

## Commemorate National Multiple Sclerosis Day (28<sup>th</sup> of May): Seek Funding for Research

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Received date: May 21, 2014, Accepted date: May 22, 2014, Published date: May 26, 2014

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### Editorial

Multiple sclerosis (MS) is a chronic and often progressive inflammatory disease that attacks the myelin sheath of the central nervous system (CNS) presenting a special kind of sclerotic lesions [1]. The northern hemisphere has a high prevalence of MS. In this disease, a cell-mediated immune response accounts for discrete plaques of demyelination at sites throughout the CNS. The pathophysiology is complex and still under investigation. Some consider MS a pathological entity [2] while some consider it a clinical entity [3]. The unknown underlying condition causes damage in two phases. First some MRI-abnormal areas with hidden damage appear in the brain and spine, followed later by leaks in the blood-brain barrier where immune cells infiltrate causing demyelination [4].

MS is mainly a white matter disease, and lesions appear mainly in a peri-ventricular distribution, but the cortex and deep gray matter (GM) nuclei are also affected [5]. MS is active even during remission periods [6]. GM atrophy is independent of the MS lesions and is associated with physical disability, fatigue, and cognitive impairment [7]. The scars that give the name to the condition are produced by the astrocyte cells healing old lesions [8].

Treatments under investigation for multiple sclerosis seek to improve function, curtail attacks, or limit the progression of the underlying disease. Many treatments already in clinical trials involve drugs that are used in other diseases or medications that have not been designed specifically for multiple sclerosis. Many basic investigations seeking to understand the disease to find new treatments are

underway. However, these treatments and trials for drug development need research and research needs money. Money for research can be funded by the government, NGOs, grants or donations. Commemorate National Multiple Sclerosis Day (28th of May) by seeking financial support for MS research.

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