'DON'T MISS THIS COURSE!' Recommended by Jette Holbrook BSOS

Dr Paul Durham, PhD. Distinguished Professor of Cell Biology

Understanding the Epigenome: A Pathway to Personalised Medicine

Friday 8th June 2018

What is epigenetics?

Prof Paul Durham is a professor of cell biology and epigenetics. He has a special interest in temporomandibular dysfunction and migraine. Epigenetics is the study of changes in organisms caused by modification of gene expression rather than alteration of the genetic code itself. That means we can actively influence the genetic hand we were all dealt. Paul will talk about how the way we live impact our health and potentially the health of our children 2 generations down the line, how pain in one area of our bodies sets us up to be more likely to get further problems, why treating TMD can aid migraine sufferers and why chicken soup is indeed good for our health. He describes the pain fatigue cycle and how stress, muscle tension, poor sleep, depression and emotions can cause us/our patients to be caught up in this. He illuminates areas as wide as genomes, nicotine, vaginal births, antibiotics and gut bacteria.

Why is this relevant?

The goal of this course is to provide a comprehensive view of how lifestyle choices and environment impact disease progression and our overall well-being and present strategies to help your patients maintain a healthy epigenome. Paul will discuss:

- How the way we live impacts our own health and the health of our grandchildren.
- How pain in one area of the body sets us up to be more susceptible to problems elsewhere.
- Why treating TMD can aid migraine sufferers.
- Why chicken soup is indeed good for our health.
- How stress, muscle tension, poor sleep, microbiome, depression and emotions relate to the pain fatigue cycle.

Who is Paul Durham?

Dr. Paul Durham is Distinguished Professor of Cell Biology at Missouri State University and Director of its Center for Biomedical and Life Sciences, a multidisciplinary laboratory that utilizes cellular/molecular, microbiological, biochemical and chemical techniques. He has a special interest in temporomandibular dysfunction and migraine. Dr. Durham is frequently invited as a guest lecturer. He has published more than 70 peer-reviewed research articles and more than 100 abstracts. He is a member of the Society for Neuroscience, the American Association for the Advancement of Science, the American Headache Society, the American Pain Society and the American Academy of Orofacial Pain. In addition, he has served on numerous study sections for the National Institutes of Health, as well as pharmaceutical company advisory boards, and is currently a reviewer for more than 10 journals.

Objectives:

- Know the difference between one's genome and epigenome and the relevance to understanding human health and disease progression.
- Appreciate the dynamic nature of our epigenome which allows for adaptive evolution and the ability to prevent expression of genes that predispose one to a particular disease.
- Understand the importance of a patient's environment (stress), microbiome and life style choices such as sleep, exercise, and diet in the development of chronic orofacial pain conditions.
- Gain new insights into the pathology of orofacial pain conditions and new treatment strategies to help modulate sensitization of the trigeminal system and minimize risk factors.

Target audience

Anyone interested in understanding the pathology of orofacial pain conditions and learning how to better manage a chronic pain patient by changing their epigenome through life style and dietary changes. Dentists, physicians, nurses, physical therapists, or other orofacial pain specialists.

Venue: Grand Hotel Fee: BSOS Members - £108

Station Rise

York Non Members - £216

YO1 6GD

Tel: 01904 898654

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BSOS Office, PO Box 3064, Reading, RG1 9WH