# **Daniel S. Margulies**

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Lab Github: 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**

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**

2018	HDR	Sorbonne Université, Paris
2010	PhD	Humboldt Universität zu Berlin
2008	MA	European Graduate School, Saas Fee, Switzerland
2005	BA	New York University

## **Funding**

2011-2017	PΙ	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**

Wiley Young Investigator Award, Organization for Human Brain MappingOtto Hahn Medal, Max Planck Society

# Mentoring & Supervision

Postdocs		<b>Doctoral Students</b>	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	<b>Bachelors Students</b>	
Chris Gorgolewski	(2013-2015)	Alexander Schaefer	2015	Anastasia Osoianu	2016
Alexandros Goulas	(2013-2015)	Judy Kipping	2015		
loachim Böttger	(2012-2014)	Yating Ly	2013		

# **Academic Service**

## **Editorial board**

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
2012	Guest Editor	Frontiers in Neuroanatomy
2011-2012	Video Advisor	Neurolmage

## 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 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 2015 2013–2017	Education course lecturer Course Organizer Lecturer	Brain Parcellation, Organization for Human Brain Mapping Advanced Lecture on Connectivity, International Max Planck Research School 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

Workshop
 Workshop
 Biennial Conference on Resting State and Brain Connectivity
 Workshop
 Experimental Entanglements in Cognitive Neuroscience
 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), Chinese Academy of Sciences, Donders Institute, Freie University (Berlin), Fudan University (Shanghai), Hebrew University, Humboldt University (Berlin), Imperial College London, Institute for Cognitive Neuroscience (UCL), Jülich Research Center, Kyoto University, Max Delbrück 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, Hangzhou Normal University, 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 für Kunst und Medientechnologie (Karlsruhe)

# **Conference Organizing**

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)

2012– Chair Over ten international Brainhack events

2009-Co-chairNeuroesthetics Symposium (2009, 2011, 2013)2009Co-chairHabits in Habitat I: Emotions and Motion2008Co-organizerWorkshop 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
  - 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, Marqulies 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* 

- Tang R, Ketcha M, Badea A, Calabrese ED, Margulies DS, Vogelstein JT, Priebe CE, Sussman DL (In Press)
   Connectome Smoothing via Low-rank Approximations
   IEEE Transactions on Medical Imaging
- 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

7. 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

- 8. 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
- 9. 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

10. 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

- 11. 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
- 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
   Neurolmage 176:518–527
- 13. Kipping JA, Margulies DS, Eickhoff SB, Lee A, Qiu A (2018)

 $\textbf{Trade-off of cerebello-cortical and cortico-cortical functional networks for planning in 6-year-old children} \ \textit{NeuroImage} \ 176:510-517$ 

14. 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

15. 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

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

Large-Scale Gradients in Human Cortical Organization

Trends Cogn Sci 22(1):21-31

17. 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

18. 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

19. 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

\* 20. 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)

† 21. 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)

† 22. 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

\* 23. Margulies DS (2017)

**Unraveling the Complex Tapestry of Association Networks** 

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

† 24. 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)

† 25. 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

† 26. 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

† 27. 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

† 28. 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

J Viral Hepat 24(3):216-225

- 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
- 30. 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
- 31. 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
- 32. 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
- 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
- 34. 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
- 35. 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
- \* 36. **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*)

- † 37. 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
- † 38. 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
- † 39. Steinbeis N, Margulies DS (2016)

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

† 40. 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

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

Influences on and Measures of Unintentional Group Synchrony

Front Psychol 7:1744

42. 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

43. 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

- 44. Hove MJ, Stelzer J, Nierhaus T, Thiel SD, Gundlach C, Marqulies 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
- 45. 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

46. Rohr CS, Villringer A, Solms-Baruth C, Meer E, Marqulies DS, Okon-Singer H (2016)

The neural networks of subjectively evaluated emotional conflicts

Hum Brain Mapp 37(6):2234-46

47. 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

48. 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 Neurolmage 128:116-124

49. 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

- 50. 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

51. Smallwood J, Karapanagiotidis T, Ruby F, Medea B, Caso I, Konishi M, Wang H-T, Hallam G, Margulies DS, Jefferies E

Representing Representation: Integration between the Temporal Lobe and the Posterior Cingulate Influences the **Content and Form of Spontaneous Thought** 

PLoS One 11(4):e0152272

52. 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

Neurolmage 125:1022-1031

53. 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

54. 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

† 55. 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

† 56. Gorgolewski KJ, Varoquaux G, Rivera G, Schwarz Y, Ghosh SS, Maumet C, Sochat VV, Nichols TE, Poldrack RA, Poline J-B, Yarkoni T, **Marqulies DS** (2015)

NeuroVault.org: a web-based repository for collecting and sharing unthresholded statistical maps of the human brain

Front Neuroinform 9:8

† 57. 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

58. 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

† 59. 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

60. 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

61. 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

62. 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

63. 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

† 64. 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

† 65. 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

† 66. Callard F, **Margulies DS** (2014)

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