ECTRIMS-MAGNIMS fellowship programme
Awardees fellows

2019 Awardees

Fellow: Rosa Cortese

Research Topic: Towards a better understanding of MOG-Antibody-associated disease and new MAGNIMS MRI criteria.
Home Institution: Queen Square Multiple Sclerosis Centre (QSMSC), Department of Neuroinflammation, University College London, Institute of Neurology, London, UK
Host Institution: Department of Medicine, Surgery and Neurosciences, University of Siena
Mentors: Profs Nicola De Stefano and Olga Ciccarelli

Fellow: Lukas Haider

Research Topic: "Dirty"Virchow-Robin Spaces in Controls and Multiple Sclerosis
Home Institution: Department of Biomedical Imaging and Image Guided Therapy, Medical University of Vienna
Host Institution: Queen Square Multiple Sclerosis Centre (QSMSC), Department of Neuroinflammation, University College London, Institute of Neurology, London, UK
Mentors: Frederik Barkhof, Declan Chard and Olga Ciccarelli

2018 Awardees

Fellow: Margareta Clarke

Research Topic: Iron rims around multiple sclerosis lesions. A new MRI marker of disease activity and progression?
Home Institution: Nottingham University Hospitals NHS Trust and University of Nottingham, Nottingham, United Kingdom
Host Institution: Hospital Universitari Vall d'Hebron, Vall d'Hebron Research Institute, Autonomous University of Barcelona, Barcelona, Spain
Mentors: Prof Alex Rovira and Dr Deborah Pareto

Fellow: Alberto Calvi

Research Topic: Slowly Evolving Lesions (SELs) in multiple sclerosis
Home Institution: Multiple Sclerosis Centre, IRCCS Fondazione Ca' Granda, Ospedale Maggiore Policlinico, University of Milan, Italy
Host Institution: Queen Square Multiple Sclerosis Centre, National Hospital for Neurology and Neurosurgery, University College of London, UK
Mentor: Prof. Frederik Barkhof, Prof Ciccarelli Olga and Dr Ferran Prados

2017 Awardees

Fellow: Soheil Damangir, PhD

Research Topic: Optimizing crowd-sourced solutions toward generating large reference datasets for WM lesion segmentation in MS
Home Institution: Karolinska Institutet, Department of Neurobiology Care Sciences and Society. Stockholm. Sweden
Host Institution: VU University Medical Center, Amsterdam, Netherlands, with collaboration at the Vall d'Hebron University Hospital, Barcelona, Spain
Mentor: Dr. Hugo Vrenken and Prof. Frederik Barkhof
Fellowship Duration: 1 year
Present Institution:
Articles:

Fellow: Marcello Moccia, MD

Research Topic: Improving longitudinal spinal cord atrophy measurements for clinical trials in multiple sclerosis by using the Generalised Boundary Shift Integral (GBSI)
Home Institution: Multiple Sclerosis Clinical Care and Research Centre, Department of Neuroscience, Federico II University of Naples, Italy.
Host Institution: UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
Mentor: Prof. Olga Ciccarelli and Prof. Frederik Barkhof
Fellowship Duration: 1 year
Present Institution (after the fellowship): Research student, NMR Research Unit, Queen Square Multiple Sclerosis Centre, Department of Neuroinflammation, Institute of Neurology, University College of London, United Kingdom.
Articles:

2016 Awardees

Fellow: Alessandro d'Ambrosio, MD

Research Topic: Relating functional connectivity to cognition in multiple sclerosis: from stationary to time-varying analysis of strategic large-scale networks
Home Institution: MS center, Division of Neurology, Department of Medical, Surgical, Neurological, Metabolic and Aging Sciences, University of Campania "Luigi Vanvitelli", Naples, Italy.
Host Institution: Neuroimaging Research Unit, INSPE, Division of Neuroscience, San Raffaele Scientific Institute and Vita-Salute San Raffaele University, Milan, Italy
Mentor: Prof. Massimo Filippi
Fellowship Duration: 1 year
Present Institution: PhD student. Neuroimaging Research Unit, INSPE, Division of Neuroscience, San Raffaele Scientific Institute and Vita-Salute San Raffaele University, Milan, Italy
Articles:

Fellow: Sara Collorone, MD

Research Topic: To investigate how longitudinal changes in Structural Cortical Networks relate to disease evolution in Clinically Isolated Syndrome using 3D T1-weighted high-resolution scans from the MAGNIMS CIS cohort
Home Institution: Department of Neurology and Psychiatry. Policlinico Umberto I. "Sapienza" University of Rome. Rome
Host Institution: UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
Mentor: Dr. Ahmed Toosy and Prof. Frederik Barkhof
Fellowship Duration: 1 year
Present Institution: Honorary Clinical Research Associate and part-time PhD student Queen Square Multiple Sclerosis Centre. Department of Neuroinflammation. Institute of Neurology. NMR Unit. UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
Articles:

2015 Awardees

Fellow: Mohammad Aboulwafa, MD

Research Topic: Whole-cord and voxel-based assessment of cervical cord atrophy in MS patients with different clinical phenotypes: a multi-centre assessment
Home Institution: Department of Neurology. Al-Azhar University. Cairo. Egypt
Host Institution: Neuroimaging Research Unit, INSPE, Division of Neuroscience, San Raffaele Scientific Institute and Vita-Salute San Raffaele University, Milan, Italy
Mentor: Prof. Massimo Filippi
Fellowship Duration: 1 year
Present Institution: Graduate Student. Department of Neurology. Al-Azhar University. Cairo. Egypt
Articles:

Fellow: Arman Eshaghi, MD

Research Topic: To explore imaging phenotypes of patients with multiple sclerosis using 4-dimensional voxel-based morphometry
Home Institution: Tehran University of Medical Sciences, Tehran, Iran
Host Institution: UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
**Mentor:** Prof. Olga Ciccarelli
Fellowship Duration: 1 year
Present Institution: PhD student. UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
Articles:

- Eshaghi A, Wottschel V, Cortese R, Calabrese M, Sahraian MA, Thompson AJ, Alexander DC, Ciccarelli O. Gray matter MRI differentiates neuromyelitis optica from multiple sclerosis using random forest. Neurology. 2016 Dec 6;87(23):2463-2470.
- Eshaghi A, Bodini B, Ridgway GR, García-Lorenzo D, Tozer DJ, Sahraian MA, Thompson AJ, Ciccarelli O. Temporal and spatial evolution of grey matter atrophy in primary progressive multiple sclerosis. Neuroimage. 2014 Feb 1;86:257-64

2014 Awardees

Fellow: Mariano Cabezas Grebol, PhD
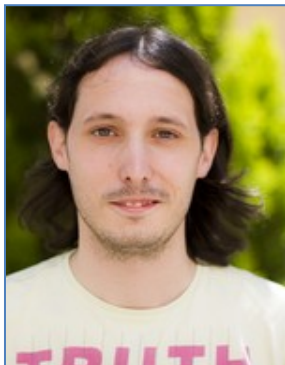
Research Topic: Automatic detection and analysis of new lesions in serial MRI of MS patients
Home Institution: Institut de Recerca en Visió Per Computador i Robòtica (Vicorob). Universitat de Girona. Girona
Host Institution: Hospital Universitari Vall d'Hebron, Barcelona, Spain
Mentor: Prof. Alex Rovira
Fellowship Duration: 1 year
Present Institution: Institut de Recerca en Visió Per Computador i Robòtica (Vicorob). Universitat de Girona. Girona
Articles:

- Cabezas M, Corral JF, Oliver A, Díez Y, Tintoré M, Auger C, Montalban X, Lladó M, Pareto D, Rovira À. Improved Automatic Detection of New T2 Lesions in Multiple Sclerosis Using Deformation Fields. AJNR Am J Neuroradiol. 2016 Jun 9

Fellow: Yaou Liu, MD, PhD

Research Topic: Validation of deep gray matter atrophy measurement in Multiple Sclerosis for multi-center studies: a MUSCAT project
Home Institution: Department of Radiology, Xuanwu Hospital, Capital Medical University. Beijing
Host Institution: MS Center Amsterdam, VU University Medical Center, Amsterdam, Netherlands
Mentor: Prof. Frederic Barkhof and Dr. Hugo Vrenken
Fellowship Duration: 1 year
Present Institution: Department of Radiology, Xuanwu Hospital, Capital Medical University, Beijing
Articles:

- **Liu Y**, Wang J, Daams M, Weiler F, Hahn HK, Duan Y, Huang J, Ren Z, Ye J, Dong H, Vrenken H, Wattjes MP, Shi FD, Li K, Barkhof F. Differential patterns of spinal cord and brain atrophy in NMO and MS. Neurology. 2015 Apr 7;84(14):1465-72

- **Liu Y**, Lukas C, Steenwijk MD, Daams M, Versteeg A, Duan Y, Li K, Weiler F, Hahn HK, Wattjes MP, Barkhof F, Vrenken H. Multicenter Validation of Mean Upper Cervical Cord Area Measurements from Head 3D T1-Weighted MR Imaging in Patients with Multiple Sclerosis. AJNR Am J Neuroradiol. 2016 Apr;37(4):749-54.

2013 Awardees

Fellow: Alvino Bisecco, MD

Research Topic: Disconnection and regional WM change with regard to cognition in setting of Multicentre MAGNIMS study
Home Institution: Division of Neurology, Department of Department of Medical, Surgical, Neurological, Metabolic and Aging Sciences, Second University of Naples, Naples.
Host Institution: Neuroimaging Research Unit, INSPE, Division of Neuroscience, San Raffaele Scientific Institute and Vita-Salute San Raffaele University, Milan, Italy
Mentor: Prof. Massimo Filippi
Fellowship Duration: 1 year
Present Institution: Assistant Professor of Neurology, I Division of Neurology; Department of Medical, Surgical, Neurological, Metabolic and Aging Sciences, University of Campania "Luigi Vanitelli"; Naples.
Articles:
- **Bisecco A**, Rocca MA, Pagani E, Mancini L, Enzinger C, Gallo A, Vrenken H, Stromillo ML, Copetti M, Thomas DL, Fazekas F, Tedeschi G, Barkhof F, Stefano ND, Filippi M; MAGNIMS Network. Connectivity-based parcellation of the thalamus in multiple sclerosis and its implications for cognitive impairment: A multicenter study. Hum Brain Mapp. 2015 Jul;36(7):2809-25.
- Preziosa P, Rocca MA, Pagani E, Stromillo ML, Enzinger C, Gallo A, Hulst HE, Atzori M, Pareto D, Riccitelli GC, Copetti M, De Stefano N, Fazekas F, **Bisecco A**, Barkhof F, Yousry TA, Arévalo MJ, Filippi M; MAGNIMS Study Group. Structural MRI correlates of cognitive impairment in patients with multiple sclerosis: A Multicenter Study. Hum Brain Mapp. 2016 Apr;37(4):1627-44.

Fellow: Gijs Nagtegaal*, MD
Research Topic: Development of a predictor of clinical disease evolution for individual early MS or CIS patients based on anatomical location information of WM lesions.
Home Institution: VU University Medical Center, Department of Radiology, Amsterdam, The Netherlands
Host Institution: Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy
Mentor: Prof. Nicola de Stefano
*Passed away 23 July, 2013

2012 Awardees

Fellow: Özgür Yaldizli, MD

Research Topic: The dynamics of cortical grey matter lesion and non-lesional abnormalities and its correlation with clinical and cognitive measures in MS: a serial magnetic resonance imaging study
Home Institution: Department of Neurology. University Hospital Basel, Basel. Switzerland
Host Institution: UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
Mentor: Prof. David Miller
Fellowship Duration: 1 year
Present Institution: Consultant neurologist and senior research associate. Department of Neurology. University Hospital Basel. Basel. Switzerland
Articles:

- **Yaldizli Ö**, Pardini M, Sethi V, Muhlert N, Liu Z, Tozer DJ, Samson RS, Wheeler-Kingshott CA, Yousry TA, Miller DH, Chard DT. Characteristics of lesional and extra-lesional cortical grey matter in relapsing-remitting and secondary progressive multiple sclerosis: A magnetisation transfer and diffusion tensor imaging study. Mult Scler. 2016 Feb;22(2):150-9

Fellow: Georgina Arrambide, MD

Research Topic: Contribution of 3T MRI and spinal cord MRI to the diagnosis of adult and paediatric patients with clinically isolated syndromes suggestive of Multiple Sclerosis
Home Institution: Instituto Nacional de Neurología y Neurocirugía Manuel Velasco Suárez (INN). Mexico DF.
Host Institution: Multiple Sclerosis Centre of Catalonia, Hospital Vall d'Hebron, Barcelona, Spain
Mentor: Prof. Xavier Montalban / Prof. Alex Rovira
Fellowship Duration: 1 year

Present Institution: Neurologist. Professor of Neurology-Neuroimmunlogy. Neurology-Neuroimmunology Department & Neurorehabilitation Unit Multiple Sclerosis Centre of Catalonia (Cemcat). Autonomous University of Barcelona. Barcelona. Spain

Articles:

- Arrambide G, Rovira A, Sastre-Garriga J, Tur C, Castilló J, Río J, Vidal-Jordana A, Galán I, Rodríguez-Acevedo B, Midaglia L, Nos C, Mulero P, Arévalo MJ, Comabella M, Huerga E, Auger C, Montalban X, Tintore M. Spinal cord lesions: A modest contributor to diagnosis in clinically isolated syndromes but a relevant prognostic factor. Mult Scler. 2017 Mar 1

2011 Awardees

Fellow: Marco Battaglini, PhD

Research Topic: Development of novel multimodal segmentation techniques to improve quantitative assessment of MR images in MS

Home Institution: Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy

Host Institution: Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, UK

Mentor: Prof. Jacqueline Palace

Fellowship Duration: 1 year

Present Institution: Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy

Articles:

- Battaglini M, Jenkinson M, De Stefano N. Evaluating and reducing the impact of white matter lesions on brain volume measurements. Hum Brain Mapp. 2012 Sep;33(9):2062-71

Fellow: Dušan Damjanović, MD

Research Topic: Common Dataset project

Home Institution: Center for Magnetic Resonance. Clinical Center of Serbia. Belgrade

Host Institution: Neuroimaging Research Unit, INSPE, Division of Neuroscience, San Raffaele Scientific Institute and Vita-Salute San Raffaele University, Milan, Italy

Mentor: Prof. Massimo Filippi
Fellowship Duration: 1 year
Present Institution: Head of Neuroradiology Unit. MR departament. Center for Radiology and MR. Clinical Center of Serbia. Belgrade
Articles:

- **Damjanovic D**, Valsasina P, **Rocca** MA, Stromillo ML, Gallo A, Enzinger C, Hulst HE, Rovira A, Muhlert N, De Stefano N, **Bisecco** A, Fazekas F, Arévalo MJ, Yousry TA, Filippi M. Hippocampal and Deep Gray Matter Nuclei Atrophy Is Relevant for Explaining Cognitive Impairment in MS: A Multicenter Study. AJNR Am J Neuroradiol. 2017 Jan; 38(1):18-24.
- Tillema JM, Hulst HE, Rocca MA, Vrenken H, Steenwijk MD, **Damjanovic D**, Enzinger C, Ropele S, Tedeschi G, Gallo A, Ciccarelli O, Rovira A, Montalban X, de Stefano N, Stromillo ML, Filippi M, Barkhof F; MAGNIMS Study Group. Regional cortical thinning in multiple sclerosis and its relation with cognitive impairment: A multicenter study. Mult Scler. 2016 Jun; 22(7):901-9.
- Koini M, Filippi M, Rocca MA, Yousry T, Ciccarelli O, Tedeschi G, Gallo A, Ropele S, Valsasina P, Riccitelli G, **Damjanovic D**, Muhlert N, Mancini L, Fazekas F, Enzinger C; MAGNIMS fMRI Study Group. Correlates of Executive Functions in Multiple Sclerosis Based on Structural and Functional MR Imaging: Insights from a Multicenter Study. Radiology. 2016 Sep; 280(3):869-79.

2009 Awardees

Fellow: Benedetta Bodini, MD

Research Topic: Is grey matter damage secondary to white matter abnormalities in different MS subtypes?
Home Institution: UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery, Queen Square, London, UK
Host Institution: Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy
Mentor: Prof. Nicola de Stefano
Fellowship Duration: 1 year
Present Institution: Consultant Neurologist ICM - Institut du Cerveau et de la Moelle épinière, Hôpital Pitié-Salpêtrière, Paris
Articles:

- **Bodini B**, Battaglini M, De Stefano N, Khaleeli Z, Barkhof F, Chard D, Filippi M, Montalban X, Polman C, Rovaris M, Rovira A, Samson R, Miller D, Thompson A, Ciccarelli O. T2 lesion location really matters: a 10-year follow-up study in primary progressive multiple sclerosis. J Neurol Neurosurg Psychiatry. 2011 Jan;82(1):72-7.

Fellow: Veronica Popescu, MD

Research Topic: Investigating the long-term clinical predictability of atrophy. Further refinement of post-processing procedures obviating the need for manual correction and application to 3D data-sets

Home Institution: Radiology department of the VU University Medical Center Amsterdam the Netherlands.

Host Institution: MS Center Amsterdam, VU University Medical Center, Amsterdam, Netherlands

Mentor: Prof. Frederik Barkhof

Fellowship Duration: 1 year

Present Institution: MS neurologist at the Rehabilitation & MS Centre, Overpelt, Belgium. Guest professor. Hasselt University, Belgium

Articles:

- **Popescu V**, Agosta F, Hulst HE, Sluimer IC, Knol DL, Sormani MP, Enzinger C, Ropele S, Alonso J, Sastre-Garriga J, Rovira A, Montalban X, Bodini B, Ciccarelli O, Khaleeli Z, Chard DT, Matthews L, Palace J, Giorgio A, De Stefano N, Eisele P, Gass A, Polman CH, Uitdehaag BM, Messina MJ, Comi G, Filippi M, Barkhof F, Vrenken H; MAGNIMS Study Group. Brain atrophy and lesion load predict long term disability in multiple sclerosis. J Neurol Neurosurg Psychiatry. 2013 Oct;84(10):1082-91.

- **Popescu V**, Battaglini M, Hoogstrate WS, Verfaillie SC, Sluimer IC, van Schijndel RA, van Dijk BW, Cover KS, Knol DL, Jenkinson M, Barkhof F, de Stefano N, Vrenken H; MAGNIMS Study Group. Optimizing parameter choice for FSL-Brain Extraction Tool (BET) on 3D T1 images in multiple sclerosis. Neuroimage. 2012 Jul 16;61(4):1484-94.