The role of bacteria or viruses in health and disease

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Date

Various studies are ongoing to develop a deeper understanding of the role of bacteria and viruses in causing diseases. This paper looks at various recent studies that attempt to explain how viruses and bacteria cause diseases.

Authors	Title	Journal	Brief Summary of the paper
Hewitt, R., Farne, H., Ritchie, A., Luke, E., Johnston, S.L. and Mallia, P.	The role of viral infections in exacerbations of chronic obstructive pulmonary disease and asthma.	. Therapeutic advances in respiratory disease, 10(2), (2016) pp. 158-174.	The article talks about the role all of the viral contagions in the emergence of respiratory diseases. The paper also reviews cases related to different viruses causing diseases to a human beings. As well as when the viruses are not checked lead to severe health complications that affect how the respiratory system performs (Hewitt et al. 2016, p. 160).

Cao x	Self-regulation and cross-regulation of pattern-recognition receptor signaling in health and disease	Nature Reviews Immunology, 16(1) (2016) pp. 35-50.	The report talks about how the natural body immunity and how bacteria and viruses weaken the body system making people, fall sick (Coa, 2016, p. 40). It also explains how certain virus cause disease and how eliminating of the bacterial and virus leads to a reduction in diseases. It also gives a description of body receptors react to the presence of virus and bacteria.
Dzutsev, A., Badger, J.H., Perez-Chanona, E., Roy, S., Salcedo, R., Smith, C.K., and Trinchieri, G	Microbes and Cancer	Annual Review of Immunology, 34 (2016) pp. 479-510.	It talks about the relationship between microbes and cancer. It explores scientific ways that link cause the cancer cell to particular types of bacteria that lead to abnormal growth of body

			cells (Dzutsev et al. 2016, p. 480). It also reviews how the absence of particular kinds of microbes in the body makes one cancer free.
Huang, Y.J., Erb-Downward, J.R., Dickson, R.P., Curtis, J.L., Huffnagle, G.B. and Han, M.K.	Understanding the role of the microbiome in chronic obstructive pulmonary disease: principles, challenges, and future directions	. Translational Research, 179, (2017) pp. 71-83.	The article explains how microbes and bacterial lead to obstruction of the pulmonary artery and vein consequently making once suffer from heat-related diseases (Huang et al. 2017, p. 80). It explores challenges people face when infected with the disease and studies being conducted to help people affected by the bacteria not to contact the disease.
Prinz, M. and Priller, J.	The role of peripheral immune cells in the CNS in	Nature Neuroscience,	The study details the role of the central nerves system in ensuring natural

	steady state and disease.	20(2),(2017) pp. 136-144	immunity can fight different bacteria and viruses thus protecting one from diseases (Prinz and Priller, 2017, p. 137). It also talks about how various bacterial diseases affect the central nervous system making and in the process, people fall sick.
Thurber, R.V., Payet, J.P., Thurber, A.R. and Correa, A.M.	Virus-host interactions and their roles in coral reef health and disease.	Nature Reviews Microbiology, 15(4), (2017) pp. 205-216.	It talks about the role of the virus in causing reef complications. It gives a scientific study of how virus present in the body can multiple and affect various organs and tissues in the body (Thurber et al. 2017, p. 210). Changing the functionality of the body process making the body vulnerable to diseases.

References

Cao, X., 2016. Self-regulation and cross-regulation of pattern-recognition receptor signaling in health and disease. Nature Reviews Immunology, 16(1), pp. 35-50.

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Huang, Y.J., Erb-Downward, J.R., Dickson, R.P., Curtis, J.L., Huffnagle, G.B. and Han, M.K., 2017. Understanding the role of the microbiome in chronic obstructive pulmonary disease: principles, challenges, and future directions. Translational Research, 179, pp. 71-83.

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