

## CURRICULUM VITAE

**Marcus Kaiser, Ph.D. FRSB**  
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### Education/Qualifications

8/2005 Jacobs University Bremen, Germany  
PhD in Neuroscience, special distinction  
9/2002 Ruhr-University Bochum, Germany  
“Diplom” (=BSc+MSc) Biology, first-class honours degree  
Since 10/1998 Distance University Hagen, Germany  
part time studies of Computer Science (Master’s level)

### Professional History

2021 – Professor (Personal Chair) in Neuroinformatics,  
University of Nottingham, UK  
2019 – Guangci Visiting Professor, Dept of Functional Neurosurgery  
Rui Jin Hospital, Shanghai Jiao Tong University, China  
2015 – 2021 Professor (Personal Chair) in Neuroinformatics,  
Newcastle University, UK  
2010 – 2015 Associate Professor (Reader) in Neuroinformatics,  
Newcastle University, UK  
2009 – 2013 Visiting Associate Professor (part-time)  
Seoul National University, South Korea  
Department of Brain and Cognitive Sciences  
2005 – 2010 Assistant Professor (RCUK Academic Fellow)  
for Complex Neural Systems, Newcastle University, UK

### Early Research Experience

7/2000 – 9/2000 University of Newcastle, Department of Psychology (Prof. Malcolm Young, Dr. Stefano Panzeri, Dr. Peter Andras): Bayesian analysis of neuronal spike train data and analysis of cortical network properties.  
2/1999 – 8/1999 Ruhr-University Bochum, Department of Zoology and Neurobiology (Prof. K.P. Hoffmann): Design and implementation of a program for experiment planning and visualization using Delphi and extension of existing data analysis programs.  
8/1998 Max-Planck-Institute for Molecular Physiology in Dortmund (Prof. Mario Markus): Development of a cell culture system for the green algae *Pediastrum duplex* to examine its self-organization as well as discovery of a possible model for self-organization that was subsequently studied by the research group.

## Prizes, Awards and other Honours

- 2017 Elected member of the UK Computing Research Committee (UKCRC)  
2016 Elected Fellow of the Royal Society of Biology (FRSB)  
2003 – 2005 Fellow of the German National Merit Foundation (PhD scholarship)  
2000 – 2002 Fritz-ter-Meer Foundation (Bayer PLC) (MSc studentship)

## Professional Contributions

### Memberships

- UKCRC - UK Computing Research Committee (<http://www.ukcrc.org.uk/>) panel of leading computing researchers from academia and industry (member since 2017)  
RSB - Royal Society of Biology (Fellow since 2016)  
IEEE - Institute of Electrical and Electronics Engineers (Member since 2012; Senior Member since 2013)  
BNA - British Neuroscience Association (Member since 2012)  
SIRS - Schizophrenia International Research Society (Associate Member since 2025)  
ISMAR - International Society of Magnetic Resonance  
ISMARM - International Society for Magnetic Resonance in Medicine (British Chapter)

UK Mathematical Neuroscience Network

UK INCF Special Interest Group in Image-based Neuroinformatics (Leader)

EPSRC Peer Review College

MRC 'Neurosciences and Mental Health Board' member for Computational Neuroscience

MRC Strategic Advisory Group 'Data Science'

IEEE Brain Neuroethics subcommittee Medical Applications

Braingrade GmbH – Scientific Advisory Board Member

NeurGear – Scientific Advisory Board Member

DeepBrain – Chief Scientific Officer

### Editorial board memberships

- *PLOS Computational Biology* (since 11/2019)
- *Royal Society Open Science* (since 12/2016)
- *Network Neuroscience*, MIT Press (since 4/2016)
- *Applied Network Science*, Springer (since 7/2015)
- *ACM Computing Reviews* (since 10/2012)
- *Frontiers in Neuroinformatics* (since 8/2007)
- *PLOS ONE* (since 9/2008)

### Organizational management

- Chair of Neuroinformatics UK <http://www.neuroinformatics.org.uk/> (since 2017)
- Chair of the SIG in Neuroinformatics of the British Neuroscience Association (since 2018)
- Leader of the NHS CHAIN Technology Sub-group Computational Neurology (since 2016)
- Organization of the first UK INCF workshop on Image-based Neuroinformatics, Newcastle University, January 2012

### University of Nottingham (2021 –)

- Co-Director and Lead for the Faculty of Medicine of the N3 Centre for Neurotechnology, Neuromodulation, and Neurotherapeutics (since 2025) <https://www.nottingham.ac.uk/science/research/n3centre/n3centre.aspx>
- Co-Director of the Translational Neuroscience and Mental Health Centre of Excellence, Institute of Mental Health (since 2024) <https://institutemh.org.uk/research/centre-for->

[translational-neuroscience/about-centre-for-translational-neuroscience](#)

- Lead of the NIHR Biomedical Research Centre research area ‘Precision Neuromodulation’ (since 2024) <https://nottinghambrc.nihr.ac.uk/research>
- Member of the University ‘AI in Research and Knowledge Exchange’ steering group (since 2024)
- Director of the Research and Knowledge Exchange committee (2021-2024), Mental Health and Clinical Neuroscience unit, School of Medicine
- Member of the Research committee, School of Medicine (2021-2024)
- Lead for organising Nottingham Research Fellowship process, School of Medicine (2022/23)

Newcastle University (2005 – 2021)

- Initiator/Co-Director of Wellcome Trust Systems Neuroscience PhD programme (since 2007)
- Leader of Neuroinformatics (<http://neuroinformatics.ncl.ac.uk/> )
- Leader of Neuroinformatics strand within our Bioinformatics master programme (since 2010)
- Chair of the IT Committee within the School of Computing (since 2015)

Reviewer for funding bodies

*UK*

Academy of Medical Sciences  
Alzheimer Research UK  
Biol. & Biotech. Res. Council (BBSRC)  
Eng. & Phys. Sci. Res. Council (EPSRC)  
Medical Research Council (MRC)  
National Institute for Health Research (NIHR)  
Wellcome Trust  
Leverhulme Trust  
Hadwen Trust  
Lister Institute  
Royal Society of Edinburgh

*International*

US National Science Foundation (NSF)  
European Research Council (ERC)  
French Research Foundation (ANR)  
German Ministry for Research (BMBF)  
Austrian Science Fund (FWF)  
Swiss National Science Foundation (SNF)  
Israel Science Foundation (ISF)  
Canada Foundation for Innovation (CFI)  
Banff International Research Station (BIRS)  
Dutch Science Foundation (NWO)  
US-Israel Binational Science Foundation  
Hong-Kong Baptist University  
Weston Foundation, Canada

Reviewer for journals

ACM Computing Reviews  
American Journal of Psychiatry  
Biological Psychiatry  
BMC Neuroscience  
Brain  
Brain Connectivity  
Brain Research Bulletin  
Brain Structure and Function  
British Journal of Neurosurgery  
Cerebral Cortex  
Chaos  
Chinese Physics Letters  
Clinical Neurophysiology  
Current Biology  
e-Life

European Journal of Neuroscience  
European Journal of Neurology  
European Physical Journal B  
Epilepsia  
F1000  
Frontiers in Neuroinformatics  
Human Brain Mapping  
IEEE TUFFC  
Journal of Alzheimer’s Disease  
Journal of Complex Networks  
Journal of Neuroscience  
Journal of the Royal Society Interface  
Journal of Comparative Physiology A  
National Science Review  
Nature Communications

Nature Physics	Physical Review E
Nature Reviews Neuroscience	Physical Review Letters
Network Neuroscience	PLOS Computational Biology
Neural Networks	PLOS ONE*
NeuroComputing	PNAS
Neuroimage	Proc. Roy. Soc. Lond. Ser. B
Neuroimage Clinical	Proc. Roy. Soc. Lond. Ser. A
Neuroimage Reports	Scholarpedia
Neuroinformatics	Science Advances
Neurology	Science Translational Medicine
Neuron	Scientific Reports
New Journal of Physics	The Anatomical Record
PeerJ	Translational Psychiatry
Phil. Trans. Roy. Soc. B	Trends in Cognitive Sciences
Physica A	

Reviewer for publishers (journal and book proposals)

Cambridge University Press	Elsevier
MIT Press	Wiley-VCH Press
Oxford University Press	

External reviewer for faculty selection or faculty tenure/promotion

Universities in EU, USA, Canada, China and Africa

**GRANTS AWARDED**

Current Grants

2025	NIHR BRC IAA: ultrasound VNS stimulation for tinnitus (Co-I)	£11,053
2025	MRC Programme Grant <b>(PI)</b> Closed-loop neuromodulation	£2,364,041
2022	EPSRC NeuroMod+: Next-generation neuromodulation (Co-PI)	£1,265,849

Previous Grants

2024	EPSRC NeuroMod+ pilot grant <b>(PI)</b>	£64,000
2022	EPSRC New Horizon grant <b>(PI)</b>	£200,000
2021	EPSRC Transformative Healthcare Grant <b>(PI)</b>	£317,000
2021	EPSRC Impact Accelerator Award <b>(PI)</b>	£31,000
2020	NIHR AI in medicine grant OCTAHEDRON (Co-I)	£150,000
2019	MRC-KHIDI UK-Korea Dementia Research project <b>(PI)</b>	£305,000
2016	EPSRC Synthetic Biology Programme Grant (Co-I)	£4,350,000
2014	EPSRC/Wellcome Trust: Innovative Engineering for Health (Co-I)	£10,000,000
2017	NIHR - NUTH/NU platform for health data informatics (Co-I)	£108,000
2016	Alzheimer's Research UK Pilot Grant (Co-I)	£45,000
2015	Newcastle Healthcare Charity (Co-I)	£35,000
2014	School of Computing Science – Research Innovation Fund <b>(PI)</b>	£9,500
2013	EPSRC Standard Grant <b>(PI)</b>	£465,000
2013	NIHR: Disruption of brain connectivity in Lewy body dementias (Co-I)	£80,000
2012	BBSRC PhD studentship <b>(PI)</b>	£90,000
2011	EPSRC Impact Award <b>(PI)</b>	£26,495
2011	Amazon Cloud Computing Research Grant <b>(PI)</b>	\$7,500
2010	Santander Visiting Fellowship <b>(PI)</b>	£3,000
2009	EPSRC First Grant <b>(PI)</b>	£380,000

2009	Newcastle University, Computing Science Strategic Grant (PI)	£10,000
2009	KRF WCU-Visiting Professorship Seoul National University	£235,000
2009	BBSRC PhD studentship (PI)	£80,000
2007	Wellcome Trust - Four-year PhD programme (Co-PI)	£4,000,000
2007	Royal Society - Conference Travel Grant	£1,000
2007	International Center of Transdisciplinary Studies (ICTS), Jacobs University Bremen - Visiting Fellowship	£750
2007	Royal Society - Research Grant (PI)	£15,000
2006	EPSRC - CARMEN e-science (Co-I, total sum of grant)	£4,500,000
2006	EPSRC - CASE PhD studentship (PI)	£80,000
2005	DFG (German Research Council) - Conference Travel Grant	£750
2004	DAAD - academic exchange - Germany-USA (co-applicant)	£5,000

## ACADEMIC SUPERVISION

### Research fellows supervised

2008 – 2012	Jennifer Simonotto	2012 – 2019	Luis Peraza Rodriguez
2009	Christoph Feenders	2015 – 2016	Sol Lim
2010	Jinseop Kim *	2017 – 2019	Shouyong Jiang *
2010 – 2013	Cheol E. Han *	2021 – 2022	James Ross
2013 – 2016	Roman Bauer *	2023 – 2024	Marilyn Gatica *
2013 – 2015	Peter Taylor *	2022 – 2024	Cyril Atkinson-Clement *
2013 – 2016	Yujiang Wang *		

### PhD students supervised

2009 – 2013	Henrik Kjeldsen *	now professor at Aarhus University, Denmark
2009 – 2014	Richard Tomsett	BBSRC programme
2010 – 2015	Sol Lim	Korean Research Foundation
2013 – 2016	Chris Papasavvas	Wellcome Trust programme
2014 – 2019	Chris Thornton *	BBSRC programme
2014 – 2019	Frances Hutchings	Computing Science Studentship
2016 – 2019	Julia Schumacher	
2018 – 2020	Xue Chen *	now professor at Qingdao University, China
2015 – 2020	Chris Hayward	SAGe Faculty DTA studentship
2017 – 2020	Ramtin Mehraram	
2017 – 2021	Nishant Sinha	Computing Science / IoN studentship
2014 – 2024	Michael Mackay	Staff PhD student (part-time)

\* : now faculty members (11 in total)

### PhDs examined (external)

2025	Alexa Lee	Stephen Mousley	Cambridge University, UK
2024	Ruohan	Zhang	Warwick University, UK
2023	Arthur	Spencer	Bristol University, UK
2022	Giorgia Giulia	Evangelista	EPFL, Switzerland
2021	Zhuo	Wan	Warwick University, UK
2021	Sarbani	Das	Southampton University, UK
2020	Stephen	Bonner	Durham University, UK
2018	Sebastian	Rinke	Technical University Darmstadt, Germany
2018	Keith	Smith	Edinburgh University, UK

2017	Siti Makhtar	York University, UK
2016	Ye Yao	Warwick University, UK
2015	Peter Eipert	Rostock University, Germany
2015	Sarvenaz Choobdar	University of Porto, Portugal
2012	David Samu	Sussex University, UK
2011	Pedro Ribeiro	University of Porto, Portugal
2007	Lucia Zemanova	Potsdam University, Germany

## TEACHING ACTIVITY

### Higher education teaching qualification

2009 Certificate in Advanced Studies in Academic Practice, Newcastle University  
recognized as Higher Education Academy (HEA) Associate Fellow

### Undergraduate and graduate teaching

2002 – 2005 Jacobs University Bremen, Germany

2005 – Newcastle University

- Computing Environments for Bioinformatics module (Perl, SQL)
- Neuroinformatics and Computational Neuroscience module
- Complex Systems module (network analysis & dynamical systems)
- Lecture on Connectomics, MSc Neuroscience
- Lecture on Neuroinformatics, IoN Research Summer School

2010 – 2012 Seoul National University

- Neuroinformatics and Computational Neuroscience module
- Lecture on Neuroinformatics and Connectomics, PhD programme

2011 Tutorial on Connectome Analysis at Computational Neuroscience Society  
Annual Meeting, Stockholm, Sweden

### Public understanding of science

2022 Public Lecture Nottingham University, UK

2017 Public Lecture Computing at School North East Meeting, Newcastle, UK

2014 YouTube Channel: <https://www.youtube.com/c/DynamicConnectomeLab>

2013 Comic British Science Festival, Newcastle, UK

2006 Interview BBC Radio, UK

2005 Public lecture Benjamin der Wissenschaft, Bremen, Germany

## PUBLICATIONS

Google Scholar 11,700 citations (h-index: 52)

[http://scholar.google.com/citations?user=Ha\\_ZNkAAAAJ](http://scholar.google.com/citations?user=Ha_ZNkAAAAJ)

ORCID <https://orcid.org/0000-0002-4654-3110>

## Books

Kaiser M. Changing Connectomes: Evolution, Development and Dynamics in Network Neuroscience. MIT Press, 2020.

<https://mitpress.mit.edu/books/changing-connectomes>

Bota M, Crook S, Kaiser M (eds.) Producing and Analyzing Macro-Connectomes: Current State and Challenges. Frontiers Research Topic, 2016.

Kaiser M, Hilgetag CC, Kötter R (eds.) Hierarchy and dynamics in neural networks. Frontiers Research Topic, 2012.

## PhD thesis

2005 Neural and Biochemical Networks: Organization, Development, and Robustness

## Recent Preprints

1. Jung JY, Atkinson-Clement C, Kaiser M, Ralph MAL. Transcranial focused ultrasound stimulation of the anterior temporal lobe enhances semantic memory by modulating brain morphology, neurochemistry and neural dynamics. bioRxiv.org, 2025.03. 10.642483, 2025.
2. Gatica M, Atkinson-Clement C, Coronel-Oliveros C, Alkhawashki M, Mediano PAM, Tagliazucchi E, Rosas FE, Kaiser M, Petri G. Understanding the high-order network plasticity mechanisms of ultrasound neuromodulation. bioRxiv, 2025.01. 11.632528, 2025.
3. Kang JC, Ng JY, Kaiser M, Choi H, Song JJ, Jung JY. Transcutaneous auricular vagus nerve stimulation enhances emotional bias towards happiness in healthy young adults: A comparative study of electrical and ultrasound stimulation. bioRxiv, 2025.11. 19.689293, 2025

## Peer-reviewed Journal Publications

1. Kang Y, Han KM, Ham BJ, Auer DP, Jung J, Kaiser M. Transcranial Focused Ultrasound for Emotion Regulation: A Systematic Review and Quantitative Summary of Human Studies. *Journal of Affective Disorders*, in press.
2. Jung JY, Atkinson-Clement C, Kaiser M, Ralph MAL. Transcranial focused ultrasound stimulation of the anterior temporal lobe enhances semantic memory by modulating brain morphology, neurochemistry and neural dynamics. *Nature Communications*, in press.
3. Jung M, Park J, Kang Y, Shin D, Kang J, Moon HJ, Jung J, Kaiser M, Auer D, Ham BJ, Han KM. Suicide attempt history, childhood trauma, and functional brain network alterations in major depressive disorder: A resting-state functional connectivity-based multivariate pattern analysis. *Neuropsychopharmacology*, <https://doi.org/10.1038/s41386-025-02307-9>, 2026
4. Yang Y, Cao S, Liao S, Tang Y, Kaiser M. Higher-order Link Prediction via Time-aware Dynamic Embedding Learning. *Frontiers of Computer Science*, in press.
5. Tudor K, Labree B, Dewey RS, Hoare D, Kaiser M, Sereda M. Methods of Computational Modelling in Studies of Transcranial Direct Current Stimulation (tDCS) in Adults to Inform

- Protocols for Tinnitus Treatment: A Scoping Review. *Brain Sciences*, 16(1):44, 2025.
6. Yang Y, Cao S, Wang L, Liu D, Kaiser M. User Identification Based on the Topology Consistency of Cross-layer Common Neighbors in Social Network. *Neurocomputing*, 131591, 2025.
  7. Gatica M, Atkinson-Clement C, Coronel-Oliveros C, Alkhawashki M, Mediano PAM, Tagliazucchi E, Rosas FE, Kaiser M, Petri G. Understanding the high-order network plasticity mechanisms of ultrasound neuromodulation. *PLOS Computational Biology*, 21(10), e1013514, 2025.
  8. Labree B, Kaiser M, Pourhoseingholi MA, Hoare DJ, Sereda M. Auricular Ultrasonic Vagus Nerve Stimulation: Effectiveness of Blinding and Occurrence of Adverse Effects in Healthy Volunteers. *Brain Sciences*, 5(9), 986; 2025
  9. Atkinson-Clement C, Howett D, Alkhawashki M, Ross J, Slater B, Gatica M, Balezeau F, Zhang C, Sallet J, Petkov C, Kaiser M. Temporal Dynamics of Offline Transcranial Ultrasound Stimulation. *Current Research in Neurobiology*, 8:100148, 2025.
  10. Atkinson-Clement C, Junor A, Kaiser M. Neuromodulation perception by the general public: lessons from a large-scale online survey. *Scientific Reports*, 15:5584, 2025.
  11. Atkinson-Clement C, Alkhawashki M, Gatica M, Kontogouris S, Kaiser M. Delay- and Pressure-Dependent Neuromodulatory Effects of Transcranial Ultrasound Stimulation. *Neuromodulation*, S1094-7159(25)00006-6, 2025.
  12. Kuhn, T.P., Indahlastari, A., Vila-Rodriguez, F. & Fonzo, G.A. et al. The ENIGMA-Neuromodulation Working Group – A Mission Statement. *Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation*, 10;18(2):142-144, 2025.
  13. Atkinson-Clement C, Kaiser M. Optimizing Transcranial Focused Ultrasound Stimulation: An Open-Source Tool for Precise Targeting. *Neuromodulation* 28(1):185-187, 2025.
  14. Atkinson-Clement C, Kaiser M, Lambon Ralph M, Jung JY. Ventricle stimulation as a potential gold-standard control stimulation site for transcranial focused ultrasound stimulation. *Brain Stimulation*, 17(6):1328–1330, 2024.
  15. Atkinson-Clement C, Alkhawashki M, Gatica M, Ross J, Kaiser M. Dynamic Changes in Human Brain Connectivity Following Ultrasound Neuromodulation. *Scientific Reports*, 14:30025, 2024.
  16. Caffaratti H, Slater B, Shaheen N, Rhone A, Calmus R, Kritikos M, Kumar S, Dlouhy B, Oya H, Griffiths T, Boes AD, Trapp N, Kaiser M, Sallet J, Banks MI, Howard MA, Zanaty M, Petkov CI. Neuromodulation with Ultrasound: Hypotheses on the Directionality of Effects and a Community Resource. *eLife*, 13:RP100827, 2024.
  17. Wang Y, Jiang Z, Chu C, Zhang Z, Wang J, Li D, He N, Fietkiewicz C, Zhou C, Kaiser M, Bai X, Zhang C. Push-pull effects of basal ganglia network in Parkinson's disease inferred by functional MRI. *npj Parkinson's Disease*, 10(1):224, 2024.
  18. Zhao W, Su K, Zhu H, Kaiser M, Fan M, Zou Y, Li T, Yin D. Activity flow under the manipulation of cognitive load and training. *Neuroimage*, 297:120761, 2024.
  19. Atkinson-Clement C, Alkhawashki M, Ross J, Gatica M, Zhang C, Sallet J, Kaiser M. Dynamical and individualised approach of transcranial ultrasound neuromodulation effects in non-human primates. *Scientific Reports* 14 (1):11916, 2024.
  20. Gatica M, Atkinson-Clement C, Pedro A. M. Mediano PAM, Alkhawashki M, Ross J, Sallet J, Kaiser M. Transcranial ultrasound stimulation effect in the redundant and synergistic networks consistent across macaques. *Network Neuroscience*, 1–19, 2024.
  21. Yang Y, Shuai C, Long W, Dong L, Kaiser M. User Identification, Cross-layer, Topology Consistency, Link Prediction, Multilayer Complex Network. *Neurocomputing*, 2024.
  22. Kaiser M. Ten simple rules for establishing an experimental lab. *PLOS Computational Biology* 20:e1011778, 2024.
  23. Kopetzky SJ, Li Y, Kaiser M, Butz-Ostendorf M. Predictability of intelligence and age from structural connectomes. *PLOS ONE* 19(4):e0301599, 2024.

24. Mackay M, Huo S, Kaiser M. Spatial organisation of the mesoscale connectome: A feature influencing synchrony and metastability of network dynamics. *PLOS Computational Biology*, 19(8): e1011349, 2023.
25. Kaiser M. Connectomes: From a sparsity of networks to large-scale databases. *Frontiers in Neuroinformatics* 17:1170337, 2023
26. Hayward C, Huo S, Chen X, Kaiser M. Non-optimal component placement of the human connectome supports variable brain dynamics. *Network Neuroscience* 7(1), 254-268, 2023.
27. Yu Q, Yin D, Kaiser M, Xu G, Guo M, Liu F, Li J, Fan M. Pathway-Specific Mediation Effect between Structure, Function, and Motor Impairment After Subcortical Stroke. *Neurology*, 100 (6), e616-e626, 2023.
28. Zaami B, Turnbull M, Hazra A, Wang Y, de Souza CG, Escobedo-Cousin E, Idil AS, Bailey R, Tardio S, Patel A, Ponon N, Hutchings F, Kaiser M, Cunningham MO, Clowry GJ, LeBeau FE, Constandinou TG, Baker SN, Donaldson N, Degenaar P, O'Neill A, Trevelyan AJ, Jackson A. Closed-loop optogenetic control of normal and pathological network dynamics. *Nature Biomedical Engineering*, 7 (4), 559-575, 2023.
29. Mehraram R., Peraza L.R., Murphy N.R.E., Cromarty R.A., Graziadio S., O'Brien J.T., Killen A., Colloby S.J., Firbank M., Su L., Collerton D., Taylor J.-P., Kaiser M. Functional and structural brain network correlates of visual hallucinations in Lewy body dementia. *Brain*, 145 (6), 2190-2205, 2022.
30. Huo S, Yong Zou Y, Kaiser M, Liu Z. Time-limited self-sustaining rhythms and state transitions in brain networks. *Physical Review Research*, 4 (2), 023076, 2022.
31. Lai Y, Naying He N, Wei H, Deng L, Zhou H, Li J, Kaiser M, Zhang C, Li D, Sun B. Value of functional connectivity in outcome prediction for pallidal stimulation in Parkinson's disease. *Journal of Neurosurgery*, 2022.
32. Breitwieser L, Hesam A, de Montigny J, Vavourakis V, Iosif A, Jennings J, Kaiser M, Manca M, Di Meglio A, Al-Ars Z, Rademakers F, Mutlu O, Bauer R. BioDynaMo: a modular platform for high-performance agent-based simulation. *Bioinformatics*, 38 (2), 453-460, 2022.
33. Jiang S, Otero-Muras I, Banga J, Wang Y, Kaiser M, Krasnogor N. OptDesign: Identifying Optimum Design Strategies in Strain Engineering for Biochemical Production. *ACS Synthetic Biology*, 2022.
34. Ortiz-Rios M, Balezeau F, Haag M, Schmid MC, Kaiser M. Dynamic reconfiguration of macaque brain networks during natural vision. *Neuroimage*, 244, 118615, 2021.
35. Firfilionis D, Hutchings F, Tamadoni R, Walsh D, Turnbull M, Escobedo-Cousin E, Bailey RG, Gausden J, Patel A, Hacı D, Liu Y, LeBeau F, Trevelyan A, Constandinou TG, O'Neill A, Kaiser M, Degenaar P, Jackson A. A Closed-Loop Optogenetic Platform. *Frontiers in Neuroscience*, 15, 718311, 2021.
36. Chen X, Necus J, Peraza Rodriguez L, Mehraram R, Wang Y, O'Brien J, Blamire A, Kaiser M, Taylor JP. The functional brain favours segregated modular connectivity at old age unless targeted by neurodegeneration. *Nature Communications Biology*, 4 (1), 1-16, 2021.
37. Chen X, Wang Y, Kopetzky SJ, Butz-Ostendorf M, Kaiser M. Connectivity within regions characterizes epilepsy duration and treatment outcome. *Human Brain Mapping*, 42: 3777-3791, 2021.
38. Hall GR, Kaiser M, Farr TD. Stroke induced functional connectivity change is comparable from mouse to man. *Stroke*, doi:10.1161/STROKEAHA.121.034097, 2021.
39. Yin D, Kaiser M. Understanding Neural Flexibility from a Multifaceted Definition. *Neuroimage*, 235:118027, 2021.
40. Bauer R, Clowry G, Kaiser M. Creative destruction: a basic computational model of cortical layer formation. *Cerebral Cortex*, 31:3237-3253, 2021.
41. Lee S, Kim D, Youn HC, Hyung WSW, Suh S, Kaiser M, Han CE, Jeong HG. Brain network analysis reveals that amyloidopathy affects comorbid cognitive dysfunction in older adults with depression. *Scientific Reports*, 11:4299, 2021.

42. Carmon J, Heege J, Necus JH, Owen TW, Pipa G, Kaiser M, Taylor PN, Wang Y. Reliability and comparability of human brain structural covariance networks. *Neuroimage* 117104, 2020.
43. Hutchings F, Thornton C, Zhang C, Wang Y, Kaiser M. Predicting the Impact of Electric Field Stimulation in a Detailed Computational Model of Cortical Tissue. *Journal of Neural Engineering*, in press (arXiv preprint arXiv:2001.10414).
44. Kaiser M. Functional compensation after lesions: Predicting site and extent of recovery. arXiv preprint arXiv:2005.03093, 2020.
45. Jiang S, Li H, Guo J, Zhong M, Yang S, Kaiser M, Krasnogor N. NIHBA: A Network Interdiction Approach for Metabolic Engineering Design. *Bioinformatics*, 10.1093/bioinformatics/btaa163, 2020.
46. Pappasavvas CA, Trevelyan AJ, Kaiser M, Wang Y. Divisive gain modulation enables flexible and rapid entrainment in a neocortical microcircuit model. *Journal of Neurophysiology*, 123:1133-1143, 2020.
47. Giannakakis E, Hutchings F, Pappasavvas CA, Han CE, Weber B, Zhang C, Kaiser M. Computational modelling of the long-term effects of brain stimulation on the local and global structural connectivity of epileptic patients. *PLOS ONE* 15 (2), e0221380, 2020.
48. Giannakakis E, Han CE, Weber B, Hutchings F, Kaiser M. Towards simulations of long-term behavior of neural networks: Modelling synaptic plasticity of connections within and between human brain regions. *Neurocomputing*, 416:38-44, 2020.
49. Jiang S, Li H, Guo J, Zhong M, Yang S, Kaiser M, Krasnogor N. AREA: An adaptive reference-set based evolutionary algorithm for multiobjective optimisation. *Information Sciences* 515: 365-387, 2020.
50. Mehraram R, Kaiser M, Cromarty R, Graziadio S, O'Brien JT, Killen A, Taylor JP, Peraza LR. Weighted network measures reveal differences between dementia types: An EEG study. *Human Brain Mapping* 41: 1573– 1590, 2020.
51. Kaiser M. Computational models and fundamental constraints can inform the design of synthetic connectomes. *Physics of Life Reviews*, 2019.
52. Schumacher J, Cromarty R, Gallagher P, Firbank MJ, Thomas AJ, Kaiser M, Blamire AM, O'Brien JT, Peraza LR, Taylor JP. Structural correlates of attention dysfunction in Lewy body dementia and Alzheimer's disease: An ex-Gaussian analysis. *Journal of Neurology*, 266(7): 1716–1726, 2019.
53. Schumacher J, Peraza L, Firbank M, Thomas A, Kaiser M, Gallagher P, O'Brien J, Blamire A, Taylor JP. Dysfunctional brain dynamics and their origin in Lewy body dementia. *Brain*, 142(6): 1767–1782, 2019.
54. Schumacher J, Peraza L, Firbank M, Thomas A, Kaiser M, Gallagher P, O'Brien J, Blamire A, Taylor JP. Dynamic functional connectivity changes in dementia with Lewy bodies and Alzheimer's disease. *Neuroimage: Clinical*, 22: 101812, 2019.
55. Jiang S, Kaiser M, Yang S, Krasnogor N. A Scalable Test Suite for Continuous Dynamic Multiobjective Optimisation. *IEEE Transactions on Cybernetics*, 1-13, 10.1109/TCYB.2019.2896021, 2019.
56. Thornton C, Hutchings F, Kaiser M. The Virtual Electrode Recording Tool for EXtracellular Potentials (VERTEX) Version 2.0: Modelling *in vitro* electrical stimulation of brain tissue. *Wellcome Open Research*, 4:20, 2019.
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126. Kaiser M, Hilgetag CC. Spatial growth of real-world networks. *Physical Review E*, 69:036103, 2004.
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#### **Peer-reviewed conference proceedings**

1. Torres M, Jiang S, Pelta D, Kaiser M, Krasnogor N. Strain Design as Multiobjective Network Interdiction Problem: A Preliminary Approach. CAEPIA, Lecture Notes in Artificial Intelligence, 2018.
2. Jiang S, Krasnogor N, Kaiser M, Wan S, Guo J, Yang S. An empirical study of dynamic triobjective optimisation problems. IEEE Congress on Evolutionary Computation, 2018.
3. Jiang S, Kaiser M, Guo J, Yang S, Krasnogor N. Less detectable environmental changes in dynamic multiobjective optimisation. Proceedings of the Genetic and Evolutionary Computation Conference, 673-680, 2018.
4. Han CE, Peraza LR, Taylor JP, Kaiser M. Predicting Age across Human Lifespan Based on Structural Connectivity from Diffusion Tensor Imaging. IEEE Biomedical Circuits and Systems Conference, 2014.
5. Brust MR, Turgut D, Ribeiro CHC, Kaiser M. Is the Clustering Coefficient a Measure for Fault Tolerance in Wireless Sensor Networks? IEEE International Conference on Communication, 2012.
6. Ribeiro P, Silva F, Kaiser M. Strategies for Network Motifs Discovery. Fifth IEEE International Conference on e-Science, 2009.
7. Smith LS, Austin J, Baker S, Borisyuk R, Eglen S, Feng J, Gurney K, Jackson T, Kaiser M, Overton P, Panzeri S, Quian Quiroga R, Schultz SR, Sernagor E, Smith VA, Smulders TV, Stuart L, Whittington MA, Ingram CD. The CARMEN e-Science pilot project: Neuroinformatics work packages. Proceedings of the UK e-Science All Hands Meeting, 591-598, 2007.

## Book chapters

1. Jiang S, Torres M, Pelta D, Krabben P, Kaiser M, Krasnogor N. Improving microbial strain design via multiobjective optimisation and decision making. In: *AI for Synthetic Biology 2*, 2018.
2. Bauer R, Breitwieser L, Di Meglio A, Johard L, Kaiser M, Manca M, Rademakers F, Talanov M, Tchitchigin AD. The BioDynaMo Project: Experience Report. In: Vallverdu, Mazzara, Talanov, Distefano & Lowe: *Advanced Research on Biologically Inspired Cognitive Architectures*. IGI Global, 2017.
3. Lim S, Hutchings F, Kaiser M. Modeling the impact of lesions in the brain. In: van Ooyen & Butz-Ostendorf, *Rewiring the Brain: A Computational Approach to Structural Plasticity in the Adult Brain*. Academic Press, 2017.
4. Bauer R, Kaiser M. Organisational Principles of Connectomes: Changes during Evolution and Development. In: Shigeno, Murakami & Nomura, *Brain Evolution by Design*. Springer, 2017.
5. Wang Y, Hutchings F, Kaiser M. Computational Modelling of Neurostimulation in Brain Diseases. *Progress in Brain Research*, Vol. 222, Amsterdam: Elsevier, pp. 191-228, 2015.
6. Kaiser M. Neuropathologies and Networks. *Encyclopedia of Computational Neuroscience*. Springer, 2014.
7. Kaiser M, Hilgetag C. Wiring principles, Optimization. *Encyclopedia of Computational Neuroscience*. Springer, 2014.
8. Kaiser M, Simonotto J. Limited Spreading: How Hierarchical Networks prevent the Transition to the Epileptic State. In *Steyn-Ross/Steyn-Ross: Modeling Phase Transitions in the Brain*". Springer, 2010.
9. Kaiser M, Simonotto J. Structural and Functional Dynamics in Cortical and Neuronal Networks. In: Dehmer /Emmert-Streib, *Analysis of Complex Networks: From Biology to Linguistics*". Wiley-VCH, 2009.
10. Kaiser M. Multiple-scale hierarchical connectivity of cortical networks limits the spread of activity. In: Soltesz/Stanley: *Computational Neuroscience in Epilepsy*". Academic Press, New York, 2008.
11. Hilgetag CC, Kaiser M. Organization and Function of Complex Cortical Networks. In: beim Graben/Zhou/Thiel/Kurths: *Lectures in supercomputational neuroscience: dynamics in complex brain networks*". Springer, Heidelberg, 2008.

## Book reviews

1. Kaiser M. Book review for 'Rao R: Brain-computer interfacing: an introduction. Cambridge University Press' in *ACM Computing Reviews*, 2014.
2. Kaiser M. Book review for 'Sporns O: Discovering the human connectome. MIT Press' in *ACM Computing Reviews*, 2012.
3. Kaiser M. Book review for 'Oliveira & Stewart: Writing Scientific Software: A Guide to Good Style. Cambridge University Press', *Higher Education Academy (HEA) Subject Centre for Information and Computer Sciences*, 2008.

## Other publications

1. Gibson F, Overton P, Smulders T, Schultz S, Eglén SJ, Ingram CD, Panzeri S, Bream P, Sernagor E, Cunningham M, Adams C, Echtermeyer C, Simonotto J, Kaiser M, Swan D, Fletcher M, Lord P. Minimum Information about a Neuroscience Investigation (MINI) Electrophysiology. *Nature Precedings* 1720.1, 2008.
2. Hilgetag CC, Kaiser M. Die Netzwerk-Struktur biologischer Systeme. *BIOforum*, (4):32-33, 2005.
3. Kaiser M. Spatial network growth: Generating small-world, scale-free, and multi-cluster

spatial networks. *Technical Report No. 1, IUB School of Engineering and Science, 2005*

### **Press coverage / Public engagement**

1. Great Exhibition Road Festival, 2025
2. Ones Changing the World Podcast, 2025  
<https://www.youtube.com/watch?v=Wge1gOdtYcg>
3. Nottingham TV interview, 2025  
<https://www.youtube.com/watch?v=03PIUGuh7t4>
4. Imperial Lates event, Imperial College London science fair, 2025
5. Interview for psychreg.org, 2021  
<https://www.youtube.com/watch?v=kQtSBYTJe9k>
6. 健康地老去 / Staying healthy as we age, Advance Medical, 2019  
<https://mp.weixin.qq.com/s/mj7j-Fw6BvRCGjEaiCNV-Q>
7. Video interview for the Alzheimer Research UK (ARUK) conference, 2019  
<https://vjdemencia.com/speaker/marcus-kaiser/>
8. How even our brains get 'slacker' as we age (author: Dr Yujiang Wang): BBC Radio 4 Today programme, Daily Mail, Daily Mirror, Der Standard, El Mundo, Sun, October 2016
9. Virtual brain surgery could personalise epilepsy treatment. *New Scientist*, December 2015
10. Brain Connectivity Leads Girls to Mature Faster than Boys. Daily Telegraph, Daily Mail, Correio Braziliense, Correio do Estado, Irish Independent, Dân Trí, 自由時報, December 2013
11. British Science Festival 2013: Comic about epilepsy and Science Exhibition, September 2013
12. British Science Festival 2013: How did a brain evolve?
13. Strategies for stopping flu spreading. *MIT Technology Review* & Lenta.ru, May 2012
14. Timing is everything. *U.S. News and Bloomberg Business*, January 2011
15. Stopping spreading: One link at a time. *BBSRC Business*, October 2008
16. Lange Leitungen. *Die Zeit*, 10 August 2006
17. BBC Newcastle radio interview. 1 August 2006
18. Peter Riesbeck: Mobile Eliten. *Berliner Zeitung*, 14 April 2005

### **INVITED TALKS**

#### Conference organization

Organizer of the symposium 'Brain Connectivity: From Structure to Function' for the annual meeting of the British Neuroscience Association. Liverpool, April 2009.

#### Invited speaker

- |         |  |
|---------|--|
| 4/2026  | Korea University, South Korea                    |
| 4/2026  | East China Normal University, Shanghai, China    |
| 2/2026  | Cyprus Institute of Neurology & Genetics, Cyprus |
| 11/2025 | Making Connections, Cambridge, UK                |
| 11/2025 | Oxford Biohacker Club, Oxford, UK                |
| 10/2025 | Newcastle University, UK                         |

7/2025 National University Hospital, Singapore  
 7/2025 East China Normal University, Shanghai, China  
 7/2025 Shanghai Mental Health Centre, China  
 7/2025 Hong Kong Baptist University, Hong Kong, China  
 7/2025 Focused Ultrasound Neuromodulation (FUN), Hong Kong, China  
 4/2025 Fudan University, China  
 3/2025 Brainbox webinar, Cyberspace  
 3/2025 Parkinson's UK neuromodulation training workshop, Nottingham, UK  
 2/2025 Cambridge University, UK  
 11/2024 Oxford University, UK  
 11/2024 Cambridge University, UK  
 11/2024 Foresight Neurotechnology seminar series, USA  
 7/2024 Hamburg University, Germany  
 7/2024 Southampton University, UK  
 5/2024 Lincoln University, UK  
 8/2023 Fudan University, Shanghai, China  
 8/2023 East China Normal University, Shanghai, China  
 8/2023 Jiao Tong University, Shanghai, China  
 1/2023 Korea University, Seoul, South Korea  
 12/2022 Nottingham Trent University, UK  
 12/2022 Birmingham University, UK  
 11/2022 Cambridge University, UK  
 11/2022 ANT-Neuro, Neuromeeting, Berlin, Germany  
 9/2022 Ernst Strüngmann Institute, Frankfurt, Germany  
 7/2022 City University London, UK  
 7/2022 Imperial College London, UK  
 5/2022 Newcastle University, UK  
 2/2022 NetWorkX Porto, Portugal  
 10/2021 Brain Innovation Days, panel discussion, UK  
 9/2021 University of Zurich, Switzerland  
 4/2021 Unexplored Neuroscience, online seminar  
 3/2021 Indian Institute of Technology, B.H.U. Campus, India  
 3/2021 Leeds University, UK  
 9/2020 Royal Society of Biology, UK  
 6/2020 Nottingham University, UK  
 5/2020 Keele University, UK  
 2/2020 Bristol University, UK  
 1/2020 University of Tübingen, Germany  
 1/2020 University of Aix-Marseille, France  
 12/2019 East China Normal University, Shanghai, China  
 11/2019 RWTH Aachen, Medical School, Germany  
 10/2019 Shanghai Tech University, iHuman Institute, China  
 7/2019 University of Luxembourg, Luxembourg  
 7/2019 University of Duisburg-Essen, Germany  
 4/2019 East China Normal University, Shanghai, China  
 3/2019 EPFL, Lausanne, Switzerland  
 3/2019 Blue Brain Project, Campus Biotech, Geneva, Switzerland  
 11/2018 Oxford Brookes University, UK  
 10/2018 Jiao Tong University, Rui Jin Hospital, China  
 2/2018 Nottingham University, UK  
 12/2017 East China Normal University, Shanghai, China

11/2017 Computational Neuroscience Winter School, Antibes, France  
 9/2017 Birkbeck University, London, UK  
 2/2017 Plymouth University, UK  
 12/2016 BrainModes Workshop, Belgium  
 8/2016 East China Normal University, Shanghai, China  
 6/2016 Intl Conference on Discrete Models of Complex Systems, Aveiro, Portugal  
 6/2016 'Bringing Big and Complex Data into Clinical Practice', Munich, Germany  
 6/2016 Leeds University, UK  
 5/2016 Lake Como Complex Networks Summer School, Italy  
 5/2016 York University, UK  
 2/2016 Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany  
 1/2016 Sussex University, UK  
 12/2015 Neuroscience R&D Technologies Conference, Barcelona, Spain  
 11/2015 COSMOS EU ITN Workshop, Florence, Italy  
 9/2015 Connectome Workbench (Chair of panel discussion), Cambridge, UK  
 4/2015 Birmingham University, UK  
 3/2015 Porto University, Portugal  
 1/2015 Leicester University, UK  
 8/2014 Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, China  
 4/2014 Cambridge University, UK  
 10/2013 Nottingham University, UK  
 6/2013 King's College London, UK  
 4/2013 Manchester University, UK  
 4/2013 CERN, Switzerland  
 2/2013 Freiburg University, Germany  
 5/2012 East China Normal University, Shanghai, China  
 2/2012 Warwick University, UK  
 2/2012 Nottingham Trent University, UK  
 9/2011 North-East Epilepsy Research Meeting, UK  
 6/2011 Porto University, Portugal  
 5/2011 Hong Kong Baptist University, China  
 4/2011 Korea University, South Korea  
 2/2011 Bristol University, UK  
 8/2010 Max-Planck-Institute for Brain Research, Frankfurt, Germany  
 5/2010 RIKEN Brain Science Institute, Tokyo, Japan  
 5/2010 Distinguished Lecture Series, Seoul National University, South Korea  
 5/2010 National Institute of Mathematical Sciences (NIMS), South Korea  
 4/2010 Korean Adv. Institute of Science & Technology (KAIST), South Korea  
 1/2010 Cambridge University, Department of Psychology, UK  
 11/2009 Workshop: Computational Brain, Leicester, UK  
 10/2009 Manchester University, School of Computer Science, UK  
 9/2009 International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Imperial College, London, UK  
 9/2009 North-East Epilepsy Research Meeting, UK  
 9/2009 Workshop: Mathematics for the Computational Brain, Ambleside, UK  
 7/2009 Computational Neuroscience Society (CNS) meeting, Berlin, Germany  
 5/2009 Opening Symposium, Department of Brain and Cognitive Sciences, Seoul National University, South Korea  
 2/2009 Edinburgh University, School of Informatics, UK  
 2/2009 Royal Edinburgh Hospital, UK  
 11/2008 Imperial College London, Hammersmith Hospital, fMRI seminar, UK

11/2008 Imperial College London:  
Workshop 'Complexity and Networks-Neuroscience', UK

10/2008 SAFECOMP: International Conference on Computer Safety, Reliability  
and Security (talk and panel discussion), Newcastle, UK

9/2008 Strathclyde Univ.: Workshop on Complexity in the Brain, Glasgow, UK

12/2007 Oxford University, John Radcliffe University Hospital, UK

10/2007 Oxford University, Said Business School, UK

3/2007 Northwestern Institute of Complex Systems: Complexity Conference,  
Northwestern University, USA

3/2007 Max-Planck-Institute for Brain Research, Frankfurt, Germany

2/2007 Okinawa Institute of Science and Technology, Japan

1/2007 Santa Fe Institute: Workshop on Network Robustness, New Mexico, USA

10/2006 Durham University, UK

8/2006 Edinburgh University, UK

6/2006 European Bioinformatics Institute: Workshop on Biological Networks, Industry  
Programme, Cambridge, UK

4/2006 Aston University, Birmingham, UK

8/2005 University of Dusseldorf, Dusseldorf, Germany

10/2004 Neurosciences Institute, San Diego, USA

8/2004 Ruhr-University Bochum, Bochum, Germany

6/2004 Mediterranean Institute for Adv. Studies (IMEDEA), Spain

Conference talks (selected for a talk by programme committees)

2024 Brainbox Initiative meeting, London, UK

2024 Focused Ultrasound Neuromodulation (FUN), Toronto, Canada

2024 Chinese Neuroscience Society Annual Meeting, Suzhou, China

2024 BrainNet workshop, KTH Royal Institute of Technology in Stockholm, Sweden

2023 Computational analysis and modelling for biomedicine, University of Surrey, UK

2023 NIHR UK Stroke Research Workshop, London, UK

2023 Midlands Epilepsy Research Day, Aston University, Birmingham, UK

2022 Advances in Theoretical and Computational Neuroscience, Nottingham, UK

2022 NetSci, Network Neuroscience workshop, Cyberspace

2021 NetSci, Network Neuroscience workshop, Cyberspace

2020 Dynamic Connectome symposium, Frankfurt, Germany

2020 Society of Neurobiology of Language, Cyberspace

2019 Alife Conference, Newcastle upon Tyne, UK

2019 Alzheimer Research UK conference, Harrogate, UK

2018 NetSci Conference, Paris, France

2017 American Epilepsy Society Conference, Washington D.C., USA

2017 European Focused Ultrasound (EUFUS) Conference, Leipzig, Germany

2017 Neurotechnology R&D Conference, London, UK

2017 Bernstein Conference, Göttingen, Germany

2017 NetSci Conference, Indianapolis, USA

2017 3R Meeting, Newcastle upon Tyne, UK

2017 Computing At Schools North East (CASNE), Newcastle upon Tyne, UK

2017 British Neuroscience Association Conference, Birmingham, UK

2017 Computational Neurology Conference, Newcastle upon Tyne, UK

2016 INCF Neuroinformatics Conference, Reading, UK

2016 European Conference for Mathematical and Theoretical Biology, Nottingham, UK

2015 Neuroscience Research Technologies, Barcelona, Spain  
 2015 ISMAR International Neuroimaging Conference, Shanghai, China  
 2015 NetSci Conference, Zaragoza, Spain  
 2014 Computational Neuroscience and Neuroinformatics workshop, Edinburgh, UK  
 2014 Mathematics of Brain Dynamics workshop, Birmingham University, UK  
 2013 American Epilepsy Society Annual Meeting, Washington D.C., USA  
 2012 eFutures: Building Brains Workshop, Edinburgh University, UK  
 2012 Opening symposium, BCS MRI Center, Seoul National University, Korea  
 2012 Fusion Science Workshop in Translational Neuroimaging, Korea University, Seoul, Korea  
 2012 Organization of hierarchical neural networks, Bremen, Germany  
 2011 NIPS Satellite: Linking Brain Structure to Function, Granada, Spain  
 2011 Computational Neuroscience Society (CNS) meeting, Stockholm, Sweden  
 2011 Brain Connectivity Workshop (BCW) annual meeting, Montreal, Canada  
 2011 British Neuroscience Association (BNA) annual meeting, Harrogate, UK  
 2010 International Net-Works Conference (keynote speaker), Zaragoza, Spain  
 2010 UK INCF Neuroinformatics meeting, Edinburgh, UK  
 2009 British Neuroscience Association (BNA) annual meeting, Liverpool, UK  
 2009 International Conference on Network Science (NetSci 2009), Venice, Italy  
 2008 International Conference on Network Science (NetSci 2008), Norwich, UK  
 2007 Mathematical Neuroscience Network Meeting, Warwick University, UK  
 2007 Society for Neuroscience Annual Meeting, San Diego, USA  
 2006 Computational Neuroscience Society - Annual Meeting, Edinburgh, UK  
 2006 Theoretical Neuroscience Meeting, Bristol, UK  
 2005 Society for Neuroscience Annual Meeting, Washington D.C., USA  
 2005 Theoretical Neuroscience Meeting, Loughborough, UK  
 2004 & 2005 Intl. Conference on Cognitive and Neural Systems (ICCN), Boston, USA