

Dr Giulio Ferrazzi, Academic CV

PERSONAL INFORMATION

email giulio.ferrazzi@ospedalesancamillo.net
date of birth 27 April 1987
cur. affiliation IRCCS San Camillo Hospital

PERSONAL STATEMENT

A skilled and motivated Scientist in the field of sequence development applied to brain/cardiac MRI. Experienced in implementing and overseeing new ideas, has a proven track record of [scientific publications](#).

RESEARCH INTERESTS

- Medical physics.
- Multimodal imaging technology.
- Prospective and retrospective motion correction.
- MR sequence development.
- Image reconstruction.
- Image registration.

WORKING EXPERIENCE

*Neuroimaging Lab
Coordinator* *Apr. 2020 – Present* IRCCS San Camillo, Venice, Italy
Duties: *Lab activity coordination - Development of acquisition/processing techniques applied to brain MRI - Scientific consultancy.*

Researcher *Jan. 2019 – Mar. 2020* King's College London, UK
Research topics: *Sequence development in free-breathing cardiac perfusion MRI.*

Researcher *July 2017 – Dec. 2018* PTB, Berlin, Germany
Research topics: *Sequence development for cardiac MRI at Ultra High Field (7 Tesla).*

Researcher *Aug. 2015 – June 2017* King's College London, UK
Research topics: *Sequence development for motion robust fetal and neonatal MRI as part of the [Developing Human Connectome \(DHCP\)](#) project.*

EDUCATION

PhD candidate	July 2012 – July 2015	King's College London, UK
	Thesis: <i>An exploration of methods for performing resting state fMRI in the human fetus</i> . Supervisor: Prof. Joseph HAJNAL - jo.hajnal@kcl.ac.uk .	
M.Sc. in Biomedical Engineering	Oct. 2009 – April 2012	University of Padua, Italy
	Thesis: <i>Numerical modeling of Atomic Force Microscopy (AFM) towards estimation of material parameters from fibroblast cells</i> . Grade: 107/110 .	
Bachelor in Biomedical Engineering	Sept. 2006 – Sept. 2009	University of Padua, Italy
	Thesis: <i>Melanocytic Lesion Tracking in Noisy video sequences</i> . Grade: 104/110 .	

OTHER INFORMATION

Academic Services	Bachelor and Master students supervision. PhD students co-supervision.	
	Organizing laboratories for Bachelor and Master students.	
Professional Services	Ad hoc reviewer for: <i>NeuroImage</i> , <i>Magnetic Resonance in Medicine (MRM)</i> , <i>Journal of Magnetic Resonance Imaging (JMRI)</i> and <i>Neuroscience and Biomedical Engineering</i> .	
Awards	2020	· SCMR travel award.
	2019	· Magna Cum Laude Award at ISMRM Montréal.
	2019/16/15/14	· ISMRM travel award.
	2017	· Guarantors of Brain travel award (£1000).
	2014	· Summa Cum Laude Award at ISMRM Milan.
	2013	· Magna Cum Laude Award at ESMRMB Toulouse.
Courses	2013	· EIBIR Summer School, Dubrovnik, Croatia.
	2012	· FSL Course, Bristol, UK.
Exchange period, A.Y. 2010-11	Exchange student at the Royal Institute of Technology (KTH), Stockholm, Sweden.	

PUBLICATIONS, JOURNAL PAPERS

- Ferrazzi* and Bassenge* et al. **MRM (in Press)**, *Autocalibrated cardiac tissue phase mapping with multiband imaging and k-t acceleration*.
- Ferrazzi et al. **MRM 2019 Vol 81(2):1016-1030**, *Auto-calibrated Multiband CAIPIRINHA with through-time encoding: proof of principle and application to cardiac tissue phase mapping*.

- Ferrazzi et al. **MRM 2018 Vol 80(1):137-146**, *An efficient sequence for fetal brain imaging at 3T with enhanced T_1 contrast and motion robustness.*
- Nunes* and Ferrazzi* et al. **MRM 2018 Vol 80(1):279-285**, *Inner-volume echo volumar imaging (IVEVI) for robust fetal brain imaging.*
- Ferrazzi* and Nunes* et al. **NeuroImage 2016 Vol 15(127):298-306**, *An exploration of task based fMRI in neonates using echo-shifting to allow acquisition at longer T_E without loss of temporal efficiency.*
- Ferrazzi et al. **NeuroImage 2014 Vol 1(101):555-68**, *Resting State fMRI in the moving fetus: A robust framework for motion, bias field and spin history correction.*
- Cordero-Grande et al. **MRM 2020 Vol 84(2)**: *Motion-corrected MRI with DISORDER: Distributed and incoherent sample orders for reconstruction deblurring using encoding redundancy.*
- Wink et al. **MRM 2020 Vol 84(1):327-338**: *4D flow imaging with UNFOLD in a reduced FOV.*
- Wink et al. **MRM 2019 Vol 82(3):886-900**: *4D Flow Imaging with 2D-Selective Excitation.*
- Gaspar et al. **MRM 2018 Vol 81(1):477-485**: *Optimizing maternal fat suppression with constrained image-based shimming in fetal MR.*
- Hutter et al. **MRM 2018 Vol 79(3):1447-1459**: *Quiet Echo Planar Imaging for Functional and Diffusion MRI.*
- Kainz et al. **In Proc. ISBI 2015 pp. 849-852**: *Adaptive scan strategies for fetal MRI imaging using slice to volume techniques.*

CONFERENCE PAPERS

- Ferrazzi et al. **In Proc. SCMR 2020 (Talk)**: *First-pass multi-contrast and multi-phase myocardial perfusion using simultaneous multi-slice imaging.*
- Ferrazzi et al. **In Proc. ISMRM 2019 (Talk)**: *Autocalibrated multiband CAIPIRINHA with k-t-acceleration: Towards the complete spatio-temporal coverage of the heart motion in one single breath-hold.*
- Ferrazzi et al. **In Proc. ISMRM 2018 (E-Poster)**: *Dynamic Auto-calibrated Multiband CAIPIRINHA: proof of principle and application to cardiac tissue phase mapping.*
- Ferrazzi et al. **In Proc. ISMRM 2017 (Traditional Poster)**: *An optimised 2D MPRAGE sequence for T_1 contrast in the fetal brain: application to slice to volume reconstruction and multiband acceleration.*
- Nunes* and Ferrazzi* et al. **In Proc. ISMRM 2017 (E-Poster)**: *Motion-Robust Fetal Brain Imaging using Inner Echo Volumar Imaging.*
- Ferrazzi et al. **In Proc. ISMRM 2016 (E-Poster)**: *Revisited Multislice Distributed Inversion Recovery towards an Efficient Neonatal MR Examination.*
- Ferrazzi et al. **In Proc. ESMRMB 2015 (Talk)**: *An investigation of Multi-Band imaging for rs-fMRI in the fetus.*
- Ferrazzi* and Nunes* et al. **In Proc. ISMRM 2015 (E-Poster)**: *An exploration of task based fMRI in neonates using echo-shifting to allow acquisition at longer T_E without loss of temporal efficiency.*
- Nunes* and Ferrazzi* et al. **In Proc. ISMRM 2015 (E-Poster)**: *Combined Echo Volumar Imaging (EVI) and Localized Excitation for Motion Insensitive Fetal fMRI.*
- Ferrazzi et al. **In Proc. OHBM 2014 (Traditional Poster)**: *Resting State fMRI in the moving fetus: a robust framework for motion, bias field and spin history correction.*

- Ferrazzi et al. **In Proc. ISMRM 2014 (Talk)**: *Resting State fMRI in the moving fetus: a robust framework for motion and spin history correction.*
- Ferrazzi et al. **In Proc. ESMRMB 2014 (Talk)**: *Resting State fMRI in the moving fetus: a robust framework for motion correction.*

OTHER CONFERENCE PROCEEDINGS

- McElroy et al. **In Proc. SCMR 2020 (Power Pitch)**: *Combined simultaneous multi-slice bSSFP and compressed sensing for first-pass myocardial perfusion imaging at 1.5T with high spatial resolution and coverage.*
- Price et al. **In Proc. ISMRM 2019 (Power Pitch)**: *The developing Human Connectome Project (dHCP): fetal acquisition protocol.*
- Schmitter et al. **In Proc. ISMRM 2019 (E-Poster)**: *Auto-calibrated Simultaneous Multi-Slice Pulse-Wave Velocity Imaging.*
- Wink et al. **In Proc. ISMRM 2019 (E-Poster)**: *On the Effective Centre of Excitation and the Point of Gradient Moment Expansion for 2D-Selective Excitation in the Presence of Flow.*
- Wink et al. **In Proc. ISMRM 2018 (E-Poster)**: *4D Flow Imaging with Reduced Field-of-Excitation.*
- Wink et al. **In Proc. ISMRM 2018 (Traditional Poster)**: *2D selective excitation with UNFOLD for 4D Flow Imaging.*
- Cordero et al. **In Proc. ISMRM 2018 (Power Pitch)**: *Spin And Field Echo (SAFE) dynamic field correction in 3T fetal EPI.*
- Cordero et al. **In Proc. ISMRM 2017 (Talk)**: *Motion correction in volumetric brain imaging based on DISORDER: Distributed and Incoherent Sample Orders for Reconstruction Disentanglement using Encoding Redundancy.*
- Abaei et al. **In Proc. ISMRM 2016 (E-Poster)**: *A Brain Resting State network specific T_2^* Study in neonatal infants.*
- Gaspar et al. **In Proc. ISMRM 2016 (E-Poster)**: *Improving functional imaging of the fetal brain using constrained image-based shimming to suppress maternal fat.*
- Price et al. **In Proc. ISMRM Multiband Workshop 2015 (Talk)**: *An investigation of Multi-Band imaging for rs-fMRI in the fetus.*
- Abaei et al. **In Proc. ISMRM 2015 (Poster)**: *Investigation of optimal echo time for resting-state fMRI acquisition in Newborn infants.*