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Major international study to examine causes of multiple sclerosis

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A major international research project into the possible causes of multiple sclerosis is being led by NUI Galway lecturer Dr Thomas Barry at the Department of Microbiology.

The joint molecular and clinical exploration of mycoplasmas and other bacteria that may play key roles in triggering MS is being funded by the National Multiple Sclerosis Society New York.

Neurology Professor Edward Hogan of NUI Galway and the Institute of Molecular Medicine and Genetics, Augusta, Georgia, USA will also be involved in the research which will involve the application of molecular probes to detect traces of mycoplasma DNA in human MS tissue samples.

Initial studies of such DNA in the brain, cerebrospinal fluid and blood of MS patients are now being followed by investigating the possibility that mycoplasma infection in humans causes an auto-immune or allergic reaction producing MS inflammatory lesions in brain and spinal cord. Mycoplasmas may incite reactions causing damage to the myelin that is the insulating sheath of nerve fibres in the nervous system.

The work aims to clarify the role of infection in the occurrence of MS which is a serious and costly disease affecting the emotional, social and financial lives of many Irish families. The research holds the potential to discover the causes of MS thereby enabling a more specific and effective treatment to be developed than those currently in use.

More than 550 people in the west have multiple sclerosis, 220 of whom live in Galway. MS is the most common disabling neurological condition of young adults. People are usually diagnosed between ages 20 to 40 years.

The symptoms experienced by people with MS vary and can include numbness, mobility difficulty, cognitive impairment, bladder weakness and blurred vision. There is no cure to date for the condition. However, disease progression can be slowed through the use of various medications.