Daniel S. Margulies

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github.com/NeuroanatomyAndConnectivity

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

CNRS Research Director, UMR 8002, Integrative Neuroscience & Cognition Center, University of Paris 2018-2020 Tenured CNRS Researcher, PI, CNRS UMR 7225, Institut du Cerveau et de la Moelle Epinière, Paris

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

2018 HDR Sorbonne Université, Paris 2010 PhD Humboldt Universität zu Berlin

European Graduate School, Saas Fee, Switzerland 2008 MA

2005 BA New York University

Funding

2020–2025	PΙ	ERC Consolidator Grant (CORTIGRAD), European Research Council	2M€
2019-2021	PI	Projet international de coopération scientifique (PICS), CNRS	21K€
2015-2016	Site-PI	Volkswagen Foundation, Hannover	395K(total)/50K(site)€
2014-2016	Co-PI	The Hub at Wellcome Collection, Wellcome Trust, London	£1M
2011-2017	PI	Max Planck Independent Research Group, Max Planck Society	1.9M€
2011	Co-I	Quebec Bio-Imaging Network	CAD\$14K CAD

Awards

2018 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	Anton Benz (co-supervised)	2020
Franz Liem	(2015-2016)	Johannes Golchert	2017	Arabella Bouzigues (co-sup)	2020
Melissa Ellamil	(2015-2016)	Estrid Jakobsen	2017	Julia Huntenburg	2014
Manousos Klados	(2014-2016)	Xiangyu Long	2015	Sabine Oligschläger	2014
Chris Gorgolewski	(2013–2015)	Alexander Schaefer	2015		
Alexandros Goulas	(2013–2015)	Judy Kipping	2015	Bachelors Students	
Joachim Böttger	(2012–2014)	Yating Lv	2013	Anastasia Osoianu	2016

Academic Service

Editorial boards

2020-	Handling Editor	Aperture
2020-	Associate Editor	Frontiers in Neuroanatomy
2019-	Associate Editor	Frontiers in Human Neuroscience: Sensory Neuroscience
2018-	Editorial Board	Nature Scientific Data
2018-	Handling Editor	Neurolmage
2014-2018	Editorial Board	Neurolmage
2013-	Academic Editor	PLoS ONE
2012-	Associate Editor	Frontiers in Human Neuroscience: Cognitive Neuroscience

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 Communications Biology, Nature Human Behaviour, Nature Methods, Nature Neuroscience, Nature Reviews Neuroscience, NeuroImage, Neuroinformatics, Neuron, Neuropsychologia, Neuropsychopharmacology, Neuroscience & Biobehavioral Reviews, PLoS Computational Biology, PLoS ONE, PLoS Biology, 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, Trends in Neurosciences

Reviewer for Funding Agencies

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

External Reviewer of Habilitations

2019 Demian Wassermann Sorbonne Université

External Reviewer of Doctoral Dissertations

2020	Noam Saadon-Grosmann	Hebrew University, Jerusalem
2020	Céline Delettre	University of Paris
2020	Katrine Rojkova	Sorbonne University
2020	Jessica Dafflon	King's College, London
2020	Majd Abdallah	University of Bordeaux
2019	Ignacio Rebollo	Sorbonne University
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

2019-2022	Program Chair, OHBM Council	Organization for Human Brain Mapping (OHBM)
2016-2017	Treasurer	Open Science Special Interest Group, OHBM
2013-2014	Research Group Leaders	Humanities & Social Sciences Section, Max Planck Society

Memberships

Organizations

2016-	Open Science Special Interest Group, OHBM
2010-	The Neuro Bureau
2009-	Organization for Human Brain Mapping (OHBM)
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

2020	Course lecturer on neuroanatomy	Introduction to Cognitive Neuroscience, ENS, Paris
2020	Education course lecturer	Cognitive Neuroscience course, Universidad Catholica, Santiago, Chile
2019	Education course lecturer	Cajal School on Whole-Brain Imaging, Bordeaux
2018&2019	Education course lecturer	Brain Parcellations & Functional Territories, OHBM
2015	Course Organizer	Advanced Lecture on Connectivity, 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

2020	Invited symposium (Co-chair)	Japan Neuroscience Society, Kobe
2020	Symposium (Chair)	Cognitive Neuroscience Society, Boston
2019	Keynote	Neuroinformatics 2019 (INCF Congress), Warsaw
2019	Plenary & Symposium	Polish Neuroscience Society, Katowice
2019	Workshop	Emergent Phenomena in Macroscopic Neural Networks, CNS, Barcelona
2019	Workshop	Network Science: Foundations & Applications, EPFL, Lausanne
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	Conf 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, Interdisciplinary Research Center (CRI), Champalimaud Foundation, Child Mind Institute (New York), Chinese Academy of Sciences, Donders Institute, Freie University (Berlin), Fudan University (Shanghai), University of Grenoble, Hebrew University, Hopital Pitié-Salpêtrière, Humboldt University (Berlin), Imperial College London, Institute for Cognitive Neuroscience (UCL), Instituto de Neurología Cognitiva (INECO), Johns Hopkins University, Jülich Research Center, Kyoto University, Max Delbrück Center (Berlin), Montreal Neurological Institute, Nathan Kline Institute, National University of Singapore, NeuroSpin, Osaka University (CiNet), Oxford University, Universidad de la República (Uruguay), University of Cardiff, University of Dresden, University of Durham, University of Düsseldorf, Hangzhou Normal University, University of Illinois, 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, Wellcome Centre for Human Neuroimage (UCL), Zentrum für Kunst und Medientechnologie (Karlsruhe)

Conference Organizing

2021	Program Chair	Organization for Human Brain Mapping (OHBM)
2020	Organizing Committee	Gradients of Brain Organization Workshop, Montreal
2020	Program Committee	Organization for Human Brain Mapping (OHBM)

2020 Organizing Committee Whistler Workshop on Brain Functional Organization, Connectivity & Behavior

2019 Organizing Committee Brainhack Global

2019 Chair PRIME-DE Brainhack, London

2019 Co-chair Primate Data Exchange (PRIME-DE) Global Collaboration Workshop, London

2019 Chair Summer Whistler Workshop on Brain Functional Organization, Connectivity & Behavior

2019 Co-chair Gradients Workshop, Collège de France

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 committee Annual Meeting of the Organization for Human Brain Mapping (OHBM)

2012- Chair Over ten international Brainhack events
 2009- Co-chair Neuroesthetics Symposium (2009, 2011, 2013)
 2009 Co-chair Habits in Habitat I: Emotions and Motion
 2008 Co-organizer Workshop on Connectivity in the Resting Brain

Publications

h-index: 60 (Google Scholar) Citations: >19k (Google Scholar)

Journal Articles

† indicates senior or corresponding author

* indicates first or co-first author

1. Friedrich P, Forkel SJ, Amiez C, Balsters JH, Coulon O, Fan L, Goulas A, Hadj-Bouziane F, Hecht EE, Heuer K, Jiang T, Latzman RD, Liu X, Loh KK, Patil KR, Lopez-Persem A, Procyk E, Sallet J, Toro R, Vickery S, Weis S, Wilson C, Xu T, Zerbi V, Eickoff SB, **Margulies DS**, Mars RB, Thiebaut de Schotten M (2020)

Imaging evolution of the primate brain: the next frontier?

Neurolmage 22:117685

2. Karapanagiotidis T, Vidaurre D, Quinn AJ, Vatansever D, Poerio GL, Turnbull A, Ho NSP, Leech R, Bernhardt BC, Jefferies E, **Margulies DS**, Nichols TE, Woolrich MW, Smallwood J (2020)

The psychological correlates of distinct neural states occurring during wakeful rest

Sci Rep 10(1):21121

3. Messinger A, Sirmpilatze N, Heuer K, Loh KK, Mars RB, Sein J, Xu T, Glen D, Jung B, Seidlitz J, Taylor P, Toro R, Garza-Villarreal EA, Sponheim C, Wang X, Benn RA, Cagna B, Dadarwal R, Evrard HC, Garcia-Saldivar P, Giavasis S, Hartig R, Lepage C, Liu C, Majka P, Merchant H, Milham MP, Rosa MGP, Tasserie J, Uhrig L, **Margulies DS**, Klink PC (2020)

A collaborative resource platform for non-human primate neuroimaging

Neurolmage 20:117519

4. Schurz M, Radua J, Tholen MG, Maliske L, Margulies DS, Mars RB, Sallet J, Kanske P (In Press)

Toward a hierarchical model of social cognition: A neuroimaging meta-analysis and integrative review of empathy and theory of mind

Psychol Bull

5. Ho NSP, Baker D, Karapanagiotidis T, Seli P, Wang HT, Leech R, Bernhardt B, **Margulies DS**, Jefferies E, Smallwood J (2020)

Missing the forest because of the trees: slower alternations during binocular rivalry are associated with lower levels of visual detail during ongoing thought

Neurosci Conscious

6. Park BY, de Wael RV, Paquola C, Larivière S, Benkarim O, Royer J, Tavakol S, Cruces RR, Li Q, Valk SL, **Margulies DS**, Mišić B, Bzdok D, Smallwood J, Bernhardt BC (2020)

Signal diffusion along connectome gradients and inter-hub routing differentially contribute to dynamic human brain function

Neurolmage

† 7. Mandonnet E, Vincent M, Valero-Cabré A, Facque V, Barberis M, Bonnetblanc F, Rheault F, Volle E, Descoteaux M, Margulies DS (2020)

Network-level causal analysis of set-shifting during trail making test part B: A multimodal analysis of a glioma surgery case

Cortex 132:238-249

8. Tian Y, Margulies DS, Breakspear M, Zalesky A (2020)

Topographic organization of the human subcortex unveiled with functional connectivity gradients Nature Neuroscience

9. Valk SL, Xu T, **Margulies DS**, Masouleh SK, Paquola C, Goulas A, Kochunov P, Smallwood J, Yeo BTT, Bernhardt BC, Eickhoff SB (2020)

Shaping brain structure: Genetic and phylogenetic axes of macroscale organization of cortical thickness *Science Advances* 6(39):eabb3417

10. Xu T, Nenning KH, Schwartz E, Hong SJ, Vogelstein JT, Goulas A, Fair DA, Schroeder CE, **Margulies DS**, Smallwood J, Milham MP, Langs G (2020)

Cross-species functional alignment reveals evolutionary hierarchy within the connectome *Neurolmage* 223:117346

11. Vatansever D, Karapanagiotidis T, **Margulies DS**, Jefferies E, Smallwood J (2020) **Distinct patterns of thought mediate the link between brain functional connectomes and well-being**Network Neuroscience 4(3):637-657

12. Hong SJ, Xu T, Nikolaidis A, Smallwood J, **Margulies DS**, Bernhardt B, Vogelstein J, Milham MP (2020) **Toward a connectivity gradient-based framework for reproducible biomarker discovery** *NeuroImage* 223:117322

13. Nenning KH, Xu T, Schwartz E, Arroyo J, Woehrer A, Franco AR, Vogelstein JT, **Margulies DS**, Liu H, Smallwood J, Milham MP, Langs G(2020)

Joint embedding: A scalable alignment to compare individuals in a connectivity space *Neurolmage* 222:117232

14. Wang HT, Ho NSP, Bzdok D, Bernhardt BC, Margulies DS, Jefferies E, Smallwood J (2020)

Neurocognitive patterns dissociating semantic processing from executive control are linked to more detailed off-task mental time travel

Scientific Reports 10(1):11904

15. Turnbull A, Karapanagiotidis T, Wang HT, Bernhardt BC, Leech R, **Margulies DS**, Schooler J, Jefferies E, Smallwood J (2020)

Reductions in task positive neural systems occur with the passage of time and are associated with changes in ongoing thought

Scientific Reports 10(1):9912

16. Fox KCR, Shi L, Baek S, Raccah O, Foster BL, Saha S, **Margulies DS**, Kucyi A, Parvizi J (2020) **Intrinsic network architecture predicts the effects elicited by intracranial electrical stimulation of the human brain** *Nature Human Behaviour* 4:1039–1052

17. Wang X, Margulies DS, Smallwood J, Jefferies E (2020)

A gradient from long-term memory to novel cognition: graded transitions through default mode and executive cortex

Neurolmage 220:117074

18. Lanzoni L, Ravasio D, Thompson H, Vatansever D, **Margulies DS**, Smallwood J, Jefferies E (*In Press* **The role of default mode network in semantic cue integration** *Neurolmage*

19. Mckeown B, Strawson WH, Wang HT, Karapanagiotidis T, Vos de Wael R, Benkarim O, Turnbull A, **Margulies DS**, Jefferies E, McCall C, Bernhardt B, Smallwood J (*In Press*)

The relationship between individual variation in macroscale functional gradients and distinct aspects of ongoing thought

Neurolmage

- 20. Vos de Wael R, Benkarim O, Paquola C, Lariviere S, Royer J, Tavakol S, Xu T, Hong SJ, Langs G, Valk S, Misic B, Milham M, **Margulies DS**, Smallwood J, Bernhardt BC (*In Press*)
 - BrainSpace: a toolbox for the analysis of macroscale gradients in neuroimaging and connectomics datasets *Communications Biology* 3(1):103
- 21. Paquola C, Bethlehem RAI, Seidlitz J, Wagstyl K, Romero-Garcia R, Whitaker KJ, Vos De Wael R, Williams GB, NSPN Consortium, Vértes PE, Margulies DS, Bernhardt BC, Bullmore ET (In Press)
 Shifts in myeloarchitecture characterise adolescent development of cortical gradients
 eLife
- 22. Mandonnet E, **Margulies DS**, Stengel C, Dali M, Rheault F, Toba MN, Bonnetblanc F, Valero-Cabre A (*In Press*) "I do not feel my hand where I see it": causal mapping of visuo-proprioceptive integration network in a surgical glioma patient
 - Acta Neurochir (Wien)
- Zhang M, Savill N, Margulies DS, Smallwood J, Jefferies E (2019)
 Distinct individual differences in default mode network connectivity relate to off-task thought and text memory during reading

Scientific Reports 9(1):16220

- 24. Morys F, Janssen L, Cesnaite E, Beyer F, Garcia-Garcia I, Kube J, Kumral D, Liem F, Mehl N, Mahjoory K, Schrimpf A, Gaebler M, Margulies DS, Villringer A, Neumann, J, Nikulin V, Horstmann A (*In Press*)

 Hemispheric asymmetries in resting-state EEG and fMRI are related to approach and avoidance behaviour, but not to eating behaviour or BMI
 - Human Brain Mapping
- 25. Murphy C, Poerio G, Sormaz M, Wang HT, Vatansever D, Allen M, Margulies DS, Jefferies E, Smallwood J (In Press) Hello, is that me you are looking for? A re-examination of the role of the DMN in social and self relevant aspects of off-task thought PLoS One 14(11):e0216182
- 26. Turnbull A, Wang HT, Murphy C, Ho N, Wang X, Sormaz M, Karapanagiotidis T, Leech R, Bernhardt BC, **Margulies DM**, Vatansever D, Jefferies E, Smallwood J (2019)
 - Left dorsolateral prefrontal cortex supports context-dependent prioritisation of off-task thought *Nature Communications* 10(1):3816
- † 27. Bayrak S, Khalil AA, Villringer K, Fiebach JB, Villringer A, **Margulies DS**, Ovadia-Caro S (2019) **The impact of ischemic stroke on connectivity gradients** *NeuroImage: Clinical* 24:101947
 - 28. Alves PN, Foulon C, Karolis V, Bzdok D, **Margulies DS**, Volle E, Thiebaut de Schotten M (*In Press*) **An improved neuroanatomical model of the default-mode network reconciles previous neuroimaging and neuropathological findings**Communications Biology
 - 29. Ping Ho NS, Wang X, Vatansever D, **Margulies DS**, Bernhardt BC, Jefferies E, Smallwood J (2019)
 Individual variation in patterns of task focused and detailed thought are uniquely associated within the architecture of the medial temporal lobe
 Neurolmage 202:116045
 - Paquola C, Vos De Wael R, Wagstyl K, Bethlehem RAI, Hong S-J, Seidlitz J, Bullmore ET, Evans AC, Misic B, Margulies DS, Smallwood J, Bernhardt BC (2019)
 Microstructural and functional gradients are increasingly dissociated in transmodal cortices PLOS Biology 17(5):1–28
 - 31. van den Heuvel MP, Scholtens LH, van der Burgh HK, Agosta F, Alloza C, Arango C, Auyeung B, Baron-Cohen S, Basaia S, Benders MJNL, Beyer F, Booij L, Braun KPJ, Filho GB, Cahn W, Cannon DM, Chaim-Avancini TM, Chan SSM, Chen EYH, Crespo-Facorro B, Crone EA, Dannlowski U, de Zwarte SMC, Dietsche B, Donohoe G, Plessis SD, Durston S, Díaz-Caneja CM, Díaz-Zuluaga AM, Emsley R, Filippi M, Frodl T, Gorges M, Graff B, Grotegerd D, Gasecki D, Hall JM, Holleran L, Holt R, Hopman HJ, Jansen A, Janssen J, Jodzio K, Jäncke L, Kaleda VG, Kassubek J, Masouleh SK, Kircher T, Koevoets MGJC, Kostic VS, Krug A, Lawrie SM, Lebedeva IS, Lee EHM, Lett TA, Lewis SJG, Liem F, Lombardo MV, Lopez-Jaramillo C, Margulies DS, Markett S, Marques P, Martínez-Zalacaín I, McDonald C, McIntosh AM, McPhilemy G, Meinert SL, Menchón JM, Montag C, Moreira PS, Morgado P, Mothersill DO, Mérillat S, Müller H-P, Nabulsi L, Najt P, Narkiewicz K, Naumczyk P, Oranje B, Ortiz-Garcia de la Foz V, Peper JS, Pineda JA, Rasser PE, Redlich R, Repple J, Reuter M, Rosa PGP, Ruigrok ANV,

Sabisz A, Schall U, Seedat S, Serpa MH, Skouras S, Soriano-Mas C, Sousa N, Szurowska E, Tomyshev AS, Tordesillas-Gutierrez D, Valk SL, van den Berg LH, van Erp TGM, van Haren NEM, van Leeuwen JMC, Villringer A, Vinkers CH, Vollmar C, Waller L, Walter H, Whalley HC, Witkowska M, Witte AV, Zanetti MV, Zhang R, de Lange SC (2019)

10Kin1day: A Bottom-Up Neuroimaging Initiative

Frontiers in Neurology 10:425

32. Lifshitz M, Sacchet MD, Huntenburg JM, Thiery T, Fan Y, Gärtner M, Grimm S, Winnebeck E, Fissler M, Schroeter TA, Margulies DS, Barnhofer T (2019)

Mindfulness-Based Therapy Regulates Brain Connectivity in Major Depression

Psychotherapy and Psychosomatics 1--3

33. Goulas A, Margulies DS, Bezgin G, Hilgetag CC (2019)

The architecture of mammalian cortical connectomes in light of the theory of the dual origin of the cerebral cortex Cortex 118:244–261

- 34. Xu T, Sturgeon D, Ramirez JSB, Froudist-Walsh S, **Margulies DS**, Schroeder CE, Fair DA, Milham MP (2019) **Inter-individual Variability of Functional Connectivity in Awake and Anesthetized Rhesus Monkeys** *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging* 4(9):543–553
- † 35. Buckner RL, Margulies DS (2019)

Macroscale Cortical Organization and a Default-Like Transmodal Apex Network in the Marmoset Monkey Nature Communications 10(1):1976

36. Hong SJ, Vos de Wael R, Bethlehem RAI, Lariviere S, Paquola C, Valk SL, Milham MP, Di Martino A, **Margulies DS**, Smallwood J, Bernhardt BC (2019)

Atypical functional connectome hierarchy in autism

Nature Communications 10(1):1022

- † 37. Oligschläger S, Xu T, Baczkowski BM, Falkiewicz M, Falchier A, Linn G, **Margulies DS** (2019) **Gradients of connectivity distance in the cerebral cortex of the macaque monkey** *Brain Struct Funct* 224(2):925–935
 - 38. Murphy C, Wang HT, Konu D, Lowndes R, **Margulies DS**, Jefferies E, Smallwood J (2019)

 Modes of operation: A topographic neural gradient supporting stimulus dependent and independent cognition

 NeuroImage 186:487–496
- † 39. 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** (2019)

A functional connectome phenotyping dataset including cognitive state and personality measures *Sci Data* 6:180307

40. 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 (2019)

A mind-brain-body dataset of MRI, EEG, cognition, emotion, and peripheral physiology in young and old adults *Sci Data* 6:180308

- 41. Tang R, Ketcha M, Badea A, Calabrese ED, **Margulies DS**, Vogelstein JT, Priebe CE, Sussman DL (2019) **Connectome Smoothing via Low-rank Approximations** *IEEE Transactions on Medical Imaging* 38(6):1446–1456
- 42. 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

- 43. 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 (2019) **Association of Peripheral Blood Pressure with Grey Matter Volume in 19- to 40-Year-Old Adults**Neurology 92(8):758–773
- 44. 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

 Neurolmage 185:286–299
- 45. 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

46. 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

47. 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

- 48. 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
- 49. 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**Neurolmage 176:510–517
- 50. 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

51. Hartwigsen G, Neef NE, Camilleri JA, Margulies DS, Eickhoff SB (2019)

Functional Segregation of the Right Inferior Frontal Gyrus: Evidence From Coactivation-Based Parcellation Cereb Cortex 29(4):1532–1546

† 52. Huntenburg JM, Bazin P-L, **Margulies DS** (2018)

Large-Scale Gradients in Human Cortical Organization

Trends Cogn Sci 22(1):21-31

- 53. 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
- 54. 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**Neurolmage 171:393–401
- 55. 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

* 56. 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)

† 57. 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)

† 58. 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

* 59. Margulies DS (2017)

Unraveling the Complex Tapestry of Association Networks

Neuron 95(2):239–241 (Invited Commentary)

† 60. 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

Neurolmage 148:179–188 (Honorable Mention for Neurolmage Best Paper Award 2017)

† 61. 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

† 62. 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

Neurolmage 146:226-235

† 63. 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

Neurolmage 146:804-813

† 64. 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

65. 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

- 66. 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
- 67. 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

68. 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

69. 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

70. Bellec P, Chu C, Chouinard-Decorte F, Benhajali Y, Margulies DS, Craddock RC (2017)

The Neuro Bureau ADHD-200 Preprocessed repository

Neurolmage 144(Pt B):275-286

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

* 72. **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*)

† 73. 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**Neurolmage 170:41–53

† 74. 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

† 75. Steinbeis N, Margulies DS (2016)

Opportunities and challenges for current developmental neuroscience *Theory & Psychology* 26(5):620–631

† 76. 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

† 77. Ellamil M, Berson J, Margulies DS (2016)

Influences on and Measures of Unintentional Group Synchrony *Front Psychol* 7:1744

78. 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

79. 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

- 80. 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
- 81. 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

82. 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

83. 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

84. 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

85. 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

- 86. 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
- 87. 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

- 88. 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
- † 89. Barnhofer T, Huntenburg JM, Lifshitz M, Wild J, Antonova E, Margulies DS (2016)

How Mindfulness Training May Help to Reduce Vulnerability for Recurrent Depression: A Neuroscientific Perspective

Clinical Psychological Science 4(2):328–343

90. Craddock RC, **Margulies DS**, Bellec P, Nichols BN, Alcauter S, Barrios FA, Burnod Y, Cannistraci CJ, Cohen-Adad J, De Leener B, Dery S, Downar J, Dunlop K, Franco AR, Seligman Froehlich C, Gerber AJ, Ghosh SS, Grabowski TJ, Hill S, Sólon Heinsfeld A, Hutchison RM, Kundu P, Laird AR, Liew S-L, Lurie DJ, McLaren DG, Meneguzzi F, Mennes M, Mesmoudi S, O'Connor D, Pasaye EH, Peltier S, Poline J-B, Prasad G, Fraga Pereira R, Quirion P-O, Rokem A, Saad ZS, Shi Y, Strother SC, Toro R, Uddin LQ, Van Horn JD, Van Meter JW, Welsh RC, Xu T (2016)

Brainhack: a collaborative workshop for the open neuroscience community

GigaScience 5(1):s13742-016-0121-x

91. 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

Neurolmage 124(Pt B):1242-4

92. 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

† 93. 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

† 94. 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

† 95. 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

96. 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

† 97. 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

Neurolmage 120:154-63

98. 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

99. 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

100. 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

101. 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

†102. 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

†103. 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

†104. Callard F, Margulies DS (2014)

What we talk about when we talk about the default mode network

Front Hum Neurosci 8:619

- 105. 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
- 106. 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
- 107. Ovadia-Caro S, Margulies DS, Villringer A (2014)

The value of resting-state functional magnetic resonance imaging in stroke *Stroke* 45(9):2818–24

108. 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

109. 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

Neurolmage 93 Pt 1:124-37

†110. 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

111. 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

112. 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

113. 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

114. 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

115. 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

†116. 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

†117. 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

Neurolmage 83:837–48

*118. Margulies DS, Böttger J, Watanabe A, Gorgolewski KJ (2013)

Visualizing the human connectome

NeuroImage 80:445-61 (Cover Article)

†119. 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

*120. 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*)

- †121. 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
- †122. 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
- †123. 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
- †124. 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

- †125. 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
- 126. Gorgolewski KJ, **Margulies DS**, Milham MP (2013) **Making data sharing count: a publication-based solution** *Front Neurosci* 7:9

- 127. 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
- 128. 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
- †129. 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
- 130. 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
- 131. 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
- 132. Lifshitz M, Margulies DS, Raz A (2012)
 Lengthy and Expensive? Why the Future of Diagnostic Neuroimaging May Be Faster, Cheaper, and More Collaborative Than We Think

 AJOB Neuroscience 3(4):48--50
- *133. 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
- 134. 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**Neurolmage 57(4):1492–8
- 135. 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
- 136. 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
- *137. **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
- 138. 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

Growing together and growing apart: regional and sex differences in the lifespan developmental trajectories of functional homotopy

J Neurosci 30(45):15034-43

- 139. 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
- 140. 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

141. 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

142. 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

*143. **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

144. 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

- 145. 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
- 146. 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
- 147. 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

*148. 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

149. 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 $Neuroreport\ 19(7):703-9$

150. 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

151. 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

152. Michanie C, Kunst G, **Margulies DS**, Yakhkind A (2007)

Symptom prevalence of ADHD and ODD in a pediatric population in Argentina

LAtton Dicord 11(2):262-7

J Atten Disord 11(3):363-7

153. 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 *154. 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

155. 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. Margulies DS, Ovadia-Caro S, Saadon-Grosman N, Bernhardt B, Jefferies B, Smallwood J (In press)

Cortical Gradients and Their Role in Cognition

In: Encyclopedia of Behavioral Neuroscience, 2nd edition (eds Koob G, Le Moal M, Thompson R) Amsterdam: Elsevier

2. Liem F, Geerligs L, Damoiseaux JS, Margulies DS (2019)

Functional Connectivity in Aging

In: Handbook of the Psychology of Aging, 9th edition (eds Schaie KW & Willis S) Cambridge: Academic Press

3. Margulies DS, Uddin LQ (2019)

Network convergence zones in the anterior midcingulate cortex

In: Handbook of Clinical Neurology: Cingulate Cortex (ed Vogt B) Amsterdam: Elsevier. Vol 166: pp 103-111

4. Burns RP, Margulies DS, Haueis P (2019)

From regions to networks: Neuroimaging approaches to mapping brain organization

In: The Dark Side of Brain Imaging

(eds Amir Raz and Robert T. Thibault) Cambridge: Academic Press

5. 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

6. 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

7. **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

8. 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

9. 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

10. 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

11. 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

12. 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. Margulies DS, Bernhardt B, Smallwood J, Keilholz S (eds) (In prep)

Gradients in Brain Organization

Neurolmage

2. Choudhury S, Slaby S, Margulies DS (eds) (2014)

Critical neuroscience: The context and implications of human brain research

Frontiers in Human Neuroscience

3. Margulies DS & Petrides M (eds) (2012)

Mapping connectivity of the human cerebral cortex

Frontiers in Neuroanatomy

4. Flach S, **Margulies DS**, Soeffner J (eds) (2010)

Habitus & Habitat I: Emotion and Motion

Bern: Peter Lang

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