Genomic Medicine and Management of Genetic Disorders

lan James Martins^{1,2,3*}

¹Centre of Excellence in Alzheimer's Disease Research and Care, School of Medical and Health Sciences, Edith Cowan University, 270 Joondalup Drive, Joondalup, 6027, Australia

²School of Psychiatry and Clinical Neurosciences, The University of Western Australia, Nedlands, 6009, Australia

³McCusker Alzheimer's Research Foundation, Hollywood Medical Centre, 85 Monash Avenue, Suite 22, Nedlands, 6009, Australia

*Corresponding author: Ian James Martins, School of Medical and Health Sciences, Edith Cowan University, 270 Joondalup Drive, Joondalup, 6027, Australia, Tel: 61863042574; E-mail: i.martins@ecu.edu.au

Received date: September 06, 2017; Accepted date: September 26, 2017; Published date: October 05, 2017

Copyright: © 2017 Martins IJ. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Citation: Martins IJ (2017) Genomic Medicine and Management of Genetic Disorders. J Genet Disord. Vol. 1 No.1: 06.

Clinical Image Article



Genomic healthcare has become of critical importance when genomic information can be used routinely to improve the health **Figure 1** [1], diagnosis [2,3] and treatment of all individuals. The discovery of the heat shock gene Sirtuin 1 [3,4] indicates that diet [5-7], stress and lifestyle are critical factors that determine the management of genetic disorders in man and longevity in various species [8]. Sirtuin 1 is involved in the induction of diabetes, regulation of the immune system, cholesterol metabolism, epigenetic modifications [9,10] and the development of multiple organ disease syndrome (mitochondrial apoptosis). The role of Sirtuin 1 in human genomic healthcare [1] is now critical to various genes and the predisposition to several diseases.

Acknowledgement

This work was supported by grants from Edith Cowan University, the McCusker Alzheimer's Research Foundation and the National Health and Medical Research Council.

References

- Lea DH, Kaphingst KA, Bowen D, Lipkus I, Hadley DW, et al. (2011) Communicating Genetic and Genomic Information: Health Literacy and Numeracy Considerations. Public Health Genomics 14: 279-289.
- Martins IJ (2017) The Future of Biomarkers Tests and Genomic Medicine in Global Organ Disease. Arch Infect Dis Ther 1: 1-6.
- Martins IJ (2016) Type 3 diabetes with links to NAFLD and Other Chronic Diseases in the Western World. Int J Diabetes Metab Disord 1: 1-5.
- 4. Martins IJ (2016) Heat shock gene Sirtuin 1 regulates postprandial lipid metabolism with relevance to nutrition and appetite regulation in diabetes. International Journal of Diabetes and Clinical Diagnosis. Int J Diabetes Clin Diagn 3: 1-3.
- Martins IJ (2016) Diet and Nutrition reverse Type 3 Diabetes and Accelerated Aging linked to Global chronic diseases. J Diabetes Res Ther 2: 1-6.
- Martins IJ (2015) Overnutrition Determines LPS Regulation of Mycotoxin Induced Neurotoxicity in Neurodegenerative Diseases. Int J Mol Sci 16: 29554-29573.
- 7. Martins IJ (2017) Dietary Interventions Reverse Insulin and Synaptic Plasticity Defects Linking to Diabetes and Neurodegenerative Diseases. SL Nutrition Metab 1: 1-5.
- Martins IJ (2017) Regulation of Core Body Temperature and the Immune System Determines Species Longevity. Curr Updates Gerontol 1: 1-6.
- Martins IJ (2017) Single Gene Inactivation with Implications to Diabetes and Multiple Organ Dysfunction Syndrome. J Clin Epigenet 3: 1-8.
- 10. Martins IJ (2017) Sirtuin 1 and Adenosine in Brain Disorder Therapy. J Clin Epigenet 3: 1-2.