S. Sophie Schauman

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Education

2016 - **D.Phil.** Biomedical Imaging CDT, University of Oxford

Thesis: Accelerated Vessel-Selective Cerebral Blood Flow Imaging Using Magnetic Resonance Imaging

Supervisors: Prof. Peter Jezzard, Dr. Mark Chiew, Dr. Thomas Okell

2013 - 2016 **B.Sc.** 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 Honours and Dean's List Commendee (top 5% in graduating class)

Research Work

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

Teaching

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 *SHElock Holmes - The Brain Detective*, a day about neuroimaging for 11-14 year old girls
- Member of developing team of *The Big Brain Roadshow* taking Neuroscience to local schools
  - Developer of *The Imaged Brain,* an interactive stall explaining 2D Fourier Transforms
  - Cast member of the play *21st Century Phrenology*

2018 Public engagement through board games

- Developed modified version of *Labyrinth* to showcase different imaging techniques.
  - Presented at *ATOM Science Festiva*l, Abingdon, UK

Awards & Scholarships

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

Oral Conference Presentations

- **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
- **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
- **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
- **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
- **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

Other Conference Abstracts

- 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
- **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
- **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