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CAREER PLACEMENTS

Academic positions

2021- Professor of Biomedical Engineering
University of Oxford
2022- Senior Research Fellow
St Hilda's College, Oxford
2017- Stipendiary lecturer in Engineering
St Hilda's College, Oxford
2016- Head of Diffusion Analysis
WIN/FMRIB Centre, Oxford, UK
2015-2021 Associate Professor
University of Oxford
2014-2019: MRC Career Development Fellow
FMRIB Centre, Oxford, UK
2009-2013: Research Associate
FMRIB Centre, Oxford, UK
2006-2009: Post-doctoral Researcher
FMRIB Centre, Oxford, UK
2003-2006: PhD candidate
INSERM/Ecole Centrale Paris, France

Non-Academic position

2002 General Electric Medical Systems, France
X-Ray tomography

Education

2007 Ph.D. NeuroImaging, *Ecole Centrale Paris*
2002 M.Sc. Image and signal processing, *Ecole Normale Supérieure de Cachan*
2002 M.Sc. Engineering and Applied Mathematics, *Ecole Centrale Paris*

RESEARCH

Publications:

Total # of journal publications (incl. peer-reviewed and preprints) = 158
Google scholar h-index = 84, >36,000 citations
Up-to-date publications list: www.fmrib.ox.ac.uk/~saad/publications.html

Research software output

FMRIB Software Library (major contributor). FSL is used in over 1000 universities and hospitals worldwide (160,000 downloads in the last 5 years). FSL is licensed by 7 of the top 10 pharmaceutical companies. https://fsl.fmrib.ox.ac.uk/fsl/fslwiki

Contributions to FSL:

- BedpostX, ProbtrackX: One of the major diffusion MRI tractography tools
- Eddy-QC: Automated quality assessment of diffusion MRI
- GPU-accelerated modelling of diffusion in FSL
- FSL tools for analysing post-mortem diffusion SSFP data
- XTRACT: tool for automated tractography in humans and macaques
- FSL-MRS - end-to-end spectroscopy toolbox www.fsl-mrs.com

Contributions to Big data project pipeline tools:

- Human Connectome Project diffusion pipeline
- UK Biobank Imaging pipeline
- Developing HCP pipeline

Grants/Fellowships

2023-2028	NIH UM1 BRAIN CONNECTS, Center for Mesoscale Connectomics: A Multimodal, Cross species Approach, $701K USD, **Role=PI** (Oxford)
2021-2026	Wellcome Senior Research Fellowship, £1.2M, **Role=PI**
2021	WIN Seed Grant, "Diffusion-weighted MR spectroscopy as a novel marker of myelination", £9,625. **Role=Co-investigator**
2020	WIN Seed Grant, "Spinal cord imaging to identify the septum of the posterior median sulcus", £10K GBP, **Role=Co-investigator**
2020-2025	Wellcome Collaborative Award, "Integrative imaging of brain structure and function in populations and individuals", £3.8M, **Role=Co-Lead**
2017-2020	NIH Supplement, “HCP Aging”, $563K USD. **Role=PI**
2015	MRC Proximity to discovery, “Deep learning knowledge exchange”, £3.4K GBP **Role=PI**
2014-2019	MRC Career Development Award, “Imaging the spatial organisation of brain connections”, ~£800K GBP. **Role = PI**
2017-2020	MRC grant, “Developing slow-wave activity saturation as a marker of depth of anaesthesia”, £546K GBP. **Role=Co-investigator**
2014-2017	EPSRC grant, “Anatomy-driven brain connectivity mapping”, £550K GBP. Role=**Co-investigator**
2014-2015	MRC Confidence in concept grant, £34K GBP. Role=**Co-investigator**
2009-20114	Canadian Institute of Health Research Grant, (~$600K CAD). Role=**Co-investigator**
2009-2012	MRC Grant, “Biophysical modelling of white matter structure”, ~£400K GBP. Role=**Co-investigator**

2005 Fondation ARC (France), grant, €12K EUR. Role=**PI**
1999-2002 Studentship, Moroccan government (~8K GBP)

Awards and prizes

2021 Good citizen award (Contribution to lab life during a pandemic), WIN/FMRIB, Oxford
2020 Good citizen award (Teaching), WIN/FMRIB, Oxford
2017 Thomas Willis Intermediate Career Researcher prize (first prize, Oxford, £1000)
2013 Thomas Willis Junior Career Researcher prize (runner up, Oxford, £500)
2007 Best Methods Paper Award in Neuroimage, OHBM (Chicago, USA)
2006 Best Poster Award, ISMRM (Seattle, USA)
1997 Winner of the National Olympiads of Mathematics (prize=$10,000 USD), Morocco

Intellectual Property

- Patent: Perception Loss Detection. 2013/179048, R Mhuircheartaigh, I Tracey, K Warnaby, **S Jbabdi**, R Rodgers.
- FSL commercial licence (Inventor).

External invitations to speak

Summary: Over 40 invitations to speak at external lab seminars, workshops, and conferences worldwide since 2006. Selected recent examples:

- ESMRMB Workshop on diffusion MRI and MRS, September 2023, Cardiff, UK
- Keynote at ISMRM Workshop on Diffusion Imaging, May 2021 (virtual)
- Educational lecture at OHBM conference, June 2021 (virtual)
- Invited lecture to workshop on comparative anatomy, April 2019, Düsseldorf, Germany
- Educational lecture at OHBM, June 2019, Rome, Italy
- Invited seminar lecture at MGH, Harvard, October 2020 (virtual)
- Speaker and panellist, Annual Meeting on Imaging and Electrophysiology (AMIE), September 2020 (virtual)

CITIZENSHIP

Journals-related activities

Member of the Board of Reviewing Editors at eLife
Former Associate Editor at PLoS Computational Biology.

Former member of the editorial board at Neuroimage.
Member of the programme committee for CDMRI (a MICCAI workshop).
Editor of a 2018 Neuroimage Special Issue on Brain Parcellation
Ad hoc journal reviewer (including Science, Nature Neuro/Comm/Methods, eLife, PNAS, J Neuroscience, Neuroimage, MRM, etc.)
Regular reviewer of grant applications both nationally and internationally.

Organisation of scientific meetings

Organised (and lectured) PyTreat: Python programming retreat. Oxford 2018, 2020, 2021
Organised (and lectured) workshop at British Neuroscience Association symposium (UK) 2009/2013/2015
Organised (and lectured) an ESMRMB workshop (Oxford, UK) 2010
Organised (and lectured) QBIN workshop (Montreal, Canada) 2010
Co-organiser and teacher at the annual FSL course (2007-present) + Organised mini-FSL courses in Mannheim 2009, Montreal 2009, Montreal 2010, Pécs (Hungary) 2012

Institutional responsibilities

2019 – present	Public Engagement with Primary schools science advisor, WIN/FMRIB, Oxford
2015 – 2018	Graduate Studies Committee, Clinical Neurosciences, University of Oxford
2017 – present	Graduate Student Advisor, St Hilda's college, University of Oxford
2017 – present	Undergraduate admissions, collections, tutoring, pastoral cafe, St Hilda's college, University of Oxford
2006 – 2012	Seminars organiser, FMRIB Centre, University of Oxford

Public engagement

Primary school activities/workshops (Oxford 2019 and Banbury 2022)
Football on the brain. Helped design material and activities (2022)
Play about history of neuroscience (actor), Oxford 2018/2019
Talking about brains to pre-school children (4 y.o.), Sanfield Nursery, Oxford (2017)
Oxford Technology Showcase, Said Business school, Oxford (2016)
SET for Britain, sharing science with MPs, Westminster (2016)
Public lecture, St Edmund Hall College, Oxford (2015)
Public lecture, St Cross College, Oxford (2015)
Speech at Oxford Alumni meeting, Oxford (2013)

TEACHING

University lecturing and classes given

Undergraduate lecturing:

- Lecturer (tutor) in Engineering Sciences at St Hilda's, teaching the Maths curriculum (approx. 14 tutorials per term, since 2017)
- Oxford Biomedical Sciences. 1st year lectures in Maths and Stats (approx. 4 per year) + setting the syllabus (since 2016)
- Lecturer in applied Mathematics, Ecole Centrale Paris (approx. 10 lectures/year between 2003-2006) and lecturer in image analysis (approx. 5 classes/year), Ecole Centrale Paris (2005-2006)

Graduate lecturing

- Oxford Centre for Doctoral Training (LSI/ONBI): teaching (4 lectures/year) + setting syllabus for courses on signal processing, Bayesian inference, and linear algebra (2014-2019)
- WIN-FMRIB Graduate Programme: lecturing + setting the syllabus (every year since 2007). This is a course on the physics and analysis of imaging organised by the Wellcome Centre for Integrative Neuroimaging. I am in charge of a section of the course on advanced analysis methods.
- FSL course : lecturing + setting the syllabus (every year since 2007). This is an international yearly course on the FSL software produced by the WIN Analysis Group. The course started in 1998 with an average attendance of 150 per course, including students and postdocs, medical practitioners, and industry professionals.

Supervisions/Examinations

Supervised or is (co-)supervising 7 MSc students, 13 PhD students (8 graduated), and 10 Post-docs (3 have now secured tenured positions).
Examined 12/10 DPhil transfers/confirmations, 10 DPhil viva voce, and 6 external PhDs.