Daniel S. Margulies

Centre national de la recherche scientifique (CNRS)
CNRS UMR 7225, Institut du Cerveau et de la Moelle èpinière
47 boulevard de l'Hôpital, 75013 Paris, France

email: daniel.margulies@icm-institute.org
homepage: www.neuroconnlab.org
ORCID: orcid.org/0000-0002-8880-9204
Lab Github: github.com/NeuroanatomyAndConnectivity

mob: +33 (0) 7 67 76 73 07
tel: +33 (0) 1 57 27 41 37

Research Interests

My research investigates the organization of large-scale brain networks, primarily through the analysis of intrinsic activity as measured with functional magnetic resonance imaging (fMRI). I have developed approaches to define subregions within complex cortical areas, conducted cross-species comparative neuroanatomical studies, and related variation in these networks to phenotypic differences across individuals. My current research addresses the emergence of network topography and its relationship to cortical structure.

Academic Appointments

2018– Tenured CNRS Researcher, PI, Frontlab, CNRS UMR 7225, Institut du Cerveau et de la Moelle Epinière
2012–2017 Faculty, International Max Planck Research School on Neuroscience of Communication, Leipzig
2011–2017 Group Leader (W2 Professor), Max Planck Research Group for Neuroanatomy & Connectivity, Leipzig
2009–2011 Postdoc, Department of Neurology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig

Education

2010 Ph.D. Humboldt Universität zu Berlin
2008 M.A. European Graduate School, Saas Fee, Switzerland
2005 B.A. New York University

Funding

2011–2017	PI	Max Planck Independent Research Group, Max Planck Society	1.9M EUR
2015–2016	Site-PI	Volkswagen Foundation, Hannover	395K(total)/50K(site) EUR
2014–2016	Co-PI	The Hub at Wellcome Collection, Wellcome Trust, London	1M GBP
2011	Co-I	Quebec Bio-Imaging Network	14,000 CAD

Awards

2018 Wiley Young Investigator Award, Organization for Human Brain Mapping
2010 Otto Hahn Medal, Max Planck Society

Mentoring & Supervision

Postdocs		**Doctoral Students**	Awarded:	**Masters Students**	Awarded:
Marcel Falkiewicz	(2015–2017)	Julia Huntenburg	2017	Julia Huntenburg	2014
Franz Liem	(2015–2016)	Johannes Golchert	2017	Sabine Oligschläger	2014
Melissa Ellamil	(2015–2016)	Estrid Jakobsen	2017		
Manousos Klados	(2014–2016)	Xiangyu Long	2015	**Bachelors Students**	
Chris Gorgolewski	(2013–2015)	Alexander Schaefer	2015	Anastasia Osoianu	2016
Alexandros Goulas	(2013–2015)	Judy Kipping	2015		
Joachim Böttger	(2012–2014)	Yating Lv	2013		

Academic Service

Editorial board

2018–	Editorial Board	*Nature Scientific Data*
2018–	Handling Editor	*NeuroImage*
2014–2018	Editorial Board	*NeuroImage*
2013–	Academic Editor	*PLoS ONE*
2012–	Associate Editor	*Frontiers in Human Neuroscience*
2012	Guest Editor	*Frontiers in Neuroanatomy*
2011–2012	Video Advisor	*NeuroImage*

Ad hoc reviewer

Annals of the New York Academy of Sciences, Biological Psychiatry, BioSocieties, Brain Connectivity, Brain Structure & Function, Journal of Cerebral Blood Flow and Metabolism, Cell Reports, Cerebral Cortex, Journal of Comparative Neurology, Cortex, Current Biology, eLife, Frontiers in Systems Neuroscience, Frontiers in Human Neuroscience, Journal of Neuroscience, Journal of Neurophysiology, Human Brain Mapping, Nature Communications, Nature Human Behaviour, Nature Methods, NeuroImage, Neuroinformatics, Neuron, Neuropsychologia, Neuropsychopharmacology, Neuroscience & Biobehavioral Reviews, PLoS Computational Biology, PLoS ONE, Philosophical Transactions of the Royal Society B, Psychiatry Research, Proceedings of the National Academy of Sciences, Journal of Psychiatry and Neuroscience, Journal of Selected Topics in Signal Processing (IEEE), Trends in Cognitive Sciences

Reviewer for Funding Agencies

Austrian Science Fund, Alexander von Humboldt-Stiftung, Biotechnology & Biological Sciences Research Council, European Research Council, Israel Science Foundation, Le Fonds de la Recherche Scientifique – FNRS, British Academy, Netherlands Organisation for Scientific Research, Wellcome Trust

External Reviewer of Doctoral Dissertations

2018	Kong Ru	National University of Singapore
2018	Phillip Dickinson	McGill University
2017	Alistair Perry	University of New South Wales
2017	Sofie Valk	Humboldt University
2015	Zoe Samara	Maastricht University
2013	Jan Buecke	Humboldt University
2012	R. Matt Hutchison	University of Western Ontario
2011	Maria de la Iglesia Vayá	Universidad Politechnica de Valencia

Elected Representative

2016–2017	Secretary	Open Science Special Interest Group, Organization for Human Brain Mapping
2013–2014	Research Group Leaders	Humanities & Social Sciences Section, Max Planck Society

Memberships

Organizations

2016– Open Science Special Interest Group, Organization for Human Brain Mapping
2010– The Neuro Bureau
2009– Organization for Human Brain Mapping
2009– Society for Neuroscience

Advisory Boards

2017– Primate Data Exchange (PRIME-DE)
2010– Neuro Bureau Executive Board
2009– International Neuroimaging Data-Sharing Initiative (INDI)

Teaching Experience

2018	Education course lecturer	Brain Parcellation, Organization for Human Brain Mapping
2015	Course Organizer	Advanced Lecture on Connectivity, International Max Planck Research School
2013–2017	Lecturer	NeuroCom Summer School, International Max Planck Research School
2013	Education course lecturer	International Society for Magnetic Resonance in Medicine
2010–2011	Lecturer	Medical Neuroscience, Charité Hospital, Berlin

Presentations

Conferences and workshops

2018	Keynote	Organization for Human Brain Mapping
2018	Workshop	Whistler Workshop on Brain Function, Connectivity & Behavior
2017	Symposium Chair	Organization for Human Brain Mapping
2017	Workshop	Tuebingen Systems Neuroscience Symposium
2017	Workshop	Cortical Feedback in the central nervous system, University of Jena
2016	Keynote	Aspects of Neuroscience Conference, University of Warsaw
2016	Keynote	Iranian Brain Mapping Conference
2015	Nanosymposium	Society for Neuroscience
2014	Workshop	Biennial Conference on Resting State and Brain Connectivity
2014	Conference symposium	International Congress on Clinical Neurophysiology
2013	Workshop	The Generational Brain, Center for Literary and Cultural Studies
2013	Conference symposium	Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde
2013	Conference symposium	Deutsche Gesellschaft für Neurologie
2013	Conference symposium	Biennial Conference for the Society for Philosophy of Science in Practice
2012	Workshop	Biennial Conference on Resting State and Brain Connectivity
2012	Workshop	Experimental Entanglements in Cognitive Neuroscience
2012	Conference symposium	International Symposium for Contemplative Sciences
2012	Workshop	International Workshop on in-vivo Brodmann Mapping of the Human Brain
2011	Workshop	Neuro-Reality Check, Max Planck Institute for the History of Science
2011	Conference symposium	Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde
2011	Conference symposium (Co-chair)	Deutsche Gesellschaft für Neurologie
2011	Invited talk	Convention of the German Academy of Neurosurgery
2009	Nanosymposium	Society for Neuroscience
2008	Invited talk	Biennial Conference on Resting State and Brain Connectivity
2008	Conference symposium	Neuropsychoanalysis Congress
2008	Conference symposium	European Conference of the Society for Literature, Science, and the Arts

Invited talks

Aarhus University, Bernstein Center for Computational Neuroscience (Berlin), Cambridge University, Champalimaud Foundation, Child Mind Institute (New York), Donders Institute, Freie University (Berlin), Hebrew University, Humboldt University (Berlin), Imperial College London, Institute for Cognitive Neuroscience (UCL), Jülich Research Center, Kyoto University, Max DelbruĬLck Center (Berlin), Montreal Neurological Institute, National University of Singapore, NeuroSpin, Osaka University (CiNet), Oxford University, University of Cardiff, University of Dresden, University of Durham, University of Düsseldorf, University of Jena, University of Lausanne, University of Leipzig, University of Magdeburg, University of Marseille, University of Miami, University of Montreal (CRIUGM), University of Newcastle, University of Rochester, University of Texas at Austin, University of Western Ontario, University of York, Vrije Universiteit Amsterdam, Weizmann Institute, Zentrum fuĬLr Kunst und Medientechnologie (Karlsruhe)

Conference Organizing

2012–	Chair	Over ten international Brainhack events
2017	Chair	Workshop on trends in large-scale cortical organization, MPI Leipzig
2014	Co-chair	Max Planck Group Leaders Annual Meeting
2014	Chair	OHBM Hackathon
2014	Local organizing committee	Annual Meeting of the Organization for Human Brain Mapping (OHBM)
2013	Co-chair	Neuroesthetics Symposium
2011	Co-chair	Neuroesthetics Symposium
2009	Co-chair	Neuroesthetics Symposium
2009	Co-chair	Habits in Habitat I: Emotions and Motion
2008	Co-organizer	Workshop on Connectivity in the Resting Brain

Publications

Journal Articles

† *indicates senior / corresponding author*
∗ *indicates first or co-first author*

† 1. Oligschläger S, Xu T, Baczkowski BM, Falkiewicz M, Falchier A, Linn G, **Margulies DS** (*In Press*)
Gradients of connectivity distance in the cerebral cortex of the macaque monkey
Brain Struct Funct

2. Murphy C, Wang HT, Konu D, Lowndes R, **Margulies DS**, Jefferies E, Smallwood J (*In Press*)
Modes of operation: A topographic neural gradient supporting stimulus dependent and independent cognition
NeuroImage 186:487–496

† 3. Mendes N, Oligschlaeger S, Lauckner ME, Golchert J, Huntenburg JM, Falkiewicz M, Ellamil M, Krause S, Baczkowski BM, Cozatl R, Osoianu A, Kumral D, Pool J, Golz L, Dreyer M, Haueis P, Jost R, Kramarenko Y, Engen H, Ohrnberger K, Gorgolewski KJ, Farrugia N, Babayan A, Reiter A, Schaare HL, Reinelt J, Roebbig J, Uhlig M, Erbey M, Gaebler M, Smallwood J, Villringer A, **Margulies DS** (*In Press*)
A functional connectome phenotyping dataset including cognitive state and personality measures
Sci Data

4. Babayan A, Erbey M, Kumral D, Reinelt J, Reiter A, Röbbig J, Lina H, Uhlig M, Anwander A, Bazin P, Horstmann A, Lampe L, Nikulin V, Okon-Singer H, Preusser S, Pampel A, Rohr C, Sacher J, Thöne-Otto A, Trapp S, Nierhaus T, Altmann D, Arelin K, Blöchl M, Bongartz E, Breig P, Cesnaite E, Chen S, Cozatl R, Czerwonatis S, Dambrauskaite G, Dreyer M, Enders J, Engelhardt M, Fischer M, Forschack N, Golchert J, Golz L, Alexandrina C, Hedrich S, Hentschel N, Hoffmann D, Huntenburg J, Jost R, Kanaan A, Kosatschek A, Kunzendorf S, Lammers H, Lauckner M, Mahjoory K, Mendes N, Menger R, Morino E, Näthe K, Neubauer J, Noyan H, Oligschläger S, Panczyszyn-Trzewik P, Poehlchen D, Putzke N, Roski S, Schaller M, Schieferbein A, Schlaak B, Schmidt R, Schmidt H, Schrimpf A, Stasch S, Voss M, Wiedemann A, Gorgolewski K, **Margulies DS**, Gaebler M, Villringer A (*In Press*)
A mind-brain-body dataset of MRI, EEG, cognition, emotion, and peripheral physiology in young and old adults
Sci Data

5. Kernbach JM, Yeo BTT, Smallwood J, **Margulies DS**, Thiebaut de Schotten M, Walter H, Sabuncu M, Holmes AJ, Gramfort A, Varoquaux GP, Thirion B, Bzdok D (2018)
Subspecialization within default mode nodes characterized in 10,000 UK Biobank participants
Proc Natl Acad Sci U S A 115(48):12295–12300

6. Schaare HL, Kharabian-Masouleh S, Beyer F, Kumral D, Uhlig M, Reinelt J, Reiter AMF, Lampe L, Babayan A, Erbey M, Roebbig J, Schroeter ML, Okon-Singer H, Mueller K, Mendes N, **Margulies DS**, Witte V, Gaebler M, Villringer A (*In Press*)
Association of Peripheral Blood Pressure with Grey Matter Volume in 19- to 40-Year-Old Adults
Neurology

7. Turnbull A, Wang HT, Schooler JW, Jefferies E, **Margulies DS**, Smallwood J (2018)
The ebb and flow of attention: Between-subject variation in intrinsic connectivity and cognition associated with the dynamics of ongoing experience
NeuroImage 185:286–299

8. Vos de Wael R, Larivière S, Caldairou B, Hong SJ, **Margulies DS**, Jefferies E, Bernasconi A, Smallwood J, Bernasconi N, Bernhardt BC (2018)
Anatomical and microstructural determinants of hippocampal subfield functional connectome embedding
Proc Natl Acad Sci U S A 115(40):10154–10159

9. Milham MP, Ai L, Koo B, Xu T, Balezeau F, Baxter MG, Croxson PL, Damatac CG, Harel N, Freiwald W, Griffiths TD, Everling S, Jung B, Kastner S, Leopold DA, Mars RB, Menon RS, Messinger A, Morrison JH, Nacef J, Nagy J, Rios MO, Petkov CI, Pinsk M, Poirier C, Rajimehr R, Rushworth MFS, Russ BE, Schmid M, Schwiedrzik CM, Sallet J, Seidlitz J, Ungerleider L, Thiele A, Tsao D, Yacoub E, Ye F, Zarco W, **Margulies DS**, Schroeder CE (2018)
An open resource for nonhuman primate imaging
Neuron 100(1):61–74

10. Sormaz M, Murphy C, Wang HT, Hymers M, Karapanagiotidis T, Poerio G, **Margulies DS**, Jefferies E, Smallwood J (2018)
Default mode network can support the level of detail in experience during active task states
Proc Natl Acad Sci U S A 115(37):9318–9323

11. Wang HT, Bzdok D, **Margulies DS**, Craddock RC, Milham MP, Jefferies E, Smallwood J (2018)
Patterns of thought: population variation in the associations between large-scale network organisation and self-reported experiences at rest
NeuroImage 176:518–527

12. Kipping JA, **Margulies DS**, Eickhoff SB, Lee A, Qiu A (2018)
Trade-off of cerebello-cortical and cortico-cortical functional networks for planning in 6-year-old children
NeuroImage 176:510–517

13. Kernbach J, Satterthwaite T, Bassett D, Smallwood J, **Margulies DS**, Krall S, Shaw P, Varoquaux G, Thirion B, Konrad K, Bzdok D (2018)
Shared Endo-phenotypes of Default Mode Dysfunction in Attention Deficit/Hyperactivity Disorder and Autism Spectrum Disorder
Translational Psychiatry 8(1):133

14. Hartwigsen G, Neef NE, Camilleri JA, **Margulies DS**, Eickhoff SB (*In Press*)
Functional Segregation of the Right Inferior Frontal Gyrus: Evidence From Coactivation-Based Parcellation
Cereb Cortex

† 15. Huntenburg JM, Bazin P-L, **Margulies DS** (2018)
Large-Scale Gradients in Human Cortical Organization
Trends Cogn Sci 22(1):21–31

16. Villena-Gonzalez M, Wang H-T, Sormaz M, Mollo G, **Margulies DS**, Jefferies EA, Smallwood J (2018)
Individual variation in the propensity for prospective thought is associated with functional integration between visual and retrosplenial cortex
Cortex 99:224–234

17. Murphy C, Jefferies E, Rueschemeyer S-A, Sormaz M, Wang H-T, **Margulies DS**, Smallwood J (2018)
Distant from input: Evidence of regions within the default mode network supporting perceptually-decoupled and conceptually-guided cognition
NeuroImage 171:393–401

18. Lefort-Besnard J, Bassett DS, Smallwood J, **Margulies DS**, Derntl B, Gruber O, Aleman A, Jardri R, Varoquaux G, Thirion B, Eickhoff SB, Bzdok D (2018)
Different shades of default mode disturbance in schizophrenia: Subnodal covariance estimation in structure and function
Hum Brain Mapp 39(2):644–661

∗ 19. **Margulies DS**, Smallwood J (2017)
Converging evidence for the role of transmodal cortex in cognition
Proc Natl Acad Sci U S A 114(48):12641–12643 (*Invited Commentary*)

† 20. Oligschläger S, Huntenburg JM, Golchert J, Lauckner ME, Bonnen T, **Margulies DS** (2017)
Gradients of connectivity distance are anchored in primary cortex
Brain Struct Funct 222(5):2173–2182 (*Editors' Choice Award for best paper published in 2017*)

† 21. Kuehn E, Dinse J, Jakobsen E, Long X, Schäfer A, Bazin P-L, Villringer A, Sereno MI, **Margulies DS** (2017)
Body Topography Parcellates Human Sensory and Motor Cortex
Cereb Cortex 27(7):3790–3805

∗ 22. **Margulies DS** (2017)
Unraveling the Complex Tapestry of Association Networks
Neuron 95(2):239–241 (*Invited Commentary*)

† 23. Liem F, Varoquaux G, Kynast J, Beyer F, Masouleh S, Huntenburg JM, Lampe L, Rahim M, Abraham A, Craddock RC, Riedel-Heller S, Luck T, Loeffler M, Schroeter ML, Witte AV, Villringer A, **Margulies DS** (2017)
Predicting brain-age from multimodal imaging data captures cognitive impairment
NeuroImage 148:179–188 (*Honorable Mention for NeuroImage Best Paper Award 2017*)

† 24. Goulas A, Stiers P, Hutchison RM, Everling S, Petrides M, **Margulies DS** (2017)
Intrinsic functional architecture of the macaque dorsal and ventral lateral frontal cortex
J Neurophysiol 117(3):1084–1099

† 25. Golchert J, Smallwood J, Jefferies E, Seli P, Huntenburg JM, Liem F, Lauckner ME, Oligschläger S, Bernhardt BC, Villringer A, **Margulies DS** (2017)
Individual variation in intentionality in the mind-wandering state is reflected in the integration of the default-mode, fronto-parietal, and limbic networks
NeuroImage 146:226–235

† 26. Golchert J, Smallwood J, Jefferies E, Liem F, Huntenburg JM, Falkiewicz M, Lauckner ME, Oligschläger S, Villringer A, **Margulies DS** (2017)
In need of constraint: Understanding the role of the cingulate cortex in the impulsive mind
NeuroImage 146:804–813

† 27. Huntenburg JM, Bazin P-L, Goulas A, Tardif CL, Villringer A, **Margulies DS** (2017)
A Systematic Relationship Between Functional Connectivity and Intracortical Myelin in the Human Cerebral Cortex
Cereb Cortex 27(2):981–997

28. Klados MA, Pandria N, Micheloyannis S, **Margulies D**, Bamidis PD (2017)
Math anxiety: Brain cortical network changes in anticipation of doing mathematics
Int J Psychophysiol 122:24–31

29. Ho TC, Sacchet MD, Connolly CG, **Margulies DS**, Tymofiyeva O, Paulus MP, Simmons AN, Gotlib IH, Yang TT (2017)
Inflexible Functional Connectivity of the Dorsal Anterior Cingulate Cortex in Adolescent Major Depressive Disorder
Neuropsychopharmacology 42(12):2434–2445

30. Poerio GL, Sormaz M, Wang H-T, **Margulies D**, Jefferies E, Smallwood J (2017)
The role of the default mode network in component processes underlying the wandering mind
Soc Cogn Affect Neurosci 12(7):1047–1062

31. Caso I, Karapanagiotidis T, Aggius-Vella E, Konishi M, **Margulies DS**, Jefferies E, Smallwood J (2017)
Knowing me, knowing you: Resting-state functional connectivity of ventromedial prefrontal cortex dissociates memory related to self from a familiar other
Brain Cogn 113:65–75

32. Masouleh S, Herzig S, Klose L, Roggenhofer E, Tenckhoff H, Kaiser T, Thöne-Otto A, Wiese M, Berg T, Schroeter ML, **Margulies DS**, Villringer A (2017)
Functional connectivity alterations in patients with chronic hepatitis C virus infection: A multimodal MRI study
J Viral Hepat 24(3):216–225

33. Bellec P, Chu C, Chouinard-Decorte F, Benhajali Y, **Margulies DS**, Craddock RC (2017)
The Neuro Bureau ADHD-200 Preprocessed repository
NeuroImage 144(Pt B):275–286

34. Sarzyńska J, Falkiewicz M, Riegel M, Babula J, **Margulies DS**, N¸ecka E, Grabowska A, Szatkowska I (2017)
More intelligent extraverts are more likely to deceive
PLoS One 12(4):e0176591

∗ 35. **Margulies DS**, Ghosh SS, Goulas A, Falkiewicz M, Huntenburg JM, Langs G, Bezgin G, Eickhoff SB, Castellanos FX, Petrides M, Jefferies E, Smallwood J (2016)
Situating the default-mode network along a principal gradient of macroscale cortical organization
Proc Natl Acad Sci U S A 113(44):12574–12579 (*Cover Article*)

† 36. Jakobsen E, Liem F, Klados MA, Bayrak S, Petrides M, **Margulies DS** (2016)
Automated individual-level parcellation of Broca's region based on functional connectivity
NeuroImage 170:41–53

† 37. Jakobsen E, Böttger J, Bellec P, Geyer S, Rübsamen R, Petrides M, **Margulies DS** (2016)
Subdivision of Broca's region based on individual-level functional connectivity
Eur J Neurosci 43(4):561–71

† 38. Steinbeis N, **Margulies DS** (2016)
Opportunities and challenges for current developmental neuroscience
Theory & Psychology 26(5):620–631

† 39. Ellamil M, Berson J, Wong J, Buckley L, **Margulies DS** (2016)
One in the Dance: Musical Correlates of Group Synchrony in a Real-World Club Environment
PLoS One 11(10):e0164783

† 40. Ellamil M, Berson J, **Margulies DS** (2016)
Influences on and Measures of Unintentional Group Synchrony
Front Psychol 7:1744

41. Alderson-Day B, Diederen K, Fernyhough C, Ford JM, Horga G, **Margulies DS**, McCarthy-Jones S, Northoff G, Shine JM, Turner J, Ven V, Lutterveld R, Waters F, Jardri R (2016)
Auditory Hallucinations and the Brain's Resting-State Networks: Findings and Methodological Observations
Schizophr Bull 42(5):1110–23

42. Tzouma A, **Margulies DS**, Triarhou LC (2016)
Commentary on "The Cerebellar System and What it Signifies from a Biological Perspective: A Communication by Christofredo Jakob (1866-1956) Before the Society of Neurology and Psychiatry of Buenos Aires, December 1938"
Cerebellum 15(4):417–24

43. Hove MJ, Stelzer J, Nierhaus T, Thiel SD, Gundlach C, **Margulies DS**, Dijk KR A, Turner R, Keller PE, Merker B (2016)
Brain Network Reconfiguration and Perceptual Decoupling During an Absorptive State of Consciousness
Cereb Cortex 26(7):3116–24

44. Medea B, Karapanagiotidis T, Konishi M, Ottaviani C, **Margulies D**, Bernasconi A, Bernasconi N, Bernhardt BC, Jefferies E, Smallwood J (2018)
How do we decide what to do? Resting-state connectivity patterns and components of self-generated thought linked to the development of more concrete personal goals
Exp Brain Res 236(9): 2469–2481

45. Rohr CS, Villringer A, Solms-Baruth C, Meer E, **Margulies DS**, Okon-Singer H (2016)
The neural networks of subjectively evaluated emotional conflicts
Hum Brain Mapp 37(6):2234–46

46. Xiao Y, Friederici AD, **Margulies DS**, Brauer J (2016)
Development of a selective left-hemispheric fronto-temporal network for processing syntactic complexity in language comprehension
Neuropsychologia 83:274–282

47. Xiao Y, Friederici AD, **Margulies DS**, Brauer J (2016)
Longitudinal changes in resting-state fMRI from age 5 to age 6years covary with language development
NeuroImage 128:116–124

48. Meshi D, Mamerow L, Kirilina E, Morawetz C, **Margulies DS**, Heekeren HR (2016)
Sharing self-related information is associated with intrinsic functional connectivity of cortical midline brain regions
Sci Rep 6:22491

49. Xiao Y, Brauer J, Lauckner M, Zhai H, Jia F, **Margulies DS**, Friederici AD (2016)
Development of the Intrinsic Language Network in Preschool Children from Ages 3 to 5 Years
PLoS One 11(11):e0165802

50. Smallwood J, Karapanagiotidis T, Ruby F, Medea B, Caso I, Konishi M, Wang H-T, Hallam G, **Margulies DS**, Jefferies E (2016)
Representing Representation: Integration between the Temporal Lobe and the Posterior Cingulate Influences the Content and Form of Spontaneous Thought
PLoS One 11(4):e0152272

51. Cohen N, **Margulies DS**, Ashkenazi S, Schaefer A, Taubert M, Henik A, Villringer A, Okon-Singer H (2016)
Using executive control training to suppress amygdala reactivity to aversive information
NeuroImage 125:1022–1031

52. Gorgolewski KJ, Varoquaux G, Rivera G, Schwartz Y, Sochat VV, Ghosh SS, Maumet C, Nichols TE, Poline J-B, Yarkoni T, **Margulies DS**, Poldrack RA (2016)
NeuroVault.org: A repository for sharing unthresholded statistical maps, parcellations, and atlases of the human brain
NeuroImage 124(Pt B):1242–4

53. Lohmann G, Stelzer J, Zuber V, Buschmann T, **Margulies D**, Bartels A, Scheffler K (2016)
Task-Related Edge Density (TED)-A New Method for Revealing Dynamic Network Formation in fMRI Data of the Human Brain
PLoS One 11(6):e0158185

† 54. Goulas A, Schaefer A, **Margulies DS** (2015)
The strength of weak connections in the macaque cortico-cortical network
Brain Struct Funct 220(5):2939–51

† 55. Gorgolewski KJ, Varoquaux G, Rivera G, Schwarz Y, Ghosh SS, Maumet C, Sochat VV, Nichols TE, Poldrack RA, Poline J-B, Yarkoni T, **Margulies DS** (2015)
NeuroVault.org: a web-based repository for collecting and sharing unthresholded statistical maps of the human brain
Front Neuroinform 9:8

† 56. Gorgolewski KJ, Mendes N, Wilfling D, Wladimirow E, Gauthier CJ, Bonnen T, Ruby FJ M, Trampel R, Bazin P-L, Cozatl R, Smallwood J, **Margulies DS** (2015)
A high resolution 7-Tesla resting-state fMRI test-retest dataset with cognitive and physiological measures
Sci Data 2:140054

57. Joel D, Berman Z, Tavor I, Wexler N, Gaber O, Stein Y, Shefi N, Pool J, Urchs S, **Margulies DS**, Liem F, Hänggi J, Jäncke L, Assaf Y (2015)
Sex beyond the genitalia: The human brain mosaic
Proc Natl Acad Sci U S A 112(50):15468–73

† 58. Rohr CS, Dreyer FR, Aderka IM, **Margulies DS**, Frisch S, Villringer A, Okon-Singer H (2015)
Individual differences in common factors of emotional traits and executive functions predict functional connectivity of the amygdala
NeuroImage 120:154–63

59. García-García I, Jurado MA, Garolera M, Marqués-Iturria I, Horstmann A, Segura B, Pueyo R, Sender-Palacios MJ, Vernet-Vernet M, Villringer A, Junqué C, **Margulies DS**, Neumann J (2015)
Functional network centrality in obesity: A resting-state and task fMRI study
Psychiatry Res 233(3):331–8

60. Striem-Amit E, Ovadia-Caro S, Caramazza A, **Margulies DS**, Villringer A, Amedi A (2015)
Functional connectivity of visual cortex in the blind follows retinotopic organization principles
Brain 138(Pt 6):1679–95

61. Nierhaus T, Forschack N, Piper SK, Holtze S, Krause T, Taskin B, Long X, Stelzer J, **Margulies DS**, Steinbrink J, Villringer A (2015)
Imperceptible somatosensory stimulation alters sensorimotor background rhythm and connectivity
J Neurosci 35(15):5917–25

62. Klados MA, Simos P, Micheloyannis S, **Margulies D**, Bamidis PD (2015)
ERP measures of math anxiety: how math anxiety affects working memory and mental calculation tasks?
Front Behav Neurosci 9:282

† 63. Böttger J, Schäfer A, Lohmann G, Villringer A, **Margulies DS** (2014)
Three-dimensional mean-shift edge bundling for the visualization of functional connectivity in the brain
IEEE Trans Vis Comput Graph 20(3):471–80

† 64. Böttger J, Schurade R, Jakobsen E, Schaefer A, **Margulies DS** (2014)
Connexel visualization: a software implementation of glyphs and edge-bundling for dense connectivity data using brainGL
Front Neurosci 8:15

† 65. Callard F, **Margulies DS** (2014)
What we talk about when we talk about the default mode network
Front Hum Neurosci 8:619

66. García-García I, Horstmann A, Jurado MA, Garolera M, Chaudhry SJ, **Margulies DS**, Villringer A, Neumann J (2014)
Reward processing in obesity, substance addiction and non-substance addiction
Obes Rev 15(11):853–869

67. Schaefer A, Burmann I, Regenthal R, Arélin K, Barth C, Pampel A, Villringer A, **Margulies DS**, Sacher J (2014)
Serotonergic modulation of intrinsic functional connectivity
Curr Biol 24(19):2314–8

68. Ovadia-Caro S, **Margulies DS**, Villringer A (2014)
The value of resting-state functional magnetic resonance imaging in stroke
Stroke 45(9):2818–24

69. Witte AV, Kerti L, **Margulies DS**, Flöel A (2014)
Effects of resveratrol on memory performance, hippocampal functional connectivity, and glucose metabolism in healthy older adults
J Neurosci 34(23):7862–70

70. Yang Z, Craddock RC, **Margulies DS**, Yan C-G, Milham MP (2014)
Common intrinsic connectivity states among posteromedial cortex subdivisions: Insights from analysis of temporal dynamics
NeuroImage 93 Pt 1:124–37

† 71. Long X, Goltz D, **Margulies DS**, Nierhaus T, Villringer A (2014)
Functional connectivity-based parcellation of the human sensorimotor cortex
Eur J Neurosci 39(8):1332–42

72. Zuo X-N, Anderson JS, Bellec P, Birn RM, Biswal BB, Blautzik J, Breitner JC S, Buckner RL, Calhoun VD, Castellanos FX, Chen A, Chen B, Chen J, Chen X, Colcombe SJ, Courtney W, Craddock RC, Martino A, Dong H-M, Fu X, Gong Q, Gorgolewski KJ, Han Y, He Y, He Y, Ho E, Holmes A, Hou X-H, Huckins J, Jiang T, Jiang Y, Kelley W, Kelly C, King M, LaConte SM, Lainhart JE, Lei X, Li H-J, Li K, Li K, Lin Q, Liu D, Liu J, Liu X, Liu Y, Lu G, Lu J, Luna B, Luo J, Lurie D, Mao Y, **Margulies DS**, Mayer AR, Meindl T, Meyerand ME, Nan W, Nielsen JA, O'Connor D, Paulsen D, Prabhakaran V, Qi Z, Qiu J, Shao C, Shehzad Z, Tang W, Villringer A, Wang H, Wang K, Wei D, Wei G-X, Weng X-C, Wu X, Xu T, Yang N, Yang Z, Zang Y-F, Zhang L, Zhang Q, Zhang Z, Zhang Z, Zhao K, Zhen Z, Zhou Y, Zhu X-T, Milham MP (2014)
An open science resource for establishing reliability and reproducibility in functional connectomics
Sci Data 1:140049

73. Rojas GM, Gálvez M, Potler N, Craddock RC, **Margulies DS**, Castellanos FX, Milham MP (2014)
Stereoscopic three-dimensional visualization applied to multimodal brain images: clinical applications and a functional connectivity atlas
Front Neurosci 8:328

74. Gorgolewski KJ, Lurie D, Urchs S, Kipping JA, Craddock RC, Milham MP, **Margulies DS**, Smallwood J (2014)
A correspondence between individual differences in the brain's intrinsic functional architecture and the content and form of self-generated thoughts
PLoS One 9(5):e97176

75. Stelzer J, Buschmann T, Lohmann G, **Margulies DS**, Trampel R, Turner R (2014)
Prioritizing spatial accuracy in high-resolution fMRI data using multivariate feature weight mapping
Front Neurosci 8:66

76. Schaefer A, **Margulies DS**, Lohmann G, Gorgolewski KJ, Smallwood J, Kiebel SJ, Villringer A (2014)
Dynamic network participation of functional connectivity hubs assessed by resting-state fMRI
Front Hum Neurosci 8:195

† 77. Gorgolewski KJ, Bazin PL, Engen H, **Margulies DS** (2013)
Fifty shades of gray, matter: Using bayesian priors to improve the power of whole-brain voxel-and connexelwise inferences
IEEE conference publications, 3rd international workshop in pattern recognition in neuroimaging 194–197

† 78. Kipping JA, Grodd W, Kumar V, Taubert M, Villringer A, **Margulies DS** (2013)
Overlapping and parallel cerebello-cerebral networks contributing to sensorimotor control: an intrinsic functional connectivity study
NeuroImage 83:837–48

∗ 79. **Margulies DS**, Böttger J, Watanabe A, Gorgolewski KJ (2013)
Visualizing the human connectome
NeuroImage 80:445–61 (*Cover Article*)

† 80. Baird B, Smallwood J, Gorgolewski KJ, **Margulies DS** (2013)
Medial and lateral networks in anterior prefrontal cortex support metacognitive ability for memory and perception
J Neurosci 33(42):16657–65

∗ 81. **Margulies DS**, Petrides M (2013)
Distinct parietal and temporal connectivity profiles of ventrolateral frontal areas involved in language production
J Neurosci 33(42):16846–52 (*Cover Article*)

† 82. Koehler S, Ovadia-Caro S, Meer E, Villringer A, Heinz A, Romanczuk-Seiferth N, **Margulies DS** (2013)
Increased functional connectivity between prefrontal cortex and reward system in pathological gambling
PLoS One 8(12):e84565

† 83. Rohr CS, Okon-Singer H, Craddock RC, Villringer A, **Margulies DS** (2013)
Affect and the brain's functional organization: a resting-state connectivity approach
PLoS One 8(7):e68015

† 84. Callard F, Smallwood J, Golchert J, **Margulies DS** (2013)
The era of the wandering mind? Twenty-first century research on self-generated mental activity
Front Psychol 4:891

† 85. Smallwood J, Gorgolewski KJ, Golchert J, Ruby FJ M, Engen H, Baird B, Vinski MT, Schooler JW, **Margulies DS** (2013)
The default modes of reading: modulation of posterior cingulate and medial prefrontal cortex connectivity associated with comprehension and task focus while reading
Front Hum Neurosci 7:734

† 86. Ovadia-Caro S, Villringer K, Fiebach J, Jungehulsing GJ, Meer E, **Margulies DS**, Villringer A (2013)
Longitudinal effects of lesions on functional networks after stroke
J Cereb Blood Flow Metab 33(8):1279–85

87. Gorgolewski KJ, **Margulies DS**, Milham MP (2013)
Making data sharing count: a publication-based solution
Front Neurosci 7:9

88. Lv Y, **Margulies DS**, Craddock R, Long X, Winter B, Gierhake D, Endres M, Villringer K, Fiebach J, Villringer A (2013)
Identifying the perfusion deficit in acute stroke with resting-state functional magnetic resonance imaging
Ann Neurol 73(1):136–40

89. Lv Y, **Margulies DS**, Villringer A, Zang Y-F (2013)
Effects of finger tapping frequency on regional homogeneity of sensorimotor cortex
PLoS One 8(5):e64115

† 90. Callard F, Smallwood J, **Margulies DS** (2012)
Default Positions: How Neuroscience's Historical Legacy has Hampered Investigation of the Resting Mind
Front Psychol 3:321

91. Sehm B, Schäfer A, Kipping J, **Margulies D**, Conde V, Taubert M, Villringer A, Ragert P (2012)
Dynamic modulation of intrinsic functional connectivity by transcranial direct current stimulation
J Neurophysiol 108(12):3253–63

92. Lohmann G, Ovadia-Caro S, Jungehülsing GJ, **Margulies DS**, Villringer A, Turner R (2012)
Connectivity concordance mapping: a new tool for model-free analysis of FMRI data of the human brain
Front Syst Neurosci 6:13

∗ 93. Böttger J, **Margulies DS**, Horn P, Thomale UW, Podlipsky I, Shapira-Lichter I, Chaudhry SJ, Szkudlarek C, Mueller K, Lohmann G, Hendler T, Bohner G, Fiebach JB, Villringer A, Vajkoczy P, Abbushi A (2011)
A software tool for interactive exploration of intrinsic functional connectivity opens new perspectives for brain surgery
Acta Neurochir (Wien) 153(8):1561–72

94. Taubert M, Lohmann G, **Margulies DS**, Villringer A, Ragert P (2011)
Long-term effects of motor training on resting-state networks and underlying brain structure
NeuroImage 57(4):1492–8

95. Gee DG, Biswal BB, Kelly C, Stark DE, **Margulies DS**, Shehzad Z, Uddin LQ, Klein DF, Banich MT, Castellanos FX, Milham MP (2011)
Low frequency fluctuations reveal integrated and segregated processing among the cerebral hemispheres
NeuroImage 54(1):517–27

96. Adelstein JS, Shehzad Z, Mennes M, Deyoung CG, Zuo X-N, Kelly C, **Margulies DS**, Bloomfield A, Gray JR, Castellanos FX, Milham MP (2011)
Personality is reflected in the brain's intrinsic functional architecture
PLoS One 6(11):e27633

∗ 97. **Margulies DS**, Böttger J, Long X, Lv Y, Kelly C, Schäfer A, Goldhahn D, Abbushi A, Milham MP, Lohmann G, Villringer A (2010)
Resting developments: a review of fMRI post-processing methodologies for spontaneous brain activity
MAGMA 23(5-6):289–307

98. Zuo X-N, Kelly C, Martino A, Mennes M, **Margulies DS**, Bangaru S, Grzadzinski R, Evans AC, Zang Y-F, Castellanos FX, Milham MP (2010)
Growing together and growing apart: regional and sex differences in the lifespan developmental trajectories of functional homotopy
J Neurosci 30(45):15034–43

99. Kelly C, Uddin LQ, Shehzad Z, **Margulies DS**, Castellanos FX, Milham MP, Petrides M (2010)
Broca's region: linking human brain functional connectivity data and non-human primate tracing anatomy studies
Eur J Neurosci 32(3):383–98

100. Sajonz B, Kahnt T, **Margulies DS**, Park SQ, Wittmann A, Stoy M, Ströhle A, Heinz A, Northoff G, Bermpohl F (2010)
Delineating self-referential processing from episodic memory retrieval: common and dissociable networks
NeuroImage 50(4):1606–17

101. Lohmann G, **Margulies DS**, Horstmann A, Pleger B, Lepsien J, Goldhahn D, Schloegl H, Stumvoll M, Villringer A, Turner R (2010)
Eigenvector centrality mapping for analyzing connectivity patterns in fMRI data of the human brain
PLoS One 5(4):e10232

102. Biswal BB, Mennes M, Zuo X-N, Gohel S, Kelly C, Smith SM, Beckmann CF, Adelstein JS, Buckner RL, Colcombe S, Dogonowski A-M, Ernst M, Fair D, Hampson M, Hoptman MJ, Hyde JS, Kiviniemi VJ, Kötter R, Li S-J, Lin C-P, Lowe MJ, Mackay C, Madden DJ, Madsen KH, **Margulies DS**, Mayberg HS, McMahon K, Monk CS, Mostofsky SH, Nagel BJ, Pekar JJ, Peltier SJ, Petersen SE, Riedl V, Rombouts SA R B, Rypma B, Schlaggar BL, Schmidt S, Seidler RD, Siegle GJ, Sorg C, Teng G-J, Veijola J, Villringer A, Walter M, Wang L, Weng X-C, Whitfield-Gabrieli S, Williamson P, Windischberger C, Zang Y-F, Zhang H-Y, Castellanos FX, Milham MP (2010)
Toward discovery science of human brain function
Proc Natl Acad Sci U S A 107(10):4734–9

∗103. **Margulies DS**, Vincent JL, Kelly C, Lohmann G, Uddin LQ, Biswal BB, Villringer A, Castellanos FX, Milham MP, Petrides M (2009)
Precuneus shares intrinsic functional architecture in humans and monkeys
Proc Natl Acad Sci U S A 106(47):20069–74

104. Shehzad Z, Kelly AM C, Reiss PT, Gee DG, Gotimer K, Uddin LQ, Lee SH, **Margulies DS**, Roy AK, Biswal BB, Petkova E, Castellanos FX, Milham MP (2009)
The resting brain: unconstrained yet reliable
Cereb Cortex 19(10):2209–29

105. Roy AK, Shehzad Z, **Margulies DS**, Kelly AM C, Uddin LQ, Gotimer K, Biswal BB, Castellanos FX, Milham MP (2009)
Functional connectivity of the human amygdala using resting state fMRI
NeuroImage 45(2):614–26

106. Kelly AM C, Martino A, Uddin LQ, Shehzad Z, Gee DG, Reiss PT, **Margulies DS**, Castellanos FX, Milham MP (2009)
Development of anterior cingulate functional connectivity from late childhood to early adulthood
Cereb Cortex 19(3):640–57

107. Martino A, Scheres A, **Margulies DS**, Kelly AM C, Uddin LQ, Shehzad Z, Biswal B, Walters JR, Castellanos FX, Milham MP (2008)
Functional connectivity of human striatum: a resting state FMRI study
Cereb Cortex 18(12):2735–2747

∗108. Stark DE, **Margulies DS**, Shehzad ZE, Reiss P, Kelly AM C, Uddin LQ, Gee DG, Roy AK, Banich MT, Castellanos FX, Milham MP (2008)
Regional variation in interhemispheric coordination of intrinsic hemodynamic fluctuations
J Neurosci 28(51):13754–64

109. Uddin LQ, Mooshagian E, Zaidel E, Scheres A, **Margulies DS**, Kelly AM C, Shehzad Z, Adelstein JS, Castellanos FX, Biswal BB, Milham MP (2008)
Residual functional connectivity in the split-brain revealed with resting-state functional MRI
Neuroreport 19(7):703–9

110. Uddin LQ, Kelly AM C, Biswal BB, **Margulies DS**, Shehzad Z, Shaw D, Ghaffari M, Rotrosen J, Adler LA, Castellanos FX, Milham MP (2008)
Network homogeneity reveals decreased integrity of default-mode network in ADHD
J Neurosci Methods 169(1):249–54

111. Castellanos FX, **Margulies DS**, Kelly C, Uddin LQ, Ghaffari M, Kirsch A, Shaw D, Shehzad Z, Martino A, Biswal B, Sonuga-Barke EJ S, Rotrosen J, Adler LA, Milham MP (2008)
Cingulate-precuneus interactions: a new locus of dysfunction in adult attention-deficit/hyperactivity disorder
Biol Psychiatry 63(3):332–7

112. Michanie C, Kunst G, **Margulies DS**, Yakhkind A (2007)
Symptom prevalence of ADHD and ODD in a pediatric population in Argentina
J Atten Disord 11(3):363–7

113. Kelly AM C, **Margulies DS**, Castellanos FX (2007)
Recent advances in structural and functional brain imaging studies of attention-deficit/hyperactivity disorder
Curr Psychiatry Rep 9(5):401–7

∗114. **Margulies DS**, Kelly AM C, Uddin LQ, Biswal BB, Castellanos FX, Milham MP (2007)
Mapping the functional connectivity of anterior cingulate cortex
NeuroImage 37(2):579–88

115. Lamprecht R, **Margulies DS**, Farb CR, Hou M, Johnson LR, LeDoux JE (2006)
Myosin light chain kinase regulates synaptic plasticity and fear learning in the lateral amygdala
Neuroscience 139(3):821–9

Book Chapters

1. Smallwood J, **Margulies DS**, Bernhardt BC, Jefferies E (2018)
Investigating the Elements of Thought: Toward a Component Process Account of Spontaneous Cognition
In: *The Oxford Handbook of Spontaneous Thought: Mind-Wandering, Creativity, and Dreaming*
(eds Kalina Christoff and Kieran C.R. Fox) New York: Oxford University Press

2. Nierhaus T, **Margulies DS**, Long XY, Villringer A (2012)
fMRI for the assessment of functional connectivity
In: *Neuroimaging – Methods*
(ed Peter Bright) Rijeka, Croatia: InTech Publishing

3. **Margulies DS** (2012)
The salmon of doubt: Six months of methodological controversy within social neuroscience
In: *Critical neuroscience. A handbook of the social and cultural contexts of neuroscience*
(eds Suparna Choudhury and Jan Slaby) Chichester: Wiley-Blackwell

4. **Margulies DS** (2011)
Seeing behind the eyes
In: *Seeing with the eyes closed*
(eds Alexander Abbushi, Ivana Franke, and Ida Mommenejad) Berlin: Association of Neuroesthetics

5. Callard F & **Margulies DS** (2011)
The industrious subject: Cognitive neuroscience's revaluation of 'rest'
In: *Cognitive architecture: From bio-politics to noo-politics – architecture & mind in the age of communication and information*
(eds Deborah Hauptmann and Warren Neidich) Rotterdam: 010 Publishers

6. Callard F & **Margulies DS** (2010)
The subject "at rest": Cognitive neuroscience's struggle with the dark side of cognition
In: *Habitus & habitat II: Other sides of cognition*
(eds Sabine Flach, Daniel S. Margulies, and Jan Soeffner) Bern: Peter Lang

7. Obrig H, Draganski B, **Margulies DS**, Steinbrink S (2010)
Mechanisms of learning in the healthy brain and after stroke, as assessed with imaging techniques
In: *Module 2: Neuroanatomy, cognition and plasticity*
(eds Agnes Flöel and Arno Villringer) Centrum für Schlaganfallforschung Berlin: Charité Universitätsmedizin Berlin

8. Glaser PEA, Castellanos FX, **Margulies DS** (2007)
Neuropharmacology of attention-deficit / hyperactivity disorder
In: *Handbook of contemporary neuropharmacology*
(eds David Sibley, Israel Hanin, Michael Kuhar, and Phil Skolnick) Wiley-Interscience

Book Reviews

1. **Margulies DS** (2014)
A tight circle of critique
[Review of the book: Francisco Ortega and Fernando Vidal (eds). *Neurocultures: Glimpses into an expanding universe*. Frankfurt am Main: Peter Lang GmbH. 2011]
BioSocieties, 9, 360-362

2. **Margulies DS** (2010)
[Review of the book: by Louis Cozolino, *The neuroscience of human relationships: Attachment and the developing social brain*. New York: W. W. Norton & Company. 2006]
Neuropsychoanalysis, 12:1, 95-102

Edited Books & Journal Special Issues

1. Choudhury S, Slaby S, **Margulies DS** (eds) (2014)
Critical neuroscience: The context and implications of human brain research
Frontiers in Human Neuroscience

2. **Margulies DS** & Petrides M (eds) (2012)
Mapping connectivity of the human cerebral cortex
Frontiers in Neuroanatomy

3. Flach S, **Margulies DS**, Soeffner J (eds) (2010)
Habitus & Habitat I: Emotion and Motion
Bern: Peter Lang

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