

**Creating international and interdisciplinary collaboration for health** 

### **AONM Newsletter January 2015**

This month's newsletter highlights some very important events in the fields of Lyme Disease, cancer and organophosphates. We cover the parliamentary hearing on Lyme Disease that enabled the proper airing of issues relating to Lyme Disease in Westminster for the first time in the UK. We also report on detecting cancer in our discussion of Dr. Xandria Williams' most recent book and the related highly sensitive HCG lab marker. Spurred on by the second Parliamentary Meeting on sheep dipping that took place in December, we cover issues relating to organophosphates. We then turn our attention to the high-intensity strength training project recently launched in Windsor, finishing, as always, with an outlook on interesting upcoming events held by either AONM or affiliated organisations.

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The Academy of Nutritional Medicine is an international and interdisciplinary forum dedicated to advancing nutritional medicine. We aim to integrate the expertise of medical doctors with the skills, knowledge and experience of complementary practitioners. Our mission is to bring cutting-edge information and pioneering therapeutic approaches in nutritional medicine to the fore for the use of naturopathic practitioners, nutritional therapists and the public. For further information on AONM, its clinics and areas of expertise please go to www.aonm.org.

## Fighting for a voice: Lyme goes to the heart of Westminster



A large AONM delegation joined over 170 attendees of a patient-led Lyme disease forum at the House of Commons on January 19. Organised by the Rt. Hon. Simon Hughes, Minister of State for Justice and Civil Liberties, on behalf of his constituent Lyme sufferer Demetrios Loukas, this was the first time that Lyme Disease had been given a public hearing in Westminster. The afternoon's speeches were facilitated by the Countess of Mar, herself a sufferer of debilitating organophosphate poisoning. When asked early on in the meeting how many of those present were patients themselves, 100 or so put up their hands. When asked how many had been forced to pursue their treatment privately, all the same hands went up. This is a travesty of unimaginable proportions, as various speakers throughout the afternoon emphasised, representing devastation on a personal level as well as a gargantuan waste of resources and economic potential. A key objective of the occasion was to give a public voice to the huge suffering and unmet needs of Lyme Disease patients in the UK.

The first speaker was Dr. Armin Schwarzbach, Lyme specialist and laboratory doctor from Germany. He presented meticulous evidence of the shortcomings of the Elisa and Western Blot tests, still currently used as a first line of Lyme testing, as well as the curious Lyme epidemiology in the UK, where official statistics are so low compared to the exponential rise in reported cases in nearby countries such as Germany and Holland. Various GPs explained that the NICE guidelines do not allow them to give IV antibiotics (on pain of losing their licence to practice), and expressed their wish to see the NHS adopt a more liberal stance.

Dr. Chris Newton and Dr. Beryl Benyon from the Well One Clinic gave a fascinating insight into lesser known modalities for treating Lyme Disease that can evidently be very effective, such as electromagnetic frequencies.

Peter Kemp, a microscopy expert, showed slides and videos that use staining to fluoresce the Borrelia, describing a "string of pearls" morphology where the Lyme spirochetes appear to undergo encystification, dividing into individual granules rather than remaining in their original spiral, worm-like form. Many studies have shown that the bacteria segment when under assault (e.g., by antibiotics) to ensure their survival within the host. Mr. Kemp said this explanation is rejected by Public Health England.

The Head of Clinical Services of Public Health England's Rare and Imported Pathogens Laboratory at Porton Down in Salisbury, Dr. Tim Brooks (the only laboratory whose results are officially recognised in the UK), was invited to respond at the end. With scarcely ten minutes left, he agreed that the incidence of Lyme has risen considerably in recent years, but suggested that many prevalent vectorborne infections found in mainland Europe are not such an issue in the UK due to its being an island. When he stated that PHE offered an extended spectrum of tests available on the NHS, only one attendee said she had been offered this – but had not yet received her results after over six months. The meeting erupted in discontent, and was called to a rather abrupt halt soon afterwards for reasons of time.

It remains to be hoped that this unprecedented meeting has focused both government and media attention on the plight of patients in this country as never before. The Rt. Hon. Simon Hughes pledged from the outset to distill action points from the meeting and take them to the next level.

BBC South Today broadcast excellent coverage the following day about the Maher family, who have spent over £100,000 on therapy for their daughter Kellie, now dependent on a mobility scooter and about to leave for the US for further treatment. https://www.facebook.com/video.php?v=776236982 466894&fref=nf

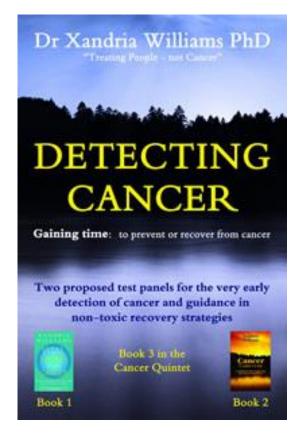
Mrs. Maher sums up the sentiment of all the patients and others who attended the forum: "We shouldn't have to go abroad for testing. We shouldn't have to go abroad for treatment. We should be able to stay at home here and look after our own families."



Borrelia Burgdorferi Cyst-Form Bacteria, from "The Top 10 Lyme Treatments" by Bryan Rosner

Gilian Crowther

#### **Book Review**



Detecting Cancer. Gaining Time: To Prevent or Recover from Cancer, by Dr. Xandria Williams, PhD, MSc, DIC, ARCS, MRSC, ND, DBM, MRN

This is the third book in her Cancer Quintet. (The first book is *Vital Signs for Cancer*, and the second is *Cancer Concerns: A Practical 10-Step Programme Described and Explained.*)

Detecting Cancer is in two parts. In the first part, Dr. Williams gently takes the reader through an explanation of cell biology, the development of cancer, the role of mitochondria, and her test panels. This part can readily be understood by those without a background in molecular biology, biochemistry or medicine; this is in no small part a reflection of Dr. Williams' engaging style of writing coupled with generous repetitions of key concepts in different ways, so that the fundamental ideas have the opportunity to "stick" in the mind. The second part of the book essentially consists of a reprint of Dr. Williams' doctoral thesis. In the main it contains the same material as in first part, but with much more scientific detail and with the level of referencing which is to be expected in a PhD thesis. Normally, most readers would have difficulty in reading the doctoral thesis, but in this book the first part has already introduced the key concepts. The result is that reading the second part of the book becomes very enjoyable. Indeed, I had difficulty putting the book down. The second part also serves once again to reinforce the author's key ideas.

The author builds on the ground-breaking ideas regarding the pathophysiology of cancer, from almost a century ago, of the Nobel laureate Dr. Otto Warburg. When mitochondrial dysfunction occurs, there is impairment of oxidative metabolism. (In large measure, it was the same Dr. Otto Warburg who established the role of intracellular enzymes in biological oxidation.) Thus, instead of making use of the pathway from acetyl-CoA (itself derived from pyruvate) to the citric acid cycle (or Kreb's cycle or the tricarboxylic acid cycle) and oxidative phosphorylation, there is greater reliance by the cell on the phylogenetically more ancient, and far less efficient, anaerobic pathway of glycolysis, with the resulting pyruvate being more likely to undergo homolactic fermentation via lactate dehydrogenase to L-lactate. (This last reaction may be considered to be an "eleventh" glycolytic reaction, appended to the 10 classical reactions of glycolysis.) The author has ingeniously recognised that these changes will be accompanied by changes in the levels of several substrates and enzymes, which in turn, coupled with assays of particular well-chosen proteins (such as p53), can serve as biomarkers either to detect cancer (or a pre-cancerous condition) presymptomatically, or to enable the response to treatment of established cancer to be followed.

This is a brilliant book written by a highly intelligent author who comes across as a very caring person. For the second edition, I hope that the publisher will consider allowing the addition of diagrams and flowcharts. Meanwhile, the present first edition deserves a high level of success. I believe that every practising clinician who might have to look after a patient who could develop cancer, and every researcher studying mammalian cancer, ought to read this excellent book.

> Professor B. K. Puri, Faculty of Medicine, Imperial College, London

#### Spotlight on lab markers

HCG as a cancer marker

Over 100 years ago, Dr John Beard, a Scottish embryologist, showed that placental cells and cancer cells were identical. We now know that these are the two main tissues that produce HCG. HCG is made up of an alpha chain and a beta chain. It has the alpha chain in common with LSH, FSH and TSH, but its beta chain is unique. HCG is produced by cancer cells early on in their formation. Thus, testing for the beta chain of HCG in someone who is not pregnant may constitute an early-warning indicator of cancer.

HCG is a complex molecule, and the CA1 profile tests for both the entire molecule and its fragments in serum, as well as for HCG in the urine. This triple test improves the reliability of the diagnosis.

There should be no HCG in samples, and even small amounts such as 1 - 3 IU/L calls for serious concern. The test done by American Metabolic Laboratories, with several decades of experience in doing this test panel, achieves this limit of detection (not achieved as far as we know by any other laboratory). The limit of most pregnancy tests is 20 units or often considerably higher. Conventional pregnancy tests are therefore totally inadequate for detecting cancer.

No test is perfect – HCG is not always detected, but the other markers in the CA1 profile (to be discussed in a future newsletter) greatly improve the reliability of the result.

An important value of this test is that it covers the entire body in one test. It does not indicate location, but that is not important if the goal is to restore systemic homeostasis throughout the whole body by natural, non-toxic means. Retesting provides a means of tracking progress. If chemotherapy, radiation or surgery are planned, further diagnostic corroboration would be appropriate. *Dr. Xandria Williams* 

Please see our "Upcoming events" section for details of Dr. Williams' talk on 2<sup>nd</sup> February, "Detecting Cancer", held by the BSIO (British Society of Integrative Oncology), as well as the review of her book "Detecting Cancer" in this edition, by Professor Basant Puri.

# **Sheep Dip Survivors Meeting at the House of Commons**



In the early 1970s, previously eradicated diseases affecting sheep and cattle found their way back onto the English mainland. This was swiftly followed by government directives with mass farming in mind that sheep and cattle had to be treated with organophosphates.

The history of organophosphates (OP) stems back prior to the Second World War, where they had been developed as a nerve gas and were then championed as effective agents for eradicating the pests that affected cattle. No warnings were given to farmers about the dangers of exposure to these chemicals, and non-compliance to the compulsory twice-a-year dipping of sheep or treatment of other animals would have meant a loss of their livelihood. With innocence and without choice, farmers followed the Ministry directives.

Lord Zuckermann, who went on to become Chief Scientist, had wanted containers to be labelled as poison, and farmers to be educated appropriately in their use and associated dangers as early as the 1950s. The Health and Safety Executive began advising farmers to wear protective clothing and take precautions when using or exposed to OP in 1981. However, it was not until 1992 that the forced directive was lifted and dipping / treatment was no longer compulsory.

Affected farmers exhibited a broad range of disorders, from ME-type disorders accompanied by multiple chemical sensitivity through to parasthesia and even paralysis. Many surviving farmers are still exhibiting signs and symptoms, as well as a plethora of conditions such as MS and Parkinson's.

Farmers have been fighting for years for recognition of their plight, and for the British government to open independent lines of enquiry that would establish that the Ministry of Agriculture, Fisheries and Food failed in their duty of care to the farmers.

The cause was taken up by Shadow Health Minster, Andy Burnham, at a first meeting at the House of Commons on May 14, 2014, "The Health Impacts of Organophosphates", on behalf of his constituent Tom Rigby, organiser of the Sheep Dip Survivors. Gilian Crowther (on behalf of AONM) and I attended the second meeting of the Sheep Dip Survivors held at the House of Commons on December 2. Andy Burnham's stated desire was to achieve an independent enquiry. He is no stranger to the field of independent enquiries with his experience of the Hillsborough Enquiry.

Many farmers presented their cases personally, while those unable to speak were represented by their family or friends. It was a heart-wrenching experience to listen to the catalogue of years of suffering and torment, and the overlap of symptoms was shocking. For those who have knowledge of methylation pathways, it was a testament to how these chemicals affect those pathways, producing end results of nightmarish proportions. Many there had managed to find their way to Dr. Sarah Myhill for support, but they seemed too few.

I, along with Gilian Crowther, offered to assist the SDS through creating a national resource programme of appropriately aware and educated practitioners who could be on hand to assist these people with their health and wellbeing as much as may be possible, even after all of these years (a joint AONM/MCS Aware programme is conceivable).

As nutritional advisor to the Multiple Chemical Sensitivity charity MCS Aware, I personally have a great interest in the field of methylation. I was deeply moved as I listened to the plight of sufferers as to the effects on their families. Sure enough, there were not only those who had been affected by working on the farms but also those who had been born to affected parents. Epigenetic effects can be caused to future generations, sometimes skipping generations. Hyperor hypo-methylating certain gene regions can lead to future generations exhibiting dysfunctions or similar symptoms without exposure to chemicals. This is indeed a case of "You are what your parents or grandparents ate or were exposed to".

As I left, I was struck by the thought that the animals that were saved from a pest-ridden death were themselves surely poisoned: their body tissues would have accumulated quantities of toxic material. What is the effect of these in the food chain? What are the health effects? We were also advised that OP bombs were used on grain stores, and still are. Extremely disturbing to consider the disorders that this combination of chemical and protein mixes is doubtless giving rise to.

Jonathan Cohen MSc, BANT Director, Clinic Director Centre for Applied Nutrition and charity advisor for MCS Aware

#### The physiological role of muscle and the science behind high-intensity strength training



A high-intensity training project using equipment not available anywhere else in the UK has recently been launched in Windsor by Dr. Tahir Masood and Angela Steel.

Dr. Masood has long been fascinated by insulin receptor resistance, the metabolic conditions it is linked to and the gut microbiome. As his research centres on the physiological effects of exercise, he is making use of an exercise protocol called "The Big 5 Workout". This is based on the book by Doug McGuff and John Little called *Body by Science*. The "Big 5" workout was previously known as 'Super Slow Training' and has been the subject of many studies which showed it to measurably counter muscle catabolism and the many health problems this entails.

Dr. Masood has been using this approach with his patients in Windsor for the past year, with some very positive results. As a result, he has offered to run several free sessions for practitioners who would like to know more. He will be giving an overview of muscle physiology and the role it plays in health as well as sharing his experience of using this exercise programme with his patients. These talks will be at the exercise facility in the centre of Windsor (Berkshire) and there will be the opportunity to try out the protocol (no special gym clothing needed). Several dates are available. Please visit this link to find out more and book a date if you would like to attend: <u>http://www.eventbrite.co.uk/e/building-leanmuscle-a-prescription-for-health-and-longevity-</u> tickets-15120833821, or email

angela@superwellness.co.uk if you have any questions / would like to attend.

#### **Upcoming Events**

**Detecting Cancer, February 2<sup>nd</sup> 2015** The British Society for Integrative Oncology (BSIO) is holding a seminar between 6.00 - 8.30 pm, when Dr. Xandria Williams will be talking about "Detecting Cancer", discussing comprehensive blood tests that can inform of potential cancer activity at a very early stage. Please see the BSIO website: <u>http://www.bsio.org.uk/</u> for their Eventbrite booking site.

Natural Therapies for Lyme Disease, March 28<sup>th</sup> 2015. Half-day workshop at Holiday Inn, Regents Park Judy Rocher, therapist and education manager of Rio Trading, will be discussing Lyme Disease and natural therapies such as the Cowden protocol (condensed and full). This course is hosted by AONM. For more information, please see http://www.aonm.org/events.html

Mitochondrial Magic: CST Introductory Seminar, April 25<sup>th</sup> 2015. All-day seminar at the Holiday Inn, Regents Park Cell Symbiosis Therapy (CST) is a revolutionary approach that traces the origins of most chronic disease to downregulation of mitochondrial ATP production. CST examines the evolutionary programs that drive this blockage. Understanding how to reverse this and restore oxidative ATP production opens up entirely new avenues for therapy. Please see the AONM website for information: http://www.aonm.org/events.html

Time to join the Mitochondrial Revolution? The British Naturopathic Journal (founded in 1949) publishes research papers on Naturopathy and closely allied subjects as well as critical reviews, discussion papers and communications. It is now an online journal (and has a journal online project to put all of its past editions online). This month it has published an article by Gilian Crowther called "Introduction to Cell Symbiosis Therapy: Mitochondria as the ultimate drivers of health and disease." Please log in to read it using special the access login for AONM: http://bnj.gcrn.org.uk/articles/introduction-tocell-symbiosis-therapy-mitochondria-as-theultimate-drivers-of-health-and-disease/ User name: aonm Password: aonm2015

**Biomedical Research Collaborative Meeting Crowdsourcing for ME, May 27<sup>th</sup>-28<sup>th</sup> 2015** Invest in ME is holding a two-day research meeting before its annual conference to establish collaboration between biomedical researchers to agree a clear strategy of biomedical research into ME. http://www.investinme.org/IIME%20IIMEC10.htm

**Invest in ME, May 29<sup>th</sup> 2015** The annual conference of *Invest in ME* is taking place at Birdcage Walk in Westminster. This charity dedicated to ME will once again be bringing together leading clinicians and researchers in the field to discuss the central issues and challenges on the path to finding solutions for this devastating condition. http://www.investinme.org/IIME%20IIMEC10.htm

NorVect 2015 Vector-Borne Diseases Conference, May 30<sup>th</sup>-31<sup>st</sup> 2015 The key focus of NorVect is Lyme Disease. "The objective ... is to connect the missing dots on vector-borne diseases". World experts will be speaking at this unique conference in Norway, including Professor Garth Nicolson. An AONM delegation will be attending. Please contact AONM if you are interested in joining (info@aonm.org). For further details, please see: http://norvect.no/conference/

Please contact us at any time if you are interested in learning more about our services, or exploring how we could work together: <u>info@aonm.org/</u> 0845 505 1296, or go to <u>www.aonm.org</u>

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