Merck Announces 2016 Recipients of €1 Million Grant for Multiple Sclerosis Innovation

- Four research grants awarded out of 260 proposals from 45 countries

Darmstadt, Germany, September 15, 2016 – Merck, a leading science and technology company, today announced recipients of the fourth annual Grant for Multiple Sclerosis Innovation (GMSI) during a symposium at the 32nd Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) in London.

This year, 260 proposals from 45 countries were submitted, representing innovative research projects taking place across the globe. Four research teams from the United Kingdom, Spain, Canada, Israel, Germany and Qatar were selected to share in the €1 million grant to support their research:

- **Nuclear magnetic resonance spectroscopy analysis of plasma; a novel, highly sensitive method for monitoring the development and predicting progression in multiple sclerosis:** Professor Daniel Anthony, Department of Pharmacology, University of Oxford, Oxford, United Kingdom.

- **Raman Spectroscopy in Multiple Sclerosis:** Dr. Elena Martinez de Lapiscina, IDIBAPS-Hospital Clinic, Barcelona, Spain.

- **Cell-type specific methylation patterns in circulating DNA: Towards the clinical application of an innovative blood-based biomarker for oligodendrocyte and neuronal damage in multiple sclerosis:** Professor Yuval Dor, Department of Developmental Biology and Cancer Research, The Institute for Medical Research Israel-Canada, Jerusalem, Israel; Dr. Adi Vaknin, Laboratory of Neuroimmunology, Department of Neurology, Hadassah Hebrew University Medical Center, Jerusalem, Israel; and Dr.
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Klemens Ruprecht, Department of Neurology, Charité – Universitätsmedizin Berlin, Germany.

- **Corneal Confocal Microscopy: A Rapid Non-invasive Surrogate Endpoint for Axonal Loss and Repair in Multiple Sclerosis:** Professor Rayaz Malik and Dr. Ioannis Petropolous, Weill Cornell Medicine-Qatar of Cornell University, Qatar Foundation, Education City, Doha, Qatar.

"Merck is committed to advancing care for patients living with multiple sclerosis through internal innovation and drug development, which is strategically complemented by external innovation from our Grant for Multiple Sclerosis Innovation,” said Steven Hildemann, Chief Medical Officer, and head of Global Medical Affairs and Global Drug Safety at the biopharmaceutical business of Merck. "This year’s grant recipients will study new ways to detect and monitor MS and predict disease progression. These projects once again highlight the leading-edge research being conducted by GMSI teams aimed at treating MS, repairing damage caused by the disease and finding new discoveries that could one day aid in preventing it.”

The GMSI was launched in October 2012 with the aim of improving the understanding of multiple sclerosis (MS) for the ultimate benefit of those living with the disease. Previous recipients have studied molecular markers of MS, novel magnetic resonance imaging (MRI) and positron emission tomography (PET) imaging and analysis techniques to detect and monitor the disease, and methods to reduce and repair nerve damage caused by inflammation in patients with MS.

The awards symposium was chaired by Professor David Bates, Emeritus Professor of Clinical Neurology, Royal Victoria Infirmary, UK, and a member of the GMSI Scientific Committee. During the symposium, Merck also announced the call for proposals for the 2017 GMSI. Up to €1,000,000 will be awarded to fund innovative research in MS, in topics that could include:

- MS pathogenesis
- Prediction of MS subtypes
- Predictive markers of treatment response
- Potential new treatments for MS
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- Innovative patient support programmes, mobile health devices or patient-reported outcomes

More information about the GMSI can be found online at: www.grantformultiplesclerosisinnovation.org.

Merck is committed to rewarding innovation and new thinking that could further advance the field of medicine. To learn more about the variety of innovation grants Merck offers, visit: http://www.merckgroup.com/en/innovation/grants_awards_initiatives/innovation_grants_awards_initiatives.html.

About Multiple Sclerosis
Multiple sclerosis (MS) is a chronic, inflammatory condition of the central nervous system and is the most common, non-traumatic, disabling neurological disease in young adults. It is estimated that approximately 2.3 million people have MS worldwide. While symptoms can vary, the most common symptoms of MS include blurred vision, numbness or tingling in the limbs and problems with strength and coordination. The relapsing forms of MS are the most common.

About Merck
Merck is a leading science and technology company in healthcare, life science and performance materials. Around 50,000 employees work to further develop technologies that improve and enhance life - from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2015, Merck generated sales of € 12.85 billion in 66 countries.

Founded in 1668, Merck is the world's oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. Merck, Darmstadt, Germany holds the global rights to the Merck name and brand. The only exceptions are the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.