

CALL FOR PAPERS

The percentage of older people is increasing steadily in proportion of the total population of the world. In a recent report published by the National Institute on Aging in March 2016, it has been estimated that nearly 617 million people, accounting for 8.5% of the global population, are aged 65 and over. Additionally, it is also predicted that this ratio is going to double to reach 17% of the global population (1.6 billion elders) in 2050. Consequently, the incidence of neurodegenerative disease will continue to rise as a result of increased life expectancy. Emerging evidence suggests that mental health decline due to neurodegenerative conditions constitutes the largest cause of global disability, which is accountable for over 20% of lifespan. Data arising from family studies that compared the age of death of monozygotic and dizygotic twins suggested that approximately 25 % of the variation in human longevity can be due to genetic factors. It is noteworthy to remark that this genetic component appears to have a larger impact at older ages. However, only a few genes have been so far associated with lifespan, and the interaction among these genes, epigenetic factors, and environmental regulators is far from being well understood.

Therefore, there is an increased need to expand the knowledge on the different genetic, epigenetic, and molecular pathways and environmental factors that affect brain plasticity and healthy aging.

Potential topics include but are not limited to the following:

- ▶ Genetic variants associated with healthy aging
- ▶ Environmental factors affecting healthy aging: impact of diet, exercise, neuroendocrine imbalance, gut microbiota, microbial infections, stress, chemical disruptors, and drugs of abuse
- ▶ Molecular mechanisms involved in the control of lifespan: role of inflammatory mediators, growth factors, microRNAs, and other epigenetic, cellular, and/or molecular pathways
- ▶ The updating of imaging studies to assess neural plasticity during aging
- ▶ Possible novel brain areas undergoing neural plasticity
- ▶ Preclinical models of aging and comorbidities affecting lifespan (obesity, depression, cardiovascular disease, hypertension, etc.)

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/np/nplda/>.

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