

# S. Sophie Schauman

Wellcome Centre for Integrative NeuroImaging  
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## Education

2016 -	<b>D.Phil.</b> Biomedical Imaging CDT, University of Oxford  Thesis title: Accelerated Vessel-Selective Cerebral Blood Flow Imaging Using Magnetic Resonance Imaging  Supervisors: Prof. Peter Jezzard, Dr. Mark Chiew, Dr. Thomas Okell
2013 - 2016	<b>B.Sc.</b> Physics with Medical Physics, University College London  Final year project: Comparison of Different X-ray Imaging Techniques in Breast Cancer  Supervisors: Prof. Robert Speller, Dr. Robert Moss  1st Class Degree and Dean's List Commendee (top 5% in graduating class)

## Awards & Scholarships

2016 - 2020	Doctoral Studentship funded through EPSRC Doctoral Training Centre
2018, 2019	ISMRM Trainee Stipend Award
2018	BC-ISMRM Student Stipend
2018	2nd Best Oral Presentation - BCISMRM Postgraduate Symposium
2018	Public Engagement Prize - University of Oxford, Doctoral Training Centre
2018	Magnetic Moment Finalist - ISMRM Public Engagement Competition
2016	The Dean's List - UCL Undergraduate Award of Excellence
2013	The Jubilee Medal - High School Award for Excellence to Student in Graduating Class

## Publications

1. **Schauman S.S.**, Chiew M., Okell T.W. "Highly Accelerated Vessel-Selective Arterial Spin Labeling Angiography using Sparsity and Smoothness Constraints", 2019, Magnetic Resonance in Medicine,10.1002/mrm.27979

## Conference Abstracts with Oral Presentations

1. **Schauman S.S.**, Chiew M., Okell T.W. "*Highly Accelerated Dynamic 2D and 3D Vessel-Encoded Arterial Spin Labelling Angiography*", 2019 ISMRM Annual Meeting, Montreal, Canada
2. **Schauman S.S.**, Chiew M., Okell T.W. "*A Five Minute 4D Vessel-Encoded Arterial Spin Labelling Angiography Scan*", 2019 BC-ISMRM Postgraduate Symposium, Birmingham, UK
3. **Schauman S.S.**, Chiew M., Okell T.W. "*Heavily undersampled radial acquisition of dynamic vessel-encoded arterial spin labelling angiograms reconstructed in a compressed sensing framework*", 2018 BC-ISMRM Annual Meeting, Oxford, UK
4. **Schauman S.S.**, Chiew M., Okell T.W. "*Vessel-encoding improves compressed sensing reconstruction of arterial spin labelling angiograms*", 2018 BC-ISMRM Postgraduate Symposium, London, UK
5. **Schauman S.S.**, Biffi B., Schievano S., Bruse J.L., Arthurs O.J., Sury M.R.J. "*Changes in tracheal shape during gestation*", 2016 British Journal of Anesthesia Research Forum Winter Meeting, Glasgow, UK

## Conference Abstracts with Poster Presentations

1. **Schauman S.S.**, Okell T.W., Chiew M., "*Precision reconstruction of vessel-encoded ASL angiography*", 2019 BC-ISMRM Annual Meeting, Sheffield, UK
2. Woods J.G., **Schauman S.S.**, Chiew M., Chappell M.A., Okell T.W. "*Optimization of time-encoded pseudo-continuous ASL angiography with a variable flip-angle scheme*", 2019 ISMRM Annual Meeting, Montreal, Canada
3. **Schauman S.S.**, Chiew M., Okell T.W. "*4D Vessel-Encoded pCASL Angiography in a Five-Minute Scan*", 2019 UM Workshop on Arterial Spin Labelling, Ann Arbor, USA
4. **Schauman S.S.**, Chiew M., Okell T.W. "*Accelerated Acquisition of Vessel-Encoded Arterial Spin Labelling Angiograms with Compressed Sensing*", 2018 ISMRM-ESMRMB Joint Annual Meeting, Paris, France

## Other Experience

### Teaching/Demonstrating

2019	Presenter, Advanced MR Physics Lecture Series (Compressed Sensing and Low-Rank Methods) FMRIB, University of Oxford
2018	Demonstrator, Medical Imaging (GLM and Parallel Imaging) EPSRC-MRC Centre for Doctoral Training in Biomedical Imaging, University of Oxford
2018	Assistant demonstrator, MR Physics Graduate Course (Image Formation, Fast Imaging) FMRIB, University of Oxford
2018, 2019	Demonstrator, Advanced Medical Imaging (Compressed Sensing) EPSRC-MRC Centre for Doctoral Training in Biomedical Imaging, University of Oxford
2017	Demonstrator, Introduction to Matlab EPSRC-MRC Centre for Doctoral Training in Biomedical Imaging, University of Oxford

### Public Engagement

2019	Public engagement ambassador for the Wellcome Centre for Integrative Neuroimaging  - Assistant organiser of <i>SHElock Holmes - The Brain Detective</i> , a day about neuroimaging for 11-14 year old girls  - Member of developing team of <i>The Big Brain Roadshow</i> taking Neuroscience to local schools  - Developer of <i>The Imaged Brain</i> , an interactive stall explaining 2D Fourier Transforms  - Cast member of the play <i>21st Century Phrenology</i>
2018	Public engagement through board games  - Developed modified version of <i>Labyrinth</i> to showcase different imaging techniques.  - Presented at <i>ATOM Science Festival</i> , Abingdon, UK

### Research

2016	Summer Project Assistant at Great Ormond Street Hospital, London, UK  Image segmentation and analysis of MR data
2015	Summer Junior Research Scientist at Nikon Metrology, Tring, UK  R&D on industrial CT systems
2014	Summer Research Assistant on joint project between  University College London (London, UK) and Aalto University (Helsinki, Finland)  Development and testing of Near Infrared Spectroscopy system and phantom

### Administration/Leadership

2019	Organising Committee, Advanced MR Physics Lecture Series, FMRIB, University of Oxford
2018-2019	President of Wolfson College Boat Club