spontaneous Beta Band Rhythms in the Predictive Coding of Natural Stimuli. *Neuroscientist*. 2020 Jun 15:1073858420928988. doi: 10.1177/1073858420928988. Online ahead of print. PMID: 32538310
204. Salvalaggio A, De Filippo De Grazia M, Zorzi M, Thiebaut de Schotten M, Corbetta M. Post-stroke deficit prediction from lesion and indirect structural and functional disconnection. *Brain*. 2020 Jul 1;143(7):2173-2188. doi: 10.1093/brain/awaa156. PMID: 32572442
205. Van Vleet T, Bonato P, Fabara E, Dabit S, Kim SJ, Chiu C, Bisogno AL, Merzenich M, Corbetta M, DeGutis J. Alertness Training Improves Spatial Bias and Functional Ability in Spatial Neglect. *Ann Neurol*. 2020 Aug 2. doi: 10.1002/ana.25862. Online ahead of print. PMID: 32740976
206. Kim D, Livne T, Metcalfe N, Corbetta M, Shulman G. Spontaneously emerging patterns in human visual cortex and their functional connectivity are linked to the patterns evoked by visual stimuli. *J Neurophysiol*. 2020 Sep 23. doi: 10.1152/jn.00630.2019. Online ahead of print. PMID: 32965156
207. Bowren M., Adolphs R., Bruss J., Manzel K., Corbetta M., Tranel D., Boes A. D., Multivariate lesion-behavior mapping of general cognitive ability and its psychometric constituents. *J Neurosci*. 2020 November 11; 40(46):8924-8937. doi: 10.1523/JNEUROSCI.1415-20.2020. Epub 2020 Oct 12. PMID: 33046547
208. Salvalaggio A, Pini L, De Filippo De Grazia M, Thiebaut De Schotten M, Zorzi M, Corbetta M, Reply: Lesion network mapping: where do we go from here? *Brain* 2020 November 19, awaa351, doi:10.1093/brain/awaa351. PMID: 33212502
209. Arbula S, Della Puppa A, De Pellegrin S, Denaro L, D'Avella D, Semenza C, Corbetta M, Vallesi A. Rule Perseveration during Task-Switching in Brain Tumor: A Severe Form of Task-Setting Impairment. *J Cogn Neurosci*. 2021 Jan 21:1-18. doi: 10.1162/jocn_a_01674. Epub ahead of print. PMID: 33475450.
210. Favaretto C, Spadone S, Sestieri C, Betti V, Cenedese A, Della Penna S, Corbetta M. Multi-band MEG signatures of BOLD connectivity reorganization during visuospatial attention. *Neuroimage*. 2021 Apr 15;230:117781. doi: 10.1016/j.neuroimage.2021.117781. Epub 2021 Jan 23. PMID: 33497772.
211. Zorzi G, Cecchin D, Bussè C, Perini G, Corbetta M, Cagnin A. Changes of Metabolic Connectivity in Dementia with Lewy Bodies with Visual Hallucinations: A ¹⁸F-Fluorodeoxyglucose Positron Emission Tomography/Magnetic Resonance Study. *Brain Connect*. 2021 Sep;11(7):518-528. doi:



- 10.1089/brain.2020.0988. Epub 2021 May 17. PMID: 33757301.
212. Griffis JC, Metcalf NV, Corbetta M, Shulman GL. Lesion Quantification Toolkit: A MATLAB software tool for estimating grey matter damage and white matter disconnections in patients with focal brain lesions. *Neuroimage Clin.* 2021;30:102639. doi: 10.1016/j.nicl.2021.102639. Epub 2021 Mar 22. PMID: 33813262; PMCID: PMC8053805.
213. de Pasquale F, Spadone S, Betti V, Corbetta M, Della Penna S. Temporal modes of hub synchronization at rest. *Neuroimage.* 2021 Jul 15;235:118005. doi: 10.1016/j.neuroimage.2021.118005. Epub 2021 Apr 2. PMID: 33819608.
214. Zorzi G, Thiebaut de Schotten M, Manara R, Bussè C, Corbetta M, Cagnin A. White matter abnormalities of right hemisphere attention networks contribute to visual hallucinations in dementia with Lewy bodies. *Cortex.* 2021 Jun;139:86-98. doi: 10.1016/j.cortex.2021.03.007. Epub 2021 Mar 18. PMID: 33848693.
215. Spadone S, Wyczesany M, Della Penna S, Corbetta M, Capotosto P. Directed Flow of Beta Band Communication During Reorienting of Attention Within the Dorsal Attention Network. *Brain Connect.* 2021 Jun 1. doi: 10.1089/brain.2020.0885. Epub ahead of print. PMID: 33926233.
216. Salvalaggio A, De Filippo De Grazia M, Pini L, Thiebaut De Schotten M, Zorzi M, Corbetta M. Reply: Lesion network mapping predicts post-stroke behavioural deficits and improves localization. *Brain.* 2021 May 7;144(4):e36. doi: 10.1093/brain/awab004. PMID: 33948628; PMCID: PMC8105034.
217. Bisogno AL, Favaretto C, Zangrossi A, Monai E, Facchini S, De Pellegrin S, Pini L, Castellaro M, Basile AM, Baracchini C, Corbetta M. A low-dimensional structure of neurological impairment in stroke. *Brain Commun.* 2021 Jun 3;3(2):fcab119. doi: 10.1093/braincomms/fcab119. PMID: 34136813; PMCID: PMC8204367.
218. Pezzulo G, Zorzi M, Corbetta M. The secret life of predictive brains: what's spontaneous activity for? *Trends Cogn Sci.* 2021 Sep;25(9):730-743. doi: 10.1016/j.tics.2021.05.007. Epub 2021 Jun 16. PMID: 34144895; PMCID: PMC8363551.
219. Siddiqi SH, Schaper FLWVJ, Horn A, Hsu J, Padmanabhan JL, Brodtmann A, Cash RFH, Corbetta M, Choi KS, Dougherty DD, Egorova N, Fitzgerald PB, George MS, Gozzi SA, Irmen F, Kuhn AA, Johnson KA, Naidech AM, Pascual-Leone A, Phan TG, Rouhl RPW, Taylor SF, Voss JL, Zalesky A, Grafman JH, Mayberg HS, Fox MD. Brain stimulation and brain lesions converge on common causal circuits in neuropsychiatric disease. *Nat Hum Behav.* 2021 Jul 8. doi: 10.1038/s41562-021-01161-1. Epub ahead of print. PMID: 34239076.
220. Arbula S, Della Puppa A, De Pellegrin S, Denaro L, D'Avella D, Semenza C, Corbetta M, Vallesi A. Rule perseveration during task-switching in brain tumor: a severe form of task-setting impairment *J Cogn Neurosci.* 2021 Aug 1;33(9):1766-1783. doi: 10.1162/jocn_a_01674. PMID: 34375415
221. Chen Y, Jiang Y, Kong X, Zhao C, Zhong S, Yang L, Feng T, Peng S, Bi Y, Corbetta M, Gong G. Common and unique structural plasticity after left and right hemisphere stroke. *J Cereb Blood Flow Metab.* 2021 Aug 20;271678X211036606. doi: 10.1177/0271678X211036606. Epub ahead of print. PMID: 34415210.
222. Zangrossi A, Cona G, Celli M, Zorzi M, Corbetta M. Visual exploration dynamics are low-dimensional and driven by intrinsic factors. *Commun. Biol.* 2021 Sep 17;4(1):1100. doi: 10.1038/s42003-021-02608-x. PMID: 34535744
223. Allegra M, Favaretto C, Metcalf N, Corbetta M, Brovelli A. Stroke-related alterations in inter-areal communication. *Neuroimage Clin.* 2021;32:102812. doi: 10.1016/j.nicl.2021.102812. Epub 2021 Sep 11. PMID: 34544032



224. Spadone S, Betti V, Sestieri C, Pizzella V, Corbetta M, Della Penna S. Spectral signature of attentional reorienting in the human brain. *Neuroimage*. 2021 Dec 1;244:118616. doi: 10.1016/j.neuroimage.2021.118616. Epub 2021 Sep 25. PMID: 34582947
225. Pini L, Wennberg AM, Salvalaggio A, Vallesi A, Pievani M, Corbetta M. Breakdown of specific functional brain networks in clinical variants of Alzheimer's disease. *Ageing Res Rev*. 2021 Dec;72:101482. doi: 10.1016/j.arr.2021.101482. Epub 2021 Oct 2. PMID: 34606986
226. Tinazzi M, Fiorio M, Berardelli A, Bonetti B, Bonifati DM, Burlina A, Cagnin A, Calabria F, Corbetta M, Cortelli P, Giometto B, Guidoni SV, Lopiano L, Mancardi G, Marchioretto F, Pellegrini M, Teatini F, Tedeschi G, Tesolin L, Turinese E, Zappia M, Marotta A. Opinion, knowledge, and clinical experience with functional neurological disorders among Italian neurologists: results from an online survey. *J Neurol*. 2022 May;269(5):2549-2559. doi: 10.1007/s00415-021-10840-y. Epub 2021 Oct 19. PMID: 34665330
227. Adhikari MH, Griffis J, Siegel JS, Thiebaut de Schotten M, Deco G, Instabato A, Gilson M, Corbetta M. Effective connectivity extracts clinically relevant prognostic information from resting state activity in stroke. *Brain Commun*. 2021 Oct 23;3(4):fcab233. doi: 10.1093/braincomms/fcab233. eCollection 2021. PMID: 34729479
228. Moretto M, Silvestri E, Zangrossi A, Corbetta M, Bertoldo A. Unveiling whole-brain dynamics in normal aging through Hidden Markov Models. *Hum Brain Mapp*. 2022 Feb 15;43(3):1129-1144. doi: 10.1002/hbm.25714. Epub 2021 Nov 15. PMID: 34783122
229. Pini L, Salvalaggio A, De Filippo De Grazia M, Zorzi M, Thiebaut de Schotten M, Corbetta M. A novel stroke lesion network mapping approach: improved accuracy yet still low deficit prediction. *Brain Commun*. 2021 Nov 13;3(4):fcab259. doi: 10.1093/braincomms/fcab259. eCollection 2021. PMID: 34859213
230. Ferreri F, Guerra A, Vollero L, Ponzo D, Määttä S, Könönen M, Vecchio F, Pasqualetti P, Miraglia F, Simonelli I, Corbetta M, Rossini PM. TMS-EEG Biomarkers of Amnesic Mild Cognitive Impairment Due to Alzheimer's Disease: A Proof-of-Concept Six Years Prospective Study. *Front Aging Neurosci*. 2021 Nov 22;13:737281. doi: 10.3389/fnagi.2021.737281. eCollection 2021. PMID: 34880743
231. Volpi T, Silvestri E, Corbetta M, Bertoldo A. Assessing different approaches to estimate single-subject metabolic connectivity from dynamic [¹⁸F]fluorodeoxyglucose Positron Emission Tomography data. *Annu Int Conf IEEE Eng Med Biol Soc*. 2021 Nov;2021:3259-3262. doi: 10.1109/EMBC46164.2021.9630441. PMID: 34891936
232. Pini L, Pizzini FB, Boscolo-Galazzo I, Ferrari C, Galluzzi S, Cotelli M, Gobbi E, Cattaneo A, Cotelli MS, Geroldi C, Zanetti O, Corbetta M, van den Heuvel M, Frisoni GB, Manenti R, Pievani M. Brain network modulation in Alzheimer's and frontotemporal dementia with transcranial electrical stimulation. *Neurobiol Aging*. 2022 Mar;111:24-34. doi: 10.1016/j.neurobiolaging.2021.11.005. Epub 2021 Nov 20. PMID: 34942516
233. Bowren M, Bruss J, Manzel K, Edwards D, Liu C, Corbetta M, Tranel D, Boes AD. Post-stroke outcomes predicted from multivariate lesion-behaviour and lesion network mapping. *Brain*. 2022 May 24;145(4):1338-1353. doi: 10.1093/brain/awac010. PMID: 35025994
234. Box-Steffensmeier JM, Burgess J, Corbetta M, Crawford K, Duflo E, Fogarty L, Gopnik A, Hanafi S, Herrero M, Hong YY, Kameyama Y, Lee TMC, Leung GM, Nagin DS, Nobre AC, Nordentoft M, Okbay A, Perfors A, Rival LM, Sugimoto CR, Tungodden B, Wagner C. The future of human behaviour research. *Nat Hum Behav*. 2022 Jan;6(1):15-24. doi: 10.1038/s41562-021-01275-6. PMID: 35087189
235. Tarantino V, Visalli A, Facchini S, Rossato C, Bertoldo A, Silvestri E, Cecchin D, Capizzi M,



- Anglani M, Baro V, Denaro L, Della Puppa A, D'Avella D, Corbetta M, Vallesi A. Impaired cognitive control in patients with brain tumors. *Neuropsychologia*. 2022 May 3;169:108187. doi: 10.1016/j.neuropsychologia.2022.108187. Epub 2022 Feb 23. PMID: 35218790
236. Villani U, Silvestri E, Castellaro M, Schiavi S, Anglani M, Facchini S, Monai E, D'Avella D, Della Puppa A, Cecchin D, Corbetta M, Bertoldo A. Diffusion-based microstructure models in brain tumours: Fitting in presence of a model-microstructure mismatch. *Neuroimage Clin*. 2022;34:102968. doi: 10.1016/j.nicl.2022.102968. Epub 2022 Feb 18. PMID: 35220105
237. Obando C, Rosso C, Siegel J, Corbetta M, De Vico Fallani F. Temporal exponential random graph models of longitudinal brain networks after stroke. *J R Soc Interface*. 2022 Mar;19(188):20210850. doi: 10.1098/rsif.2021.0850. Epub 2022 Mar 2. PMID: 35232279
238. Salvalaggio A, Silvestri E, Sansone G, Pinton L, Magri S, Briani C, Anglani M, Lombardi G, Zagonel V, Della Puppa A, Mandruzzato S, Corbetta M, Bertoldo A. Magnetic Resonance Imaging Correlates of Immune Microenvironment in Glioblastoma. *Front Oncol*. 2022 Mar 22;12:823812. doi: 10.3389/fonc.2022.823812. eCollection 2022. PMID: 35392230
239. Pirondini E, Kinany N, Sueur CL, Griffis JC, Shulman GL, Corbetta M, Van De Ville D. Post-stroke reorganization of transient brain activity characterizes deficits and recovery of cognitive functions. *Neuroimage*. 2022 Jul 15;255:119201. doi: 10.1016/j.neuroimage.2022.119201. Epub 2022 Apr 9. PMID: 35405342
240. Silvestri E, Moretto M, Facchini S, Castellaro M, Anglani M, Monai E, D'Avella D, Della Puppa A, Cecchin D, Bertoldo A, Corbetta M. Widespread cortical functional disconnection in gliomas: an individual network mapping approach. *Brain Commun*. 2022 Apr 8;4(2):fcac082. doi: 10.1093/braincomms/fcac082. eCollection 2022. PMID: 35474856
241. Silvestri E, Villani U, Moretto M, Colpo M, Salvalaggio A, Anglani M, Castellaro M, Facchini S, Monai E, D'Avella D, Puppa AD, Cecchin D, Corbetta M, Bertoldo A. Assessment of structural disconnections in gliomas: comparison of indirect and direct approaches. *Brain Struct Funct*. 2022 May 3. doi: 10.1007/s00429-022-02494-x. Online ahead of print. PMID: 35503481
242. Palombit A, Silvestri E, Volpi T, Aiello M, Cecchin D, Bertoldo A, Corbetta M. Variability of regional glucose metabolism and the topology of functional networks in the human brain. *Neuroimage*. 2022 Aug 15; 257:119280. doi: 10.1016/j.neuroimage.2022.119280. Epub 2022 May 4. PMID: 35525522
243. Idesis S, Faskowitz J, Betzel RF, Corbetta M, Sporns O, Deco G. Edge-centric analysis of stroke patients: An alternative approach for biomarkers of lesion recovery. *Neuroimage Clin*. 2022 May 23;35:103055. doi: 10.1016/j.nicl.2022.103055. Online ahead of print. PMID: 35661469
244. Rocha RP, Koçillari L, Suweis S, De Filippo De Grazia M, de Schotten MT, Zorzi M, Corbetta M. Recovery of neural dynamics criticality in personalized whole-brain models of stroke. *Nat Commun*. 2022 Jun 27;13(1):3683. doi: 10.1038/s41467-022-30892-6. PMID: 35760787
245. Siegel JS, Shulman GL, Corbetta M. Mapping correlated neurological deficits after stroke to distributed brain networks. *Brain Struct Funct*. 2022 Dec;227(9):3173-3187. doi: 10.1007/s00429-022-02525-7. Epub 2022 Jul 26. PMID: 35881254 Review.
246. Favaretto C, Allegra M, Deco G, Metcalf NV, Griffis JC, Shulman GL, Brovelli A, Corbetta M. Subcortical-cortical dynamical states of the human brain and their breakdown in stroke. *Nat Commun*. 2022 Aug 29;13(1):5069. doi: 10.1038/s41467-022-32304-1. PMID: 36038566
247. Silvestri E, Volpi T, Bettinelli A, De Francisci M, Jones J, Corbetta M, Cecchin D, Bertoldo A. Image-derived Input Function in brain [¹⁸F]FDG PET data: which alternatives to the carotid siphons? *Annu Int Conf IEEE Eng Med Biol Soc*. 2022 Jul;2022:243-246. doi: 10.1109/EMBC48229.2022.9871200. PMID: 36085666



248. Volpi T, Lee JJ, Silvestri E, Durbin T, Corbetta M, Goyal MS, Vlassenko AG, Bertoldo A. Modeling venous plasma samples in [¹⁸F] FDG PET studies: a nonlinear mixed-effects approach. *Annu Int Conf IEEE Eng Med Biol Soc.* 2022 Jul;2022:4704-4707. doi: 10.1109/EMBC48229.2022.9871429.PMID: 36086500
249. Livne T, Kim D, Metcalf NV, Zhang L, Pini L, Shulman GL, Corbetta M. Spontaneous activity patterns in human motor cortex replay evoked activity patterns for hand movements. *Sci Rep.* 2022 Oct 7;12(1):16867. doi: 10.1038/s41598-022-20866-5.PMID: 36207360
250. Zangrossi A, Silvestri E, Bisio M, Bertoldo A, De Pellegrin S, Vallesi A, Della Puppa A, D'Avella D, Denaro L, Scienza R, Mondini S, Semenza C, Corbetta M. Presurgical predictors of early cognitive outcome after brain tumor resection in glioma patients. *Neuroimage Clin.* 2022;36:103219. doi: 10.1016/j.nicl.2022.103219. Epub 2022 Oct 3.PMID: 36209618
251. Idesis S, Favaretto C, Metcalf NV, Griffis JC, Shulman GL, Corbetta M, Deco G. Inferring the dynamical effects of stroke lesions through whole-brain modeling. *Neuroimage Clin.* 2022;36:103233. doi: 10.1016/j.nicl.2022.103233. Epub 2022 Oct 17.PMID: 36272340
252. Dulyan L, Talozzi L, Pacella V, Corbetta M, Forkel SJ, Thiebaut de Schotten M. Longitudinal prediction of motor dysfunction after stroke: a disconnectome study. *Brain Struct Funct.* 2022 Dec;227(9):3085-3098. doi: 10.1007/s00429-022-02589-5. Epub 2022 Nov 5.PMID: 36334132
253. Alves PN, Forkel SJ, Corbetta M, Thiebaut de Schotten M. The subcortical and neurochemical organization of the ventral and dorsal attention networks. *Commun Biol.* 2022 Dec 7;5(1):1343. doi: 10.1038/s42003-022-04281-0.PMID: 36477440
254. Celli M, Mazzonetto I, Zangrossi A, Bertoldo A, Cona G, Corbetta M. One-year-later spontaneous EEG features predict visual exploratory human phenotypes. *Commun Biol.* 2022 Dec 12;5(1):1361. doi: 10.1038/s42003-022-04294-9.PMID: 36509841
255. Pini L, de Lange SC, Pizzini FB, Boscolo Galazzo I, Manenti R, Cotelli M, Galluzzi S, Cotelli MS, Corbetta M, van den Heuvel MP, Pievani M. A low-dimensional cognitive-network space in Alzheimer's disease and frontotemporal dementia. *Alzheimers Res Ther.* 2022 Dec 29;14(1):199. doi: 10.1186/s13195-022-01145-x.PMID: 36581943
256. Falda M, Atzori M, Corbetta M. Semantic wikis as flexible database interfaces for biomedical applications. *Sci Rep.* 2023 Jan 19;13(1):1095. doi: 10.1038/s41598-023-27743-9.PMID: 36658254

Invited Publications or Chapters

1. Aglioti S, Corbetta M, Marzi CA, Tassinari G. Blindsight: Not an all-or-none phenomenon. In : Baijc M. Ed., *Neuron, Brain, and Behaviour*, Advances in Biosciences, 70:1-4. Pergamon Press, (1988).
2. Lassonde M, Perenin MT, Tassinari G, Corbetta M, Cavanagh P. Central mechanism of stereopsis in man. In: Baijc M. Ed., *Neuron, Brain, and Behaviour*, Advances in Biosciences: 95-98. Pergamon Press, (1988).
3. Berlucchi G, Aglioti S, Biscaldi M, Chelazzi L, Corbetta M, Tassinari G. Spatial constraints on the distribution of selective attention in the visual field. In: *Brain and Reading*. C.Von Euler, I.Lundberg & G.Lennerstrand (Eds). Wenner-Gren International Symposium series, 54:115-128, (1989). M. Stockton Press
4. Petersen SE, Miezin FM, Corbetta M, Raichle ME. The use of neuroimaging in the study of vision. *Optics and Photonics*, 2:31-36, (1991).
5. Corbetta M, Miezin FM, Shulman GL, Petersen SE. Selective attention modulates extrastriate visual regions in humans during visual feature discrimination and recognition. In: *Exploring*



- brain functional anatomy with positron emission tomography*. Wiley, Chichester (Ciba Foundation 163): 165-180, (1991).
6. Petersen S.E., Fiez J.A., Corbetta M: Neuroimaging. *Current Opinion in Neurobiology*, 2:217-222, (1992).
 7. Petersen SE, Corbetta M, Miezin F, Shulman GL, Raichle ME. The effects of selective attention on visual processing measured with performance and PET (positron emission tomography). Ono, T., Squire, L., Perrett, D. and Raichle, M.(eds.), "Brain Mechanisms of Perception and Memory: From *Neuron to Behavior*," pp. 437-449, (1993).
 8. Ojemann JG, Buckner RL, Corbetta M, Raichle ME. Imaging studies of memory and attention. *Neurosurgery Clinics of North America*, 8: 307-319, (1997).
 9. Shulman GL, Corbetta M, Fiez JA, Buckner RL, Miezin FM, Raichle ME, Petersen SE. Searching for activations that generalize over tasks. *Human Brain Mapping*. 5: 317-22, (1997).
 10. Corbetta M. Functional anatomy of visual attention in the human brain: studies with positron emission tomography. Parasuram Raya, editor "*The Attentive Brain*", MIT Press, Cambridge, MA, (1998).
 11. Corbetta M. How to use neuroimaging to study visual attention. *Nato Advanced Science Institutes*, (1998).
 12. Drury HA, Van Essen DC, Corbetta M, Snyder AZ. Surface-based analyses of the human cerebral cortex. In: *Brain Warping*, A.Toga et al., eds., Academic Press, 337-362, (1998).
 13. Corbetta M, Shulman G.L Human cortical mechanisms of visual attention. In: *Attention, Space, and Action*, G.W. Humphreys, J.Duncan, A.Treisman, eds, Oxford University Press, (1999).
 14. Chelazzi L, Corbetta M. Cortical mechanisms of visuospatial attention in the primate brain. In: *The New Cognitive Neurosciences*, M.E.Gazzaniga, ed., MIT, 667-686, (2000).
 15. Corbetta M, Shulman GL. Imaging set signals and attentional modulations in the human brain. In: *Visual Attention and Neural Circuits*, J. Braun, C. Kock, J., Davis, eds. MIT Press, (2000).
 16. Corbetta M, Kincade MJ, Shulman GL. Two neural systems for visual orienting and the pathophysiology of unilateral spatial neglect. In: *The cognitive and neural bases of spatial neglect*, HO Karnath, D. Milner, G. Vallar, eds. 259-273 (2002).
 17. Shulman GL, Corbetta M. Endogenous and stimulus-driven mechanisms of task control. *Attention and Performance XX*, Duncan J. Kanwisher N. eds. MIT press. (2004) 345-362.
 18. Shulman GL, Astafiev SV, Corbetta M. Two cortical systems for the selection of visual stimuli. In: *The Cognitive Neuroscience of Attention*. M.I.Posner editor (2004)114-126.
 19. Neuroimaging in stroke recovery: A position paper from the first international workshop on neuroimaging and stroke recovery. *Cerebrovascular Disease* (2004) 18:260-267
 20. Corbetta M, Connor LT. Functional neuroimaging and neurological recovery after stroke. To appear in M. D'Esposito (Ed.) *Functional MRI: Application in clinical Neurology and Psychiatry*. (2005)
 21. Sestieri C, Corbetta M. Laboratory of attention and brain recovery at Washington University, St. Louis. *Cognitive Processing* (2006) Aug 8; [Epub ahead of print]
 22. Corbetta M. Functional Brain Imaging and Neurological Recovery. In: *Cognitive Neurorehabilitation, Second Edition: Evidence and Application*, Eds. Donald T. Stuss, Gordon Winocur and Ian H. Robertson. Cambridge University Press (2008) 162-181
 23. Corbetta M, Sylvester CL, Shulman GL. The frontoparietal attention network. In: *The New Cognitive Neurosciences*. Ed. Michael Gazzaniga. MIT Press (2009) 219-234



24. Tammie L.S. Benzinger, David Brody, Sylvain Cardin, Kenneth C. Curley, Mark A. Mintun, Seong K. Mun, Kenneth H. Wong, Jean R. Wrathall, And Workshop Scientific Organizing Team, Presentors And Roundtable Participants. Blast-related Brain Injury: Imaging for Clinical and Research Applications Report of the 2008 St. Louis Workshop. *Journal of Neurotrauma* (2009) Dec;26(12):2127-44.
25. Corbetta M. Breakdown of functional connectivity and neurological recovery. *Developmental Psychobiology*, Epub 8 Nov 2010.
26. Carter AR, Shulman GL, Corbetta M. Brain mapping of attention and neglect after stroke. In: *Brain Recovery and Neural Plasticity*. Eds. Steve Cramer & Randolph Nudo Oxford University Press (2010).
27. Edvard Moser, Maurizio Corbetta, Robert Desimone, Yves Fregnac, Pascal Fries, Ann Graybiel, John-Dylan Haynes, Laurent Itti, Christoph von der Malsburg, Lucia Melloni, Hannah Monyer, Wolf Singer, Matthew Wilson. Coordination in Brain Systems. Ernst Strungmann Symposium, Frankfurt, August 16-21, 2009.
28. Shulman GL, Corbetta M. Two attentional networks: Identification and function within a larger cognitive architecture. In: *Cognitive Neuroscience of Attention*, M.I Posner Editor. Guilford, New York, 2011.
29. Sestieri C, Shulman GL, Corbetta M. Orienting to the environment: Separate contributions of dorsal and ventral frontoparietal attention networks. In: *Neuroscience of Attention*, G.R. Mangun, Editor. Oxford University Press, 2012.
30. M Corbetta, A Baldassare, A Callejas, L Ramsey, GL Shulman. Spatial neglect and attention networks: a cognitive neuroscience approach. In: *The New Cognitive Neurosciences*. Ed. Michael Gazzaniga. MIT Press (2013) in press.

Clinical Activities

- 1996-2001 Attending Physician, Barnes-Jewish Hospital (4 weeks/year): Stroke unit and consultant Neuro-ICU. Patient care & Resident & Fellow education.
- 2001-2015 Attending Physician, TRISL (4 weeks/year): Stroke and TBI rehabilitation unit. Patient care, and Residents & Fellows education.
- 1996-2015 Weekly outpatient clinic specialized in Stroke, TBI, and Cognitive Neurology
- 2016- to-date Neurologist-in-Chief (Primario) Clinica Neurologica, Azienda Ospedale Università Padova

Teaching Activities

- Lecturer in Neuroscience course 1st year medical school (1996-2015)
- Lecturer in Clinical Neurosciences course 2nd year medical school (1996-2015)
- Clinical Neuroscience Lecture Series, Neurology Residents WUMS (1996-2015)
- Lecturer in Resident Teaching Series, PMR Residents (2001-2016)
- Cattedra di Neurologia, Scuola di Medicina, Università di Padova (2016-present)
- Lecturer PhD Neuroscience Program Padova Neuroscience Center