



A New Era in ME/CFS Research

The
Journal of
IiME

Volume 4 Issue 1

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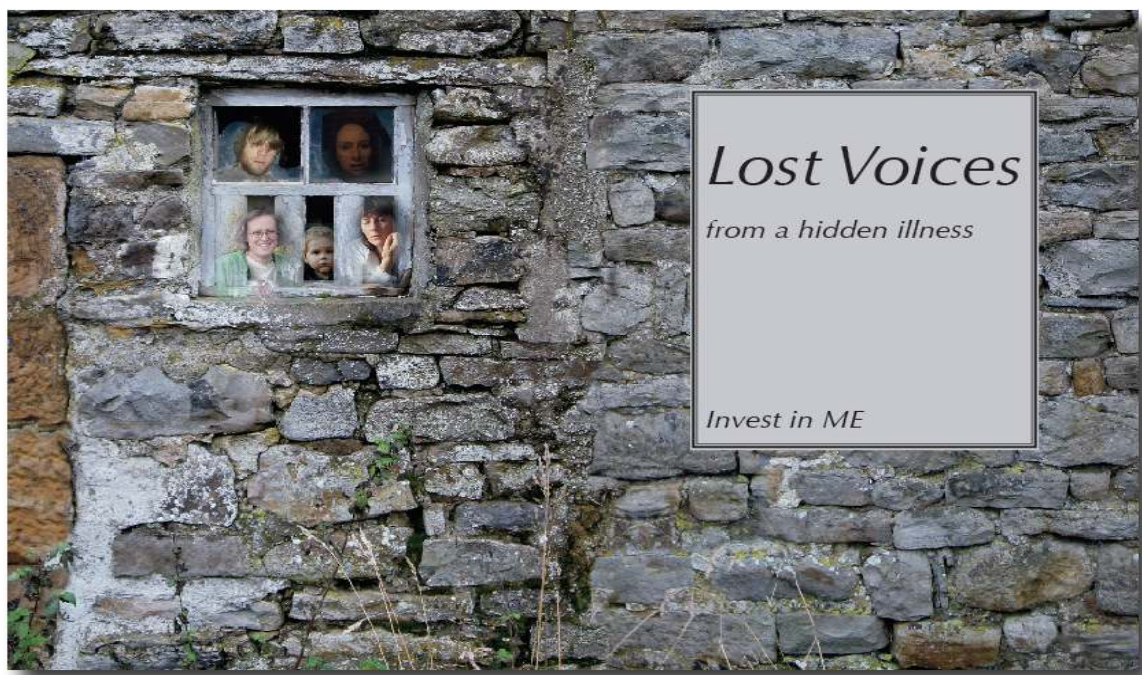
LOST VOICES

Providing a voice for those severely affected with Myalgic Encephalomyelitis

Lost Voices' is a book to help healthcare professionals, those in the media and people with ME in understanding Myalgic Encephalomyelitis (ME).

The name '**Lost Voices'** refers both to the fact that people who are severely ill with ME are generally not in a position to make themselves heard, and also to the way that the prejudiced denial of ME - as an 'aberrant belief' rather than a devastating physical illness - has meant that often others are incapable of actually hearing and seeing what is being said and shown.

'Lost Voices' shows the impact of the illness on all family members, sufferers and carers. Yet it can educate the medical profession, the public and others and clearly shows the resilient character of people with ME and their families. The book is an A4 landscape size of extremely high quality with a laminated card cover. With over 120 pages of stories, pictures and information this is book truly encapsulates the tragedy of this illness and the way in which people with ME are left to exist in a twilight zone -left to deal with this illness by themselves. The book also contains facts about ME with



The stories and photographs in '**Lost Voices'** are provided by carers, families and, as far as possible, people with ME. The book allows an opportunity for people who are usually invisible and unheard to speak for themselves, so that their situation can be seen and understood more clearly.

The book clearly and movingly shows the evidence of the devastating impact this physical disease has on individuals and their carers and families. It will help change a widespread lack of comprehension based on misinformation, vague definitions and manufactured statistics and raise awareness of the plight of ME sufferers.

contributions from experts such as Dr. John Chia, Dr Leonard Jason and Annette Whittemore. Please buy this book - for yourself or for friends, relatives or your GP - or suggest it as a gift for others to buy. This book will really make a difference.

To order **Lost Voices** email to -
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[http://www.investinme.org/LostVoicesBook/IiME Lost Voices home.htm](http://www.investinme.org/LostVoicesBook/IiME%20Lost%20Voices%20home.htm)

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Conference Edition Editorial Comment

Welcome to the 2010 conference edition of the Journal of IiME – a blend of science, facts, stories and news regarding Myalgic Encephalomyelitis (ME or ME/CFS).

May has become the month when Invest in ME organises and hosts its annual biomedical research conference, the month in which we have tried to focus attention as International ME Awareness Month. An illness which is responsible for causing such suffering and yet which has been treated with such ineptness by governments and healthcare organisations during the last generation deserves a full month to raise awareness of the issues.

Our first two conferences were, in a sense, testing the water in order to find a balance for future events. Since after our 2007 conference we decided to carry a theme for each conference where presentations and publicity could be aimed at a particular area regarding ME. In 2008 we decided to publicise sub grouping within ME with research clearly identifying the sub groups which could already be clearly defined. In 2009 we decided to focus on the severely affected people with ME – a cohort of patients who have been disenfranchised and neglected by society. The introduction of the book *Lost Voices* coincided with the theme of the 2009 conference eloquently showing the effect on patients and their families of a disease which is actually well understood by patients and which needs a strategy of proper science to resolve.

The conference this year has the theme of education of healthcare professionals with a mixture of the latest research and clinical experiences from the most renowned ME researchers and clinicians in the world. A phrase often quoted by the UK government, Chief Medical Officer (CMO) and the Medical Research Council (MRC) in the UK is that there is little known about ME. This scientific myopia is unacceptable. Five international ME/CFS conferences held at the heart of power in London have proven there is research and knowledge about this disease. What is missing is an acceptance that previous policies – based on vested interests,

Journal of IiME - Disclaimer

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poor science, ignorant perceptions and misinformation – have so prejudiced the healthcare system in the UK that people have become blind to the actual research which has been going on and deaf to the countless demands from sick and vulnerable patients asking for change and fairness.

Nowhere has this impairment of senses been more apparent than with the MRC and the CMO. Another reincarnation of an MRC expert panel to look at ME has, after two years gestation, still failed to deliver anything but a few meetings. Their latest panel is riddled with remnants of the now defunct and discredited psychosocial viewpoint – where ME patients are still being maligned as suffering from a behavioural illness.

The strategy of this panel is to marry the psychosocial and biomedical sides together. This strategy will not work. There is no more need for a so called "balanced approach". It will further waste precious resources and, more importantly, prolong the suffering of patients. The MRC policy toward ME continues to be a failure. An unequivocal change in emphasis must now be made by the MRC toward a policy of biomedical research.

The CMO has failed to engage with ME organizations, such as Invest in ME, and will again fail to be present at a fifth international conference held just a few hundred metres from his office. The lack of serious research by the MRC and the lack of leadership by the CMO has led to stagnation in the UK with little funding of research and lack of any urgency in dealing with the problem.

And then we have October 2009. A seminal moment in the history of ME.

Science magazine published research by the Whittemore-Peterson Institute (WPI), the National Cancer Institute (NCI) and the Cleveland Clinic (CC) showing links between a gamma retrovirus – (XMRV) and ME.

Though doubts have been thrown at the WPI/NCI/CC research by the establishment organizations which are suddenly forced into covering the blatant bias of the past this has only shown clearly how professional the XMRV research by WPI/NCI/CC has been. Not only has this discovery energised ME

research and highlighted the need for more funding for biomedical research it has also energised patients. As Invest in ME have pointed out in its newsletters power has now been given to the patients who have become enabled in ways which the government and MRC have failed to predict.

In the time that the UK MRC have organized a few meetings of its expert panel to discuss research into ME, producing nothing substantive and even lacking minutes for the last of these meetings, the WPI have achieved a major breakthrough – not just in science but in awareness.

Education of healthcare professionals means that the National Health Service (NHS) needs to rid itself of the bias which has been allowed to exist regarding ME. This needs education – correct education and awareness of the disease and the symptoms and side effects. To tackle education we need to get back to basics and ensure that medical students are properly trained and aware of the biomedical research into ME. The General Medical Council, we thought, were crucial as they arranged the curriculum. Their response to our letter is contained in the Journal and shows some confusion regarding who actually decides what is taught about ME.

Recent decision by Canada and Australia to ban people with ME from donating blood clearly shows the urgency which responsible governments are showing toward a possible contamination of the blood supply by people with ME who may be carrying this retrovirus. The continuing research which is being carried out, and which is being presented at the IiME conference in London, is showing these decisions to be more prescient as time goes on. We can only wonder when Europe will follow.

After continual requests by Invest in ME and our colleagues in the European ME Alliance to persuade European health ministers to consider such a ban there is still no unified action. The Chief Medical Officer of the UK government has admitted that people with ME are exempt from blood donation – but then continues by adding that they may give blood when they are "recovered" or "feeling better"! The lack of any science supporting a definition of "recovery" and the ignorance behind the statement that one can donate blood once one "feels better" is

astonishing from any healthcare provider – let alone the nation's guardian of health.

Education is the key to progress and Invest in ME provide the 5th international ME/CFS Conference to show what can be achieved by dedication, proper science and clear strategy.

A year ago, in our 2009 conference Journal of IiME (Volume 3 Issue 1), we posed a hypothetical situation which might occur between our 2009 conference and leading up to our 2010 conference. We supposed that a diagnostic test was developed and that sub groups were more easily able to be identified in order to guide treatments, and that a disease mechanism for ME was found? We asked –

- how would ministers and healthcare officials react to such changes?
- what changes would be seen in the healthcare system?
- how would the pharmaceutical industry react with the promise of great rewards from development of effective treatments and possibly cures for ME based on successful biomedical research?
- How would NICE react?

To some extent our hypothetical situation has come about. The XMRV research was published – but what has been the reaction?

An establishment mired in vested interests has been quick to malign the WPI/NCI/CC studies issuing results from rushed trials which have failed to replicate the painstaking research carried out in the USA.

NICE have been quiet. Their much maligned guidelines for ME which allows a model of ME to be retained as a behavioural or mental disorder, recommending common-sense (pacing), non-curative and ineffective (cognitive behavioural therapy) and injurious (graded exercise) therapies. With the head of NICE even having failed to read a 400+ page analysis and criticism of the hugely expensive MRC-funded PACE trials by Professor Malcolm Hooper and Margaret Williams before rejecting it, the credibility of NICE is surely at its nadir.

Perhaps predictably the Department of Health (DoH) has not acted. A department and a Chief Medical Officer which found it easy to

recommend large purchases of antivirals for pandemic of H1N1 which failed to materialize and which closed schools when a single pupil was found to have contracted this influenza variant, has been inconsistent and tardy in its reaction to the pending threat posed by XMRV and thousands of patients with an infectious disease being let loose on the blood banks of UK.

The MRC have done nothing except to continue their failed policies of accommodating vested interests promoting psychosocial therapies to treat a disease for which every IiME conference has provided clear proof of the organic origin.

As the Journal goes to press we are still awaiting decisions from the National Blood Supply agency on what is to happen. Meanwhile a potentially grave situation is allowed to continue with no action – with the risk to hundreds of thousands of people.

Yet in the absence of progress from the government, Medical Research Council and from within the NHS it is the patients who are now being empowered.

Invest in ME has recently used its Biomedical Research Fund (BRF), announced in January 2009, to part fund WPI research in UK studies of XMRV. The WPI have extended the original scale of the UK study agreed with IiME, thanks to the determination of their staff who have devoted their free time and the compassion of their president and research director.

The response from UK patients has been overwhelming, with patients who have had no access to medical care and no involvement in research suddenly allowed to bypass the status quo enforced on their situation by a failed system and direct their own involvement in medical trials.

This empowerment of the patient is an interesting corollary to the biomedical research taking place - demonstrating the fact that the UK healthcare provision as well as the policies of the MRC have failed the ME community.

Perhaps this is the model for the future.

IiME wishes to play its part in facilitating advances in biomedical research into ME and will be continuing to attempt to fund this research. To echo the oft-quoted MRC/CMO spin IiME are



interested in high-quality proposals for research – something for which there is an abundance of potential.

The only strategy which makes any sense from a scientific or moral viewpoint is to fund biomedical research into ME and treat ME in the same way as cancer, Parkinson's, MS or any other mainstream illness.

Proper diagnostic criteria, the Canadian consensus criteria, needs to be adopted to differentiate idiopathic chronic fatigue, burn out, overtraining syndrome, fibromyalgia, multiple chemical sensitivities etc. from ME and find the correct treatment for each of these groups. The treatments, which do exist for some sub groups, need to be made aware of and made available. An objective scientific approach to ME and sub grouping is required to facilitate this process.

We hope the conference will demonstrate this fact - again.

In the UK there is now a new government, a new Chief Medical Officer pending, and a new CEO at the Medical Research Council about to be selected – a unique opportunity to displace the non-science of the last decades with a strategy based on proper science, unaffected by bogus input from those vested interests promoting a psychosocial view of ME.

For researchers and medical students there can be no more rewarding area in which to specialize than myalgic encephalomyelitis.

For ME patients in the UK and their families there are grounds to hope we are on the crest of change and they can perhaps begin to see the light at the end of one of the darkest and most scandalous tunnels of medical ignorance.

As with Multiple Sclerosis, which was denied as a real disease before a diagnostic method was developed, ME is likewise on the brink of that same breakthrough. Once it does arrive then patients can begin to see a future of funding for biomedical research and more effective treatments.

A New Era in ME/CFS Research.

And those who have for a generation denied this illness with misinformation and malpractice may

well then be brought to account.

Invest in ME publish the Journal of IiME for free, and as often as our funds permit. For the conference version of the Journal (provided to conference delegates and available from IiME for a small fee) we have the following.

Professor Hooper describes the IiME conferences and introduces the speakers.

Appropriately, for a Journal produced for a conference which carries the theme of education of healthcare professionals, this version contains an illuminating study of ME in the medical literature by Professor Leonard Jason, showing coverage of ME (CFS) was severely lacking in medical textbooks.

Dr Ian Gibson is no stranger to ME and the effects on citizens. He set up an inquiry into ME in 2006 which made several recommendations (increased ring-fenced money for bio-medical research, for ME to be given due recognition, alongside heart disease and cancer, an inquiry into the vested interests of insurance companies whose advisors also act as advisors to the DWP) – none of them taken up by the government.

When the UK Secretary of State for Health and the UK government's Chief Medical officer seem to define recovery from ME as "feeling better" we have an article from an expert who has studied ME for several decades. Dr David Bell supplied a definition of recovery from ME (CFS) – something which the government officials would be well advised to read.

ME needs pharmaceutical companies to take a moral position on treatment of this neurological illness and begin funding biomedical research. We therefore invited Hemispherx Biopharma Inc. a Philadelphia based company, to contribute an article on their experiences developing drug treatments for ME. HB is developing Ampligen - potential treatment of globally important viral diseases and disorders of the immune system including HPV, HIV, Chronic Fatigue Syndrome (CFS), Hepatitis and influenza. It can only be a matter of time before such forward-thinking companies will provide the treatments for people with ME.

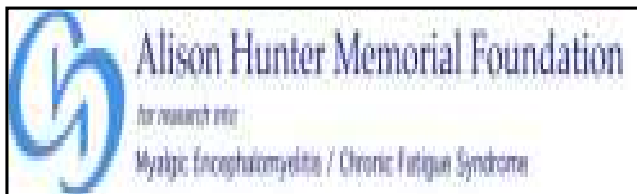
The European ME Alliance (EMEA), comprising



patient support groups, meets also in London and now spans across nine countries in Europe. EMEA provides a voice for European patients and is beginning to make its voice heard – and will continue to do so in cooperation with international organisations. Some of the member groups have provided news of what is happening in their countries. EMEA members are announcing new conferences for the later in the year, including a European Tour by Dr David Bell.

The abstracts of the conference speakers' presentations are also included in the Journal.

The Invest in ME conference in London in May is our fifth biomedical research conference and now welcomes delegates from eighteen countries. We would like to thank two organizations who have donated funds to enable Invest in ME to carry out this conference.



The Alison Hunter Memorial Foundation (AHMF) of Australia, set up by the mother of Alison Hunter, has again provided support.



Likewise the Irish ME Trust (IMET) has provided support for the fourth year running. These two organizations have track records of supporting biomedical research into ME and share a common ethos to that of IiME. We are profoundly grateful to these organizations for helping us in this way.

To those who attend the conference we hope you enjoy your day and learn a great deal. For those not able to come to the conference then we hope the Journal and the resultant DVD of the conference will provide something of use.

Enjoy the Journal, enjoy the conference.

Best Wishes

Invest in ME

Invest in ME (Charity Nr. 1114035)

ME STORY

When I finally did get a diagnosis it was only through travelling to a GP who had 40 years of clinical experience of M.E.

I couldn't get a diagnosis locally.

I'm sure the lack of an accurate diagnosis is no news to most people listening. I would, however, like to emphasise that, even after 8 years, when you finally receive a diagnosis it's not much use to you. It is a great relief to have an explanation; and confirmation of what you've been dealing with.

However, if every health professional you subsequently meet – be that for acute care in an A & E unit or resources from a wheelchair assessment advisor – if every health professional you meet then doesn't believe in M.E. it's of very little practical value when you seek services.

Worse than that, it can actually be **detrimental to the service user-service provider relationship to mention that you have this condition.**

Once the M.E. diagnosis comes up, all the negative responses ensue.

- *a person with ME*

ME FACTS

UK donor selection guidelines state that people who have previously been diagnosed with CFS/ME are able to donate blood once they have recovered and are feeling well. There is no set timescale for this, and **no additional diagnostic tests are carried out before they can donate blood.**

-UK government Chief Medical Officer May 2010

Canadian Blood Services has accepted blood donations from donors who report a history of CFS but are now well. Donors who are not well may not donate blood.

However,, we are changing the way we manage donors such that **any donor who has a medical history of CFS will be indefinitely deferred from donating blood.** Once we understand more about this issue, we will revisit this decision to determine whether the indefinite deferral is still warranted

- **Canadian Blood Services April 2010**



The 5th Invest in ME International ME/CFS 2010 Conference

5th Invest in ME Conference “On the Front Foot – Back to the Future”



By Professor Malcolm Hooper

The ME community owes a great debt to Invest in ME for arranging a succession of International conferences that present the biomedical evidence for this debilitating complex, chronic multi-system illness which has devastating effects on the sufferer and imposes enormous strains on families and carers.

For several years a galaxy of international speakers has comprehensively presented overwhelming evidence of the nature of ME its classification, aetiology, diagnosis, pathology and possible treatments.

In the UK and other countries, Governments, the National Health Service, Medical Research Council, Department of Works and Pensions, and the Insurance industry have refused to engage with this evidence, refusing all invitations to attend, learn from, and contribute to these conferences. Instead they have espoused, despite all the evidence, an ideological position that seeks to establish ME/CFS as a mental and behavioural disorder in defiance of the international classification, WHO, ICD-10 G93.3, as a neurological disorder.

This attitude compounded by widespread vested interests, particularly in the medical insurance industry, has resulted in limiting support and benefits for very sick people and their carers, repeated misdiagnoses of patients, and ultimately the abandonment and inhumane treatment of

Emeritus Professor of Medicinal Chemistry the University of Sunderland

Professor Malcolm Hooper was appointed Chief Scientific Advisor to the Gulf Veterans Association (GVA) and accepted by the Ministry of Defence (MoD) as their nominee on the Independent Panel established to consider the possible interactions between Vaccines and NAPS tablets. His involvement with the GVA brought contact with Myalgic Encephalomyelitis and related disorders. Gulf War Illness/Syndrome (GWI/S) has much in common with ME/CFS.

Professor Hooper's latest article describes the role of “Magical Medicine” in UK MRC strategy. See <http://www.investinme.org/Article400%20Magical%20Medicine.htm>

Professor Hooper is also assisting Invest in ME in current projects.

patients who are very ill and suffer from a complex chronic illness that is dismissed without proper investigation and without regard to the very extensive published peer-reviewed literature. No research funding from official bodies has been made available leaving the ME community and individuals to find funding for vital studies.

I believe that this conference marks the beginning of a significant reversal of these positions. We are in, cricketing parlance, “on the front foot” attacking the bowling.

Today, our first speaker, Professor Leonard Jason, engages with the issues round case definition which bedevils ME. Confusion, prevarication, and downright deception have through a succession of advisors to Government and other bodies succeeded in stigmatising patients. The use of heterogeneous patient cohorts has led to flawed epidemiology and spurious conclusions. There is a desperate need for clarity in this area so that valid studies can be carried out. It is important that patient sub-groups are recognised for the purpose of research, treatment and care.

Persistent viruses have been known for decades to play an important role in ME, particularly those of the coxsackie family.

The 5th Invest in ME International ME/CFS Conference 2010 *(continued)*

A “back to the future” return builds on earlier clinical observations and takes us back to the question of persistent virus infections and nature of such infections associated with increasing disability in the sufferer. Professor Nora Chapman addresses the complexities of such infections at the cellular level revealing the ways in which these viruses are able to avoid destruction by the immune system and initiate disabling illness.

Dr John Chia, a previous conference speaker, examines the specific role of enteroviruses in ME and links this to both diagnosis and treatment for patients. Coxsackie viruses have long been known to be both neurotropic and cardiotropic – they are multi-system pathogens- and many people with ME have compromised heart function.

Dr Cheney has made a special study of the cellular energy defects in cardiac function that will help our understanding of ME and ways it can be diagnosed and treated

Dr Jonathan Kerr’s studies in gene expression in ME are groundbreaking and have deepened our understanding of the illness and provided a sound clinical basis for diagnosis, sub-groups and possible new treatments. One very important aspect of his work has been the inclusion of the severely affected patients who are usually not included in any research studies.

ME are the initials for myalgic encephalomyelitis = muscle pain with inflammation of the brain and spinal cord. The inflammatory nature of ME had long been recognised and has been the subject of much research.

Dr Nancy Klimas is world famous for her work in inflammation that offers the possibility of finding biomarkers that will confirm the biomedical basis of ME and provide other physicians with an essential tool for diagnosis and possible treatment of ME.

Professor Brigitte Huber has found associations between mononucleosis (Epstein Barr virus, EBV)-related ME and a human endogenous retrovirus, HERV, that offers the possibility of new biomarkers for this illness and introduces us to the world of retroviruses.

Annette Whittemore shares much in common with many people at the conference in that she is the mother of a child (now a young woman) who

has suffered with ME for many years. Like many here today she has devoted her life and family resources to fighting this illness and finding better ways of understanding and treating ME. Due to her initiative and generosity the Whittemore–Peterson Institute, WPI, was established to provide the first centre for integrated medical care for people with ME, bringing together patients, clinicians and research staff to combat this illness. The groundbreaking and astonishing discovery of XMRV (Xenotropic Murine-like Retrovirus) emerged as a major collaborative research work from the WPI and is a first in this field.

The XMRV ‘bombshell’ took the ME world by storm and offers a possible integrated understanding of earlier diverse and extensive research studies on ME. This is advanced science of very high quality.

Dr Judy Mikovits was a key member of the team that first reported the association between XMRV and ME. This sensational discovery, coming out of ‘left field’, caused astonishment, delight to many but regrettably also acrimony, accusation and spiteful comments. Several attempts to replicate this study were unsuccessful but on close examination all the attempts at replication were found to be seriously flawed since the same methodology was not followed. So we are particularly privileged to have Judy to bring us up to date in the implications of the discovery of XMRV for the world of ME. We have the world expert on this topic making our final presentation.

Today’s conference is aflame with hope and new possibilities. No longer can the old, tired, defensive psychiatric view of ME be sustained or remain credible, groundbreaking advanced science and medicine has vindicated the humane caring compassion of those involved with suffering ME patients and given them new hope for effective treatment of this complex, chronic, disabling illness.

Just as the recent election in the UK has ushered in a new era of political change so, I believe, this conference has changed the medical and scientific landscape for ME – cause for celebration and renewed commitment to our common goals. This conference will re-energise all seeking truth and a proper justice for ME. Be energised!

Malcolm Hooper May 2010

The PACE TRIALS – MAGICAL MEDICINE

The Medical Research Council (MRC)'s PACE Trial of behavioural interventions for Chronic Fatigue Syndrome / Myalgic Encephalomyelitis (CFS/ME) attracted considerable opposition from the outset and the Principal Investigators had difficulty in recruiting a sufficient number of participants. PACE is the acronym for Pacing, Activity, and Cognitive behavioural therapy, a randomised Evaluation, interventions that, according to one of the Principal Investigators, are without theoretical foundation.

The MRC's PACE Trial seemingly inhabits a unique and unenviable position in the history of medicine. It is believed to be the first and only clinical trial that patients and the charities that support them have tried to stop before a single patient could be recruited and is the only clinical trial that the Department for Work and Pensions (DWP) has ever funded.



Since 1993, the giant US permanent health insurance company UNUM Provident has been advising the UK DWP about the most effective ways of curtailing sickness benefit payments. The PACE Trial is run by psychiatrists of the Wessely School, most of whom work for the medical and permanent health insurance industry, including UNUM Provident. These psychiatrists insist – in defiance of both the World Health Organisation and the significant biomedical evidence about the nature of it -- that “CFS/ME” is a behavioural disorder, into which they have subsumed ME, a classified neurological disorder whose separate existence they deny. Their beliefs have been repudiated in writing by the World Health Organisation.

In 1992, the Wessely School gave directions that in ME/CFS, the first duty of the doctor is to avoid legitimisation of symptoms; in 1994, ME was described as merely “a belief”; in 1996 recommendations were made that no investigations should be performed to confirm the diagnosis and in 1999 patients with ME/CFS were referred to as “the undeserving sick”.

There are legitimate concerns about the MRC PACE Trial that are centred on apparent coercion, exploitation of patients, contempt in which patients are held, manipulation, pretension, misrepresentation, flawed studies yielding meaningless results and lack of scientific rigour;

the unusual personal financial interest of the Chief Investigator; the vested interests of the Principal Investigators; high rates of Severe Adverse Events (SAEs) and in particular, the underlying non-clinical purpose of the trial, which seems to have the politically generated aim of removing patients from benefits (i.e. the use of motivational behaviour therapy to achieve the intended result of the cessation of benefits for patients with “CFS/ME”). The Manuals used in the Trial seem to show that the authors either ignore medical science or they do not understand medical science. There is rightful objection to the denial of appropriate investigations and to the nationwide implementation of behavioural modification as the sole management strategy for the nosological disorder ME/CFS. That strategy is believed to be based on (i) the commercial interests of the medical and permanent health insurance industry for which many members of the Wessely School work and (ii) the dissemination of misinformation about ME/CFS by the Wessely School, whose members also act as advisors to UK Government agencies including the DWP, which it is understood has specifically targeted “CFS/ME” as a disorder for which certain State benefits should not be available.



The Wessely School rejects the significant body of biomedical evidence demonstrating that chronic “fatigue” or “tiredness” is not the same as the physiological exhaustion seen in ME/CFS and persists in believing that they have the right to demand a level of “evidence-based” definitive proof that ME/CFS is not an “aberrant belief” as they assert, when their biopsychosocial model of “CFS/ME” that perpetuates their own aberrant belief about the nature of ME/CFS has been exposed by other psychiatrists as being nothing but a myth.

There are some extremely disquieting issues surrounding the MRC PACE Trial and documents obtained under the Freedom of Information Act allow the full story to be told for the first time.

from “**Magical Medicine: How to Make a Disease Disappear**” by Professor Hooper. See <http://tinyurl.com/2uv8j95>



The 5th Invest in ME International ME/CFS Conference 2010

Research, Research, Research

By Dr. Ian Gibson



I spoke to a friend who works as a GP in a major Norwich surgery the other day. We talked about matters medical and political. I raised with him the subject of ME.

Whilst being sceptical of many of the claims by different groups he did acknowledge that more needed to be done in resolving causes, treatments and definitions. He was keen on a more comprehensive study for symptoms which of course could be related to causes.

His suspicion, as with many others, is that ME is really a series of illnesses some of which may have similar causes or symptoms. He supported research in that area to allow for the focussing of treatments. A local medic responsible for providing the local treatment service has been working tirelessly to find an appropriate physician to run a service. What they both acknowledge is that the subject raises deep hostility, anger, suspicion and frankly libellous claims on the issue of people's sincerity to tackle the problems.

Following two inquiries in the last parliament it is time to move on and develop a research network. A statement from the last inquiry on NHS service provision for ME/CFS said –

“To date research in the field of ME/CFS has produced little substantive progress but there are a number of encouraging findings e.g. the XMRV research which need to be pursued. As noted in the Gibson report there has been far too

Dr. Ian Gibson

Dr. Ian Gibson was MP for Norwich North thirteen years. He acquired a passion for all things scientific- especially biology – and pursued his passion for science by studying at Edinburgh University where he gained a BSC and later on a PhD in genetics.

He served as the Dean of the School of Biological Sciences at UEA from 1991 to 1997 and headed a research team investigating various forms of cancer, including leukaemia, breast and prostate cancer. In 2003, the university made Dr. Gibson an Honorary Professor.

Dr. Gibson's work in Parliament and in Norwich has primarily consisted of advocacy work and pushing the government to take more notice of the role that science plays (and can play) in the UK.

His scientific background has meant that he has been involved in numbers of groups and charities in Parliament. He was a member of the Select Committee on Innovation Universities Science and Skills and was a member of the science and technology select committee from his election in 1997 and served as its chairman between 2001-5. He was chair of the All Party Parliamentary Group on Cancer.

Whilst he was the dean of biology at the University of East Anglia he was the head of a research team investigating cancer, and has been awarded a 'Champion' award by Macmillan Cancer Relief for his work in support of people with cancer. He was a major campaigner against top-up fees for universities. He headed the Inquiry into ME in 2006 – an independent inquiry which made recommendations regarding ME – such as funding for biomedical research.

See <http://tinyurl.com/2eqw55>



Research, Research, Research

much emphasis in the past on psychological research and insufficient attention to biomedical research. The Group welcomed the recent Medical Research Council initiative to attract new researchers and new technologies in this area.

However the Group is sure that it is vital that further biomedical research is undertaken to help discover a cause and more effective forms of management for this disease”

A recent Guardian article on ‘Health & Food’ edited by Sarah Boseley contained a map of England showing the geographical areas and variations in the frequency of illnesses.

The major illnesses were heart, cancer etc. but other illnesses featured in the description of health problems.

There was no mention of ME/CFS or some other new illnesses anywhere in the article.

Presumably this is because of the paucity of data which raises the question of how we obtain that information. If we are to progress on understanding of these new illnesses which involve thousands of patients and individuals of all ages then we will need the support of not just the official government bodies but also that from support groups.

In our understanding of ME/CFS it is important, I believe, to set up a research unit where we can investigate the statistics of the illness and the role of biomedical agents/factors.

Our conference today, I believe, will throw light on the research areas we need to take up. To further this pursuit we should debate the setting up of a research laboratory, its financing etc. It needs advice from colleagues in other countries like Norway, the USA etc. and we welcome representatives here today.

Invest in ME has entered discussions to investigate a laboratory in Norwich in association with the University Hospital. We will need a management structure to run the laboratory and to organise its activities.

This is not to replace the activities of organisations who are seeking to improve treatments and services but to complement them. Like many other charities, trusts etc. in the cancer field they develop their own programmes. Research, however, as we have found out with other illnesses can re-instate you in your priorities.

Prevention strategies and treatments can develop in novel innovative ways.

Research has a habit of throwing up major surprises. Drugs and treatments for other illnesses can become useful in your particular research. Prions were discovered in B.S.E. and mobile genes first emerged from work on maize.

We need to attract researchers who understand the field and its challenges as well as the technologies.

Lastly but as a major feature we need to ensure patients, carers and others are involved from the beginning. If clinical trials are to be developed then patients, nurses and others must be part of the process of setting up and interpreting the trials. I believe the will is there to set up such a research and this conference can be the talisman for the exciting new initiative.

Further details from Dr. Ian Gibson



Dr Gibson is working with Invest in ME on a project to provide services for people with ME.

ME & MEDIA

“...for many years doctors argued that Chronic Fatigue Syndrome (ME) didn’t exist. They refused even to dignify it with the name Myalgic Encephalomyelitis. ME, they said, was just ‘me’ writ large... Scientists could (now) be on the brink of a breakthrough. We must hope they are. That would – at least – go some way to compensating for the shameful manner in which sufferers were treated for so long by the medical profession”.

- *The Independent October 2009*

An Effort to Influence Medical Textbook Writers

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Abstract

A recent study found that coverage of CFS was severely lacking in medical textbooks with a representation rate of less than .01% (Jason, Paavola, Porter, & Morello, 2010).

The current study consisted of sending letters to editors that contained the findings from Jason et al.'s original study pertaining to the lack of quality information in medical texts on CFS.

Twelve editors replied to our letter, and five (42%) had positive remarks, stating that the information was helpful and would be included in new editions of texts.

We determined whether editor responses to the information sent differed as a function of theoretical orientation of their section on CFS.

Those who could not be classified because they had too little information or no CFS information responded the most.

This study suggested that it is possible to take proactive stances in attempting to inform editors about the issues related to the quantity and quality of information concerning chronic fatigue syndrome in medical textbooks.



Professor Leonard Jason PhD

Professor of Clin. & Community Psychology, Director, Center for Community Research, DePaul University, Chicago

Dr. Leonard Jason, Ph.D., is among the most prolific of all CFIDS researchers. For more than a decade, Dr. Jason and his team at DePaul University's Centre for Community Research have worked to define the scope and impact of CFS/ME worldwide.

Professor Jason presented at the IiME International ME/CFS Conference 2008 in London.

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An Effort to Influence Medical Textbook Writers

Chronic fatigue syndrome (CFS) is a complex illness (Fukuda et al., 1994; Jason & Richman, 2007), which can have devastating consequences in functional, employment and relationship areas (Jason, Fennell et al., 2003). Patients suffering from CFS are more functionally impaired than those suffering from type II diabetes mellitus, congestive heart failure, Multiple Sclerosis (MS), and end-stage renal disease (Anderson & Ferrans, 1997; Buchwald, Pearlman, Umali, Schmalings, & Katon, 1996). Although all patients do not demonstrate the same medical abnormalities, some evidence points to immune dysfunction (Patarca-Montero, 2002; Lorusso et al., 2008), HPA malfunction (Scott & Dinan, 1999), and reduction in gray matter in the brain (De Lange et al., 2004).

In addition, physician minimization of physical symptoms frequently occurs (Green, Romei et al.,

1999). Patients with CFS tend to report a very low level of satisfaction with conventional medical healthcare.

Twemlow, Bradshaw et al. (1997) found that 66% of patients with CFS reported that treatment with their physicians made their illness worse.

According to Anderson and Ferrans (1997), 77% reported negative interactions with their healthcare provider. Dissatisfaction of CFS

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patients with physician interactions may be caused by negative attitudes towards CFS patients. These attitudes may be due to lack of education about the illness. Bowen, Pheby and McNulty (2005) found that 48% of physicians do not feel confident in making a diagnosis of CFS and 41% do not feel confident in treating CFS patients once they have been diagnosed. Chew-Graham (2008) found that family physicians reported that continuing education and training left them unable to adequately diagnose and treat CFS.

Jason et al. (2010) recently examined 119 medical textbooks for CFS material. Of 129,527 total pages only 116.3 pages, less than .1%, mentioned CFS. Multiple Sclerosis was represented on .12% and Lyme disease was on .15%; yet, CFS has a prevalence rate of .42% (Jason et al., 1999), four times the prevalence rate of Multiple Sclerosis and ten times that of Lyme disease. Further, only 21% of the texts reviewed included the criteria for diagnosis of CFS and only 28.6% included treatment options, two vital topics of knowledge for physicians working with CFS patients. These findings suggest not only that the topic of CFS is under reported in published medical textbooks, but also that there are large discrepancies in the information provided.

These types of inequities of the material covered in medical textbooks have rarely been the focus of interventions. One exception is the work of Rabow, Hardie et al. (2000), who conducted a content analysis on end-of-life care in multiple medical specialties, and then held a conference with major textbook publishers where they discussed their results; this effort was successful in initiating some change (Rabow, McPhee et al., 1999). In the present study, we attempted to change the amount of CFS coverage in medical textbooks. The authors contacted the editors of the textbook sample from the study by Jason et al. (2010) and encouraged them to increase the representation of CFS. In addition, we classified the chapters that mentioned CFS as psychological, biological, or biopsychosocial and determined if theoretical orientation influenced the editors' receptiveness to our efforts to influence them.

Methods

Contacting Editors

We used the sample of textbook chapters collected in Jason et al.'s (2010) previous content analysis. We used the Internet to locate the lead editor of each textbook and found their current email address. If the lead editor's email address was not

available then a secondary editor's email address was used instead. We then emailed one editor per textbook explaining the importance of improving the material on CFS in textbooks. The letter sent is located in Appendix A. We succeeded in emailing 78 editors. Of those 78 who were emailed, four had written multiple textbooks. The e-mails only addressed one book to eliminate confusion, and each editor was sent only one email. Three of those four editors had edited two texts; the fourth had been lead editor on four texts. Though there was a total of 119 texts there were only 113 editors.

Classifying CFS Section

The sections on CFS in our sample of textbooks were categorized into four groups: biological, psychological, biopsychosocial, and an exclusion group. The criterion for a biological classification was that the section discussed CFS as a biological illness (e.g., biological tests to rule out other illnesses before diagnosis of CFS, pathophysiology, biological etiology, and biological treatments). The criterion for a psychological classification was that the section focused on the psychological factors of CFS (e.g., the text discussed individuals with personality types thought more prone to suffer from CFS, or the psychological effects of the illness). For biopsychosocial classification, the section needed to combine both biological and psychosocial factors contributing to CFS. The exclusion category indicated that there was inadequate information to make a classification into one of the three categories above (often there was no CFS information in these texts). Two research assistants individually read and classified each section. The two research assistants then discussed every section where they did not agree and carefully came to an agreed-upon consensus.

Classifying Replies

The replies from editors were categorized by two research assistants and were deemed positive, negative or neutral. Positive responses were categorized as such because the editors had stated in their responses that they would either edit their current sections on CFS to include the information provided to them, or that a new section was going to be added to the next edition containing this information. Neutral was used to classify those editors who had given a positive response; however, they chose for one reason or another not to include CFS in any future editions of their text. Negative responses indicated that the editors had not only chosen not to make a change in their inclusion of CFS but that they still viewed the

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illness as highly controversial.

Results

Descriptive Statistics

Of the textbooks, 18.5% were classified as biopsychosocial, 6.7% were biological, and 7.6% were psychological, leaving the remaining 67.2% to fall into the exclusionary category.

Editor Replies

Only 12 editors replied of the 78 contacted, giving a total response rate of 15%. Of the twelve editors who replied to our letter, three were associated with biopsychosocial, two with psychological, one with a biological section, and six with the exclusion category.

Five of the responding editors (42%) had positive remarks, stating that the information was helpful and would be included in new editions of texts. Of these five responses one was associated with a biopsychosocially oriented chapter and the remaining four were part of the exclusion category that did not contain enough material on CFS to categorize.

Six editors (50%) were placed in the neutral category, stating that they appreciated the information but could not use it in their texts usually due to the nature of the text (e.g. neuroscience or physically manifested diseases.) Of these editors one had written a biopsychosocial chapter, one a biological chapter, two wrote psychological chapters and two did not contain enough material on CFS to categorize.

Only one reply (8%) of the total responses was categorized as negative. The editor stated that CFS would not be included due to its controversial nature and unknown etiology. The negatively responding editor had previously omitted CFS from the text.

Discussion

While the majority of the responses from the editors were positive, it is of importance to note that only 12 editors replied of the 78 contacted, giving a total response rate of 15%. Of the twelve total editors who replied to the letter, three were associated with biopsychosocial chapters, two with psychological chapters, and one with a biological chapter. The remaining six editors who replied were associated with an exclusion chapter.

Five of the responding editors (42%) had positive

remarks. The editor of *Neuroscience* wrote the following:

“Thanks for this good suggestion and information. We will definitely include a section on CFS in the next edition of *Neuroscience*.”

The editor of *Harrison's Textbook of Internal Medicine* wrote:

“As *Harrison's Textbook of Internal Medicine* is used by many, if not the majority of, medical schools throughout the U.S. during the students' internal medicine rotation, it would be very important to make sure that we get this textbook's CFS chapter right for its next edition...*Harrison's* will have a new author for the CFS chapter. I'll share your position paper with the new author as the chapter is prepared.”

Further, the editor of *Pathophysiology: the Biological Basis for Disease in Adults and Children* wrote:

“[We] decided to wait until more data was available. We are going to include CFS in the alterations of musculoskeletal chapter... We agree with you that CFS is a very important disease/disorder and thank you for including all of your information.”

The editor of *General and Systemic Pathology* wrote:

“Your comments will be helpful when we come to decide what to include in subsequent editions.”

Another was concerned about textbook sales, and this editor of *Essential Family Medicine: Fundamentals and Cases* wrote:

“If there is another edition of the textbook (sales of all books are down significantly), I will certainly include a case illustrating CFS. I agree that it needs to be addressed.”

Six editors (50%) were positive but did not indicate they would use our material or other CFS sources in a revised text.

The editor of *Pathophysiology: Concepts of Altered Health States* wrote:

“I agree that the topic warrants coverage in texts used in the education of physicians. Hopefully, we will soon gain a better understanding of its pathogenesis and insights into more effective treatment methods.”

The editor of *The Handbook of Stress Medicine*

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wrote:

"I have done research on this topic myself and understand its' importance. Good luck in sending out the message."

An editor of *The Atlas of Pediatrics* wrote:

"The text is not intended to be encyclopaedic like standard textbooks of paediatrics. Hence, many disorders are purposely not included. I appreciate the need for education about CFS".

Further the editor of *Clinical Neuroanatomy and Neuroscience* wrote:

"Mine is not a textbook of clinical neurology. It is addressed to students who are 'just in off the street' and is designed to convince them that a sound understanding of the fundamentals of basic neuroscience will pay off big time later on in the interpretation of clinical disorders."

Only one reply (8%) of the total responses could be categorized as negative.

"While I appreciate your position and I am sympathetic to CFS sufferers it is still a highly controversial topic regarding etiology and not one for which there is sufficient evidence as to cause to include it in a clinical virology text meant for professionals."

While the entire sample size of textbooks (N=119) was large, the sample of editors that responded was relatively small.

Hopefully, in the future we can follow-up to see if there are actual changes made in the textbooks. There certainly is a need for more efforts to influence medical textbook writers so that they adequately provide more information about CFS to students in the healthcare field.

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Appendix A

I would like to thank you for the important service you have provided to the medical community through compiling and editing the textbook "(Name of text was placed here)". Medical textbooks are crucial to the education of medical students and also serve as reference tools for experienced physicians. I would like to inform you of an issue regarding medical education of chronic fatigue syndrome (CFS). The Center for Community Research at DePaul University has done research on the coverage of CFS provided in medical textbooks, and there is reason for concern. We did a content analysis of 119 medical textbooks from a variety of medical sub-specialties. Out of the 119 textbooks examined, only 48 mentioned CFS. CFS was discussed less than diseases such as Lyme disease and Multiple Sclerosis (MS), which have a lower prevalence than CFS.

It is crucial that textbooks contain sufficient information on illnesses, as a professor may use a textbook as a course guide. Additionally, textbooks fill in gaps to inform students of disorders and illnesses which professors may not explicitly describe in the classroom. It is essential that physicians receive sufficient training to identify CFS, as the wrong diagnosis, or lack of a diagnosis can be very damaging to people who suffer from this illness.

Research shows that many physicians may lack the

knowledge to properly diagnose and manage CFS. Two studies have found that primary care physicians report feeling a lack of confidence and knowledge in CFS diagnosis and management. 95% of individuals with CFS in one study reported feelings of estrangement. Better education of medical students will help combat this widespread stigma and improve the quality of life and treatment for individuals with CFS. The dearth of information on CFS in textbooks is of course not to blame for this problem, as it is only a reflection of the larger lack of understanding of CFS in society today. However, textbooks that contain in-depth and un-biased coverage on CFS could help to raise awareness about the illness, as textbooks are a key component to medical training. As an attachment to this email, we have provided a model section, providing information on CFS; and it has been endorsed by the International Association of ME/CFS, the scientific organization that organizes conferences and publications on CFS. We hope that you will use this model in considering what to include about CFS in future revisions of your publications. As an author and editor, you can help move the medical community in the right direction and improve the education of today's physicians.

Chronic Fatigue Syndrome

(Statement endorsed by the International Association of ME/CFS)

Chronic fatigue syndrome (CFS) is a multi-systemic illness, which is characterized by debilitating fatigue, as well as other symptoms such as unrefreshing sleep, memory and concentration problems, as well as post-exertional malaise. The total direct and indirect yearly costs in the U.S. due to CFS range from \$18.7 to \$24 billion dollars.¹ Patients with CFS are more functionally impaired than those suffering from type II diabetes mellitus, congestive heart failure, Multiple Sclerosis (MS), and end-stage renal disease.^{2,3}

The term chronic fatigue syndrome was created in 1988 by Holmes et al.⁴, but this illness had previously been referred to as Myalgic Encephalomyelitis after an outbreak in Britain in 1955.⁵ Many patients with this illness feel that the term chronic fatigue syndrome trivializes the seriousness of the illness, and some researchers and patients suggest using a combination of the terms: Myalgic Encephalomyelitis/chronic fatigue syndrome (ME/CFS).⁶

Most scientists use the Fukuda et al.⁷ CFS case

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definition, although there is a Canadian clinical case definition that is being increasingly used.⁸ The Fukuda case definition⁷ includes the following symptoms: persistent or relapsing fatigue for 6 or more months. The fatigue must be severe, impair ability to function, not be relieved by sleep or rest, and not be the result of physically exhausting activity. Also at least four of the following eight symptoms must persist for at least 6 months: tender/sore lymph nodes, sore throat, muscle pain, joint pain without swelling or redness, impaired memory or concentration, unrefreshing sleep, post-exertional malaise, and headaches of new type, pattern, or severity.

Onset of CFS symptoms are often abrupt, commonly associated with a flu-like illness. CFS can also have a gradual onset, not associated with a particular event or illness. CFS tends to be a chronic illness, with less than 10% of individuals returning to pre-CFS levels of functioning.⁹ CFS may be expressed differently in children, so there is a different case definition for pediatric CFS,¹⁰ and prognosis for youth is better than for adults. The prevalence of CFS is approximately .4%,¹¹ and this illness is most prevalent among women, individuals who are of middle age, and among individuals of lower socioeconomic status.¹¹ CFS is also found in adolescents, although at a lower rate of about .2%.¹²

One challenge in diagnosing CFS is that it shares symptoms with several illnesses, such as Lyme Disease, MS, Major Depressive Disorder (MDD), and Fibromyalgia.¹³ There are several key ways to differentiate MDD from CFS. In MDD fatigue is not as prominent as in CFS. Additionally, the onset of CFS is often sudden, while the onset of MDD tends to be gradual. Other common indications of CFS are post-exertional malaise, sore throat, swollen lymph nodes, and night sweats, and these symptoms are not commonly found in individuals with depression. Cortisol levels tend to be higher in MDD and lower in CFS. While some argue that the high prevalence of MDD in people with CFS is an indication that the disease may be psychogenic, depression commonly occurs in individuals who are chronically ill.¹⁴

Fibromyalgia and multiple chemical sensitivities commonly co-occur with CFS and share symptoms. A variety of studies have shown that approximately 35% to 75% of people with ME/CFS also have fibromyalgia.¹³ In a community sample of individuals with CFS, only 40.6% had pure CFS; 40.6% had multiple chemical sensitivities (MCS), 15.6% had fibromyalgia, and 3.1% had fibromyalgia and MCS in

addition to CFS.¹³ While these illnesses share some symptoms, they are each characterized by unique symptomology and may be differentiated with careful evaluation.

De Lange et al. observed significant reductions in grey matter volume in patients with CFS.¹⁵ Other abnormal biological findings among some patients have included aberrant ion transport and ion channel activity, low natural killer cell cytotoxicity, a shift from Th1 to Th2 cytokines, cortisol deficiency, sympathetic nervous system hyperactivity, left ventricular dysfunction in the heart, and EEG spike waves.¹⁶⁻²³ Higher brain abnormalities appear to occur among patients with CFS who do not have concurrent psychopathology, versus those who have concurrent psychopathology.²⁴ A variety of theories have been proposed to explain these findings, and they have implicated viruses, immune dysregulation, neuroendocrine problems, as well as neurologic abnormalities. Kindling²⁵ and oxidative stress²⁶ theories have also been offered as ways of explaining the psychopathology of this illness. Important genetic data has also been accumulating on this illness.²⁷

Treatment of this illness often focuses on management of symptoms, whether they are for cognitive problems or unrefreshing sleep. Trials of pharmacologic agents have not yielded success to date. One of the more popular treatments for patients with CFS has been cognitive behavior therapy (CBT). Price, Mitchell, Tidy, and Hunot²⁸ reviewed 15 studies of CBT with a total of 1,043 CFS participants. At treatment end, 40% of people in the CBT group showed clinical improvement in contrast to only 26% in usual care, but changes were not maintained at a 1-7 month follow-up when including people who had dropped out. Patient surveys have suggested that graded exercise, which is a component of CBT, was felt to be the type of treatment that made more people with CFS worse than any other. A possible reason for negative patient reaction to these graded exercise strategies is suggested in a study by Jammes, Steinberg, Mambrini, Bregeon, and Dellioux,²⁹ which found that incremental exercise among individuals with CFS was associated with oxidative stress and marked alterations of muscle membrane excitability.

Other approaches to helping patients with CFS have included pacing³⁰ and Envelope Theory,³¹ and these approaches do not unilaterally increase activity for

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all patients. For example, the Envelope Theory recommends that patients with CFS pace their activity according to their available energy resources. In this approach, the phrase, "staying within the envelope," is used to designate a comfortable range of energy expenditure, in which an individual avoids both over-exertion and under-exertion, maintaining an optimal level of activity over time. Some people with CFS need to be encouraged to increase their activity, as they have the appropriate amount of perceived energy to do so.

However, there are also people with CFS that need to be encouraged to do less in order to decrease the discrepancy between perceived and expended energy. This theory emphasizes the need to understand the differential needs of subtypes of patients with CFS. The key is to not over-expend their energy supplies or consistently go outside their "envelope" of available energy.

Rather than a cure, this approach focuses on improving the ability of patients to cope with this illness.

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ME FACT

"Postviral fatigue syndrome / myalgic encephalomyelitis... has attracted increasing attention during the last five years...Its distinguishing characteristic is severe muscle fatiguability made worse by exercise...The chief organ affected is skeletal muscle, and the severe fatiguability, with or without myalgia, is the main symptom.

The results of biochemical, electrophysiological and pathological studies support the view that muscle metabolism is disturbed, but there is no doubt that other systems, such as nervous, cardiovascular and immune are also affected...Recognition of the large number of patients affected...indicates that a review of this intriguing disorder is merited...

The true syndrome is always associated with an infection...

Viral infections in muscle can indeed be associated with a variety of enzyme abnormalities...(Electrophysiological results) are important in showing the organic nature of the illness and suggesting that muscle abnormalities persist after the acute infection...there is good evidence that Coxsackie B virus is present in the affected muscle in some cases"

(PO Behan, WMH Behan. *CRC Crit Rev Neurobiol* 1988;4:2:157-178).

From **Documented involvement of Viruses in ME/CFS** [<http://www.investinme.org/Article-365%20Documented%20involvement%20of%20viruses%20in%20ME%20CFS.htm>]

ME RESEARCH

"A significant elevation in the relative amounts of 4 of 5 pro-inflammatory cytokines in peripheral blood plasma of patients with (ME)CFS was found when compared with the controls. In cases, lymphotoxin (LT) was elevated by 257% and IL-6 by 100% over the controls."

- Professors Mary Ann Fletcher and Nancy Klimas,
(*Journal of Translational Medicine* 2009;7:96:
doi:10.1186/1479-5876-7-96)



EDUCATION on ME/CFS – The General Medical Council Position

The 2010 Invest in ME conference has the theme of education of healthcare staff. It is important for healthcare providers to be aware of the symptoms of ME, the means to diagnose, the knowledge of potential treatments and the possibilities around mis- or missed diagnoses.

General
Medical
Council

It is only by better education of healthcare staff that people with ME can obtain the correct information, advice and treatment.

The GMC play a vital role in all of this. The standard textbook used by medical students in the UK still, erroneously, categorises ME in the mental health section.

Invest in ME had understood that the GMC are responsible for the curriculum of medical students. We invited the GMC to send a representative to speak at the conference on the subject of the medical curriculum content relating to ME. The GMC declined to send anyone. They did reply to Invest in ME's letter where we asked about the medical curriculum. This is their reply.

To Invest in ME:

Thank you very much for inviting the General Medical Council to speak at your international conference, on 24 May, about the education of medical students on ME/CFS.

Please accept my apologies for the delay in responding. I am sorry, but we must decline your invitation on this occasion.

Perhaps I could explain the GMC's position in the context of the process which governs the development and inclusion of elements in curricula for medical education and training, and, allied to this, the GMC's relationship with the 32 UK medical schools in respect of their undergraduate curricula and the medical Royal Colleges in respect of the 61 specialty curricula.

For undergraduate education, the GMC require medical schools to develop curricula which meet the outcomes and standards set out in *Tomorrow's Doctors* - http://www.gmc-uk.org/education/undergraduate/tomorrows_doctors_2009.asp.

Although the revised version of *Tomorrow's Doctors* (published in September 2009) was more prescriptive than the previous edition, the GMC does not prescribe the precise content of undergraduate curricula. We do not have the legal power to set a national curriculum for the universities' undergraduate courses and we believe that it is important to preserve the independence of universities, the diversity of their courses and the

innovation that can follow from that diversity – subject to the courses meeting our requirements in order to ensure patient safety and the fitness to practise of new graduates.

As you will see, *Tomorrow's Doctors* does not specify what should be taught to undergraduates about any specific conditions. This is decided by the medical schools when drawing up their own curricula. If you would like input to your conference from a medical school perspective I suggest that you try approaching the Medical Schools Council to see if they can identify an appropriate speaker.

The curricula for the 61 specialty training areas in postgraduate medical training are developed by medical Royal Colleges and approved by the General Medical Council. The GMC's Standards for Curricula and Assessment Systems http://www.gmc-uk.org/Standards_for_Curricula_Assessment_Systems.pdf_31300458.pdf - set out the high level requirements for specialty curricula design and content.

Against this background, I am sure you will appreciate that it is impossible for the GMC to respond to individual requests for prioritisation of highly technical and complex medical conditions. It is important, therefore, that the GMC work closely with the medical Royal Colleges and Faculties which have the relevant expertise and technical understanding of the medical conditions which relate to their specialty areas.



You could try approaching the Academy of the Medical Royal Colleges or the Royal College of Physicians (London) in particular if you wish to pursue the postgraduate perspective.

We do of course have links with the medical Royal Colleges and specialty associations, with patient networks and with research bodies such as the Picker Institute. In developing our curricular requirements we engage and consult widely, as we did in developing the 2009 edition of *Tomorrow's Doctors*.

Once again, I am sorry that the GMC has no specific role or expertise on what should be included in medical curricula about ME/CFS, or any other individual conditions, in order to contribute productively to your conference.

ME STORY

Comments from ME patients about their doctors:

- "I was told I was lazy and laughed at"
- "(he said) the illness was a load of trollop, he laughed me out of the surgery"
- "(he) laughed when I told him I could only visit him if I felt fit enough"
- "I was called 'stupid' and shouted at on more occasions than I care to mention...one neurologist said he 'couldn't care less' whether I ever got better"
- "I was told I was a disgrace"
- "My illness started with a sudden, severe collapse. The doctor said that it was due to 'attention seeking'"
- "(I was) told that I was a nutter"
- "(I was) told I was selfish and introverted and it was nothing but hysteria"
- "(the) doctors said to me 'if you go on like this you will be struck off the register' "
- "(the doctor) said my symptoms / signs 'didn't exist' "
- "It was suggested 'a good man' was all I needed".
- That same year, a severely affected female patient was informed by her GP that ME "*is a condition developed by the patient for what they can get out of it*".

from **Magical Medicine: How to Make a Disease Disappear** [<http://tinyurl.com/38yuj83>]

Canadian Guidelines

Invest in ME are the UK distributors for the Canadian Consensus Criteria – the Canadian Guidelines.

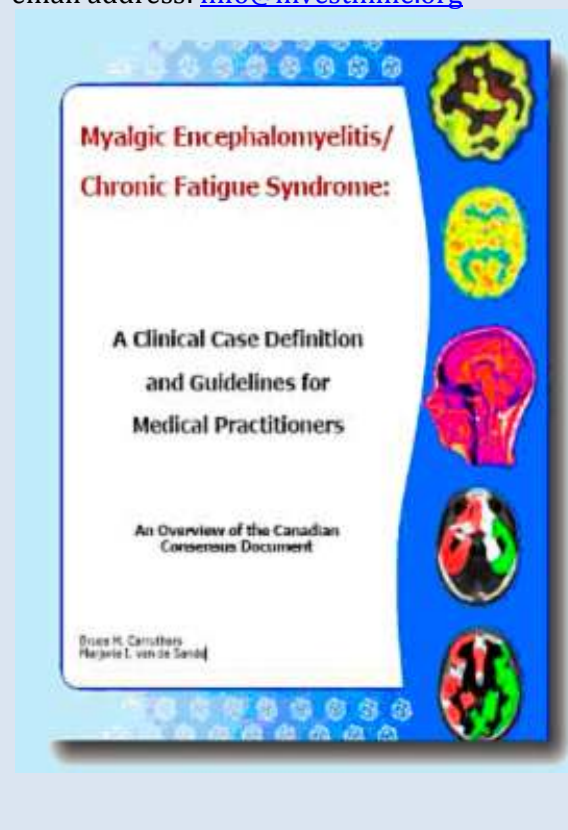
Described even by NICE as "*the most stringent*" guidelines available these are proper, up-to-date clinical guidelines which can also be used as a base for research criteria.

Findings from the study by Leonard A. Jason PhD (Comparing the Fukuda et al. Criteria and the Canadian Case Definition for Chronic Fatigue Syndrome) indicated that the Canadian criteria captured many of the cardiopulmonary and neurological abnormalities, which were not currently assessed by the Fukuda criteria.

The Canadian Criteria also selected cases with 'less psychiatric co-morbidity, more physical functional impairment, and more fatigue/weakness, neuropsychiatric, and neurological symptoms' and individuals selected by these criteria were significantly different from psychiatric controls with CFS.

The Canadian Guidelines provide an internationally accepted means for clearly diagnosing ME. The Canadian Guidelines are available from Invest in ME- the price is 83p per copy plus postage & packaging.

To order please contact Invest in ME via this email address: info@investinme.org



Definition of Recovery in Chronic Fatigue Syndrome

Dr. David S. Bell & David E. Bell

Definition of Recovery in Chronic Fatigue Syndrome

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Key Words:

Myalgic Encephalomyelitis, Chronic Fatigue Syndrome; Prognosis

Abstract

The definition of clinical recovery has long been debated in myalgic encephalomyelitis / chronic fatigue syndrome (ME/CFS).

Clinically, many persons who have had ME/CFS declare themselves "recovered" or "nearly recovered" while continuing to present for medical care because of ongoing somatic symptoms. In this study ten persons who considered themselves "recovered" or "nearly recovered" were given questionnaires to assess health status and compared to healthy adults.

Half of the "recovered" subjects would be considered ill with CFS based upon the disability requirements of the CDC empiric definition of CFS, and all "recovered" subjects had significant somatic symptoms.

Yet these subjects had all returned to normal in the symptom of orthostatic intolerance so that their daily activity was normal.

Thus the perception of recovery in ME/CFS is related to the ability to sustain upright activity and not related to the degree of somatic symptoms, including fatigue.

Introduction

In 1985, a cluster of ME/CFS occurred in Upstate New York involving 210 persons, 60 of whom were children or adolescents. The cluster was located in a 180 square mile rural region located between (but did not include) Rochester and Buffalo, New York. Based

Dr. David Bell MD



Dr David Bell MD has vast experience of ME/CFS.

He graduated from Harvard College in 1967 with an AB degree in English literature followed by Boston University with an MD degree in 1971.

Post doctoral training in paediatrics was completed in 1976 with subspecialty training in Paediatric Behaviour and Developmental Disorders.

In 1978 he began work at the University of Rochester but soon began a private practice in the town of Lyndonville, New York.

In 1985 nearly 220 persons became ill with an illness subsequently called chronic fatigue syndrome in the communities surrounding Lyndonville, New York. This illness cluster began a study of the illness which continues today.

Dr. Bell is the author or co-author of numerous scientific papers on CFS, and, in 2003 was named Chairman of the Advisory Committee for Chronic Fatigue Syndrome of the Department of Health and Human Services.

Publications include A Disease of A Thousand Names, (1988) and The Doctor's Guide to Chronic Fatigue Syndrome, (1990).

Dr Bell has recently been performing studies on XMRV.

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Lyndonville News

<http://www.davidsbell.com>

Definition of Recovery in Chronic Fatigue Syndrome (continued)

on the symptoms of the first 100 patients, diagnostic criteria were published(1), but with the publication of the Holmes criteria(2), it became clear that this cluster was the same as what was being termed chronic fatigue syndrome.

The children involved in this outbreak were a subject of particular attention. Of interest, the proportion of ill children to adults was similar to that of other community-wide epidemics described previously(3, 4). Because adolescents have lower Epstein-Barr virus (EBV) seropositivity, it was possible to eliminate EBV as the cause of this outbreak(5), a hypothesis prevalent at the time. Seventy-five percent of the children ill in this outbreak met criteria for fibromyalgia syndrome(6).

This cohort of children and adolescents with ME/CFS has now been followed clinically for twenty-five years. Four subjects have developed malignancy, and many have tested positive to the gammaretrovirus XMRV, a subject to be described in detail in subsequent studies. In 1995 a follow-up study was published(7) which demonstrated that 80% of those children and adolescents who became ill in 1985 considered themselves "well". However of those 80%, half were doing well despite ongoing somatic symptoms, while the other half had minimal or no somatic symptoms. Twenty percent of the subjects in that study were very ill and disabled. A full study detailing the current health status will be presented under separate cover. In the course of clinical practice and primary care, many of these persons have stated that they have "recovered" or "nearly recovered". However, they continue to present with symptoms suggestive of ME/CFS. The definition of recovery has been difficult to address because of the non-specificity of the symptoms. Current criteria for the diagnosis of CFS, the CDC empirical case definition(8) has one section that specifies degree of disability based upon the Medical Outcomes Survey Short Form-36(9). It has been noted that patients who report themselves "recovered" or "nearly recovered" may have low scores on this instrument. The present study was undertaken to further examine this aspect of the definition of recovery in CFS. The current study was stimulated by CFS patients who have stated that they are "recovered", yet on clinical evaluation and questionnaire are demonstrated to have persistent symptoms.

Methods - Subjects

Ten adults followed clinically for many years with CFS had stated that they had either "recovered" or "almost recovered." To assess the degree of

recovery, questionnaires were administered to assess the current severity of somatic symptoms and orthostatic intolerance. Institutional Review Board approval was obtained through the Medina Memorial Hospital Ethics Committee, and all subjects signed informed consent prior to questionnaire administration. No subject in this study had developed malignancy nor alternative causes for fatigue over the twenty-five years since being diagnosed with ME/CFS.

Ten healthy adults also completed the same questionnaires.

Methods - Instruments:

a) Hours of Activity Scale: This scale is a measure of orthostatic intolerance; it asks the subject to estimate the average total number of hours of "upright activity within an average 24 hour day." Healthy subjects consistently describe more than 12 hours of upright activity in a day. Severe CFS patients experience 2 or less hours per day, moderate CFS experience 3 to 7 hours, and mild CFS have 8 to 10 hours of upright activity within a 24 hour period (unpublished observations).

b) Visual Analog Scale of 9 Symptoms. This self-rated severity scale from 0 (no symptom) to 10 (very severe symptom) measures fatigue, sore throat, lymph node pain, headache, muscle pain, joint pain, sleep disturbance, memory and cognitive symptoms, and post-exertional malaise, all common symptoms of ME/CFS.

c) Fisk Fatigue Impact Scale (FIS) (10). This instrument is scored from 0 (no impact) to 4 (severe impact) for each of sixty questions. It is designed to assess the impact that fatigue has on daily activity. The maximum score is 160.

d) Bell Activity Scale (11, 12). This scale combines somatic symptoms with activity restriction. Persons score themselves from 0 (bed bound with very severe symptoms, requiring assistance for daily living) to 100 (full and vigorous activity with no significant symptoms). This is a simple and rapid assessment of ME/CFS severity for use at clinic visits (unpublished observations). A copy of this one page questionnaire is attached as an appendix and may be freely used.

e) Short Form-36 (9). Also called the Rand-36, this thirty-six item questionnaire has extensive use in evaluating general health and health perceptions in CFS(13, 14). It is also used to help determine diagnosis in the most recent CDC empiric criteria (8).

Definition of Recovery in Chronic Fatigue Syndrome (continued)

Results

The first question of the MOS-36 is a general rating of health status. All ten subjects in this study rated themselves as either "good" or "very good," confirming the perception that they viewed themselves as either "recovered" or "almost recovered". No subject, other than control subjects, rated themselves as "excellent."

Patients who were "recovered" were quite different from healthy controls in three areas: VAS, Ability Scale and FIS. For the Visual Analog Scale, mean recovered CFS score was 19.8 +/- 14.67 while the mean control subject score was 6.1 +/- 4.63. This mean difference is significant at the 0.05 alpha level ($p=0.011$). For the FIS, mean recovered score was 22.8 +/- 25.83, and the mean control score was 4 +/- 5.81. This difference is significant with a p-value of 0.038. Mean scores for the Bell Ability scale were 99 +/- 3.16 for recovered and 90 +/- 12.47 for controls. This was significant with a p value of 0.040. Scores for the MOS-36 will be presented under separate cover.

However, the two groups did not differ in the hours of activity scale. Recovered CFS subjects had a mean of 14 +/- 1.94 hours of upright activity, while control subjects had 15.5 hrs +/- 1.67 hours of upright activity. The average difference of the means proved to be not statistically significant ($p=0.080$). The data is presented in Table 1.

Discussion

The results of this small study suggest that all of ten persons who, in clinical follow-up had stated they had either "recovered" or "almost recovered" had persistent symptoms on several questionnaires. In fact, if the MOS-36 scores are used as an index of disability as suggested by the CDC empirical case definition(8), five of the ten "recovered" subjects would still meet criteria as having CFS.

Comparing the ten "recovered" subjects to the healthy controls, clear differences were seen in visual analog scores, Bell Ability Scale, and the Fatigue Impact Scale scores. Of these three, the least significant scores were seen in the Ability scale, perhaps because this scale attempts to combine orthostatic intolerance with somatic symptoms.

However, the Hours of Activity Scale scores, a measure of orthostatic intolerance, were the same in the two groups. This implies is that the perception of recovery is based on the symptom of orthostatic intolerance and is independent of somatic symptoms. That is, when persons with CFS improve and reach a point where they can sustain upright

activity for more than twelve hours in a day, they perceive themselves as "recovered" or "almost recovered", despite the fact that other somatic symptoms remain.

This observation has relevance in the definition of recovery in ME/CFS, an illness that has no clearly defined biologic markers at present. If confirmed in larger studies, it may explain the large discrepancy in recovery rates in studies of ME/CFS. Thus, future studies of the natural history of the illness will need to discriminate between somatic symptoms and overall activity. It may be that after a number of years, persons with ME/CFS adjust to ongoing somatic symptoms. And if they return to normal activities with improvement of orthostatic intolerance, they perceive themselves as "recovered", when in fact only one aspect of their illness has improved. Again, if this is confirmed, it implies that full recovery from ME/CFS is exceedingly rare.

One specific concern related to the definition of recovery in ME/CFS is that when people consider themselves recovered, they feel able to donate blood. One "recovered" subject in this study had normal activity but significant somatic symptoms and was a regular blood donor. Recently the gammaretrovirus XMRV has been implicated in persons with CFS(15). While the relationship of XMRV and ME/CFS is still under debate, these findings carry important implications. Furthermore, it should be remembered that only 20% of persons with ME/CFS receive a diagnosis of CFS from their health care provider (16).

A further possible implication of the uncertain definition of recovery in ME/CFS is the interpretation of XMRV incidence in the healthy control population. It will be important in the future to inquire if subjects have ever had a CFS-like illness in the past.

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Definition of Recovery in Chronic Fatigue Syndrome (continued)

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Appendix I: Bell Ability Scale

(Ref: Bell DS. The Doctor's Guide to Chronic Fatigue Syndrome. Perseus Books, Reading, MA; 1993)

Table 1: Comparing equality of means between "recovered" ME/CFS and control subjects

Clinical Assessment Tool	Patient Status	Number	Mean	Std. Deviation	Std. Error Mean	Independent Samples T-Test:
						2-Tailed Significance (Equal Variances Assumed)
Fisk FIS	Control	10	4.00	5.812	1.838	p = 0.038
	Recovered	10	22.80	25.828	8.167	
VAS Total	Control	10	6.10	4.630	1.464	p = 0.011
	Recovered	10	19.80	14.673	4.640	
Hours of Activity	Control	10	15.50	1.667	.527	p = 0.080
	Recovered	10	14.00	1.944	.615	
Bell Ability Scale	Control	10	99.00	3.162	1.000	p = 0.040
	Recovered	10	90.00	12.472	3.944	

Definition of Recovery in Chronic Fatigue Syndrome (continued)

Appendix I: Bell Ability Scale

(Ref: Bell DS. The Doctor's Guide to Chronic Fatigue Syndrome.
Perseus Books, Reading, MA; 1993)

100.	No symptoms at rest or with exercise; normal overall activity; able to work or do house/home work full time without difficulty.
90.	No symptoms at rest; mild symptoms with vigorous activity; normal overall activity level; able to work full time without difficulty.
80.	Mild symptoms at rest; symptoms worsened by exertion; minimal activity restriction for activities requiring exertion; able to work full time with difficulty in jobs requiring prolonged standing or exertion.
70.	Mild symptoms at rest; some daily activity limitation noted; overall functioning close to 90% of expected except for activities requiring exertion; able to work full time.
60.	Mild to moderate symptoms at rest; daily activity limitation clearly noted; overall functioning 70% to 90%; able to work full time in light activity if hours flexible.
50.	Moderate symptoms at rest; moderate to severe symptoms with exercise or activity; overall activity level reduced to 70% of expected; unable to perform strenuous activities but able to perform light duties or desk work 4 to 5 hours a day, but requires rest periods.
40.	Moderate symptoms at rest; overall activity 50% to 70% of previous normal; able to go out of the house for short excursions; unable to perform strenuous activities; able to work sitting down at home 3 to 4 hours per day, but requires rest periods.
30.	Moderate to severe symptoms at rest; severe symptoms with exercise; overall activity reduced to 50% of expected; usually confined to house; able to perform light activity (desk work) 2 to 3 hours per day but requires rest periods.
20.	Moderate to severe symptoms at rest; unable to perform strenuous activity; overall activity 30-50% of expected; able to leave house only rarely; confined to bed or couch most of day; unable to concentrate more than 1 hour per day.
10.	Severe symptoms at rest; bedridden the majority of the time; rare travel outside the house; marked cognitive symptoms preventing concentration.
0.	Severe symptoms on a continuous basis; bedridden; unable to care for self.

ME Fact

Clustering of combined gene data in CFS/ME patients for this and our previous study (n=117 CFS/ME patients) revealed genomic subtypes with distinct differences in SF-36 scores, clinical phenotypes, severity and geographical distribution. Antibody testing for Epstein-Barr virus (EBV), enterovirus, Coxiella burnetii and parvovirus B19 revealed subtype-specific relationships for EBV and enterovirus, the two most common infectious triggers of CFS/ME.

Kerr et al. *J Clin Pathol* doi:10.1136/jcp.2009.072561



The United States governmental entity responsible for alerting and protecting the American public from threats to their health is the Centers for Disease Control, better known as the CDC. The CDC's mission is to collaborate to create the expertise, information, and tools that people and communities need to protect their health – through health promotion, prevention of disease, injury and disability, and preparedness for new health threats.

Yet, one to four million Americans still suffer from a poorly understood, debilitating disease which was first identified in the United States in three separate recorded outbreaks over 25 years ago, including:

Incline Village, Nevada
Lyndonville, New York and
Miami, Florida.

The individuals who became ill that year came from various economic classes, different age groups, including children and adults and affected people in a small rural town, a large lakeside community and a huge metropolitan area. The individuals in those outbreaks all exhibited the same complex symptoms, yet none of the patients were examined by the government employees who were sent to investigate.

The doctors who alerted the CDC were not told of the other communities in the United States experiencing the same phenomenon. Despite the serious concerns about the severity of the patient's symptoms and their rapid descent into disability, the CDC refused to investigate further. The CDC concluded that this was a new form of EBV mono. They convened a meeting, in which they decided to call this illness "chronic fatigue syndrome" rather than adopt the name that was being used in the UK: myalgic encephalomyelitis (M.E.). M.E. at that time was already a well characterized infectious neurological disease causing a similar complex illness.

Thus began a twenty five year battle between patients and doctors who fully realized the severity of this illness and a government that has yet to commit an appropriate level of financial resources to aid the discovery process necessary to help individuals with this disease.

Annette Whittermore

Annette Whittermore is founder and President of the Whittermore-Peterson Institute of Nevada, USA.

The CFSAC

The Chronic Fatigue Syndrome Advisory Committee was established to provide science-based advice and recommendations to the Secretary of Health and Human Services and the Assistant Secretary for Health on a broad range of issues and topics pertaining to chronic fatigue syndrome (CFS). The Committee advises and makes recommendations to the Secretary, through the Assistant Secretary for Health, on a broad range of topics including: (1) the current state of knowledge and research about the epidemiology and risk factors relating to chronic fatigue syndrome, and identifying potential opportunities in these areas; (2) current and proposed diagnosis and treatment methods for chronic fatigue syndrome; and (3) development and implementation of programs to inform the public, health care professionals, and the biomedical, academic and research communities about chronic fatigue syndrome advances.

Not only has the lack of adequate resources been a major road block to discovery, but the CFS scientific review committees are currently ill-equipped to review many of the biologically complex scientific grant requests. Attempts to engage in biological research by basic researchers from virology and retro virology have generally been turned down in favor of studies aligned with a psychological theory of illness.

Years of misdirected research have resulted in a lack of a medical specialty for this group of patients to rely on for expert care.

Doctors have been left without adequate knowledge and the tools to effectively care for their patients. The sick have been turned away by major medical centers, ignored by government, and their claims denied

Letter from America

Annette Whittermore – Testimony to CFSAC

by insurance companies who refuse to pay for diagnostic tests and experimental treatments.

How could this happen to such a large group of sick people in this day and age of modern medical technology?

Who could possibly benefit by this inhumane treatment of sick human beings?

My husband is fond of the quote made popular in the Watergate era: “follow the money”.

His take on it is more specific:

When something doesn't seem right, “follow the money”.

So if one follows the money in this case, we can perhaps begin to unravel the mystery of this crime against humanity. We know that when this disease was first reported to our governmental authorities, another more deadly illness had recently been identified, HIV-AIDS.

Our nation was debating how to approach this new “gay man's disease”, until it struck a young child and a famous athlete, neither who were gay. Countries around the world were struggling to meet the heavy demands of HIV, when myalgic encephalomyelitis began to take its equally heavy toll on the lives of the innocent.

But this disease was a disease that apparently could be ignored. It seemed to impact mainly woman. There was no immediate organ damage that could be detected. It did not kill the afflicted rapidly enough; it only caused a profound disability that could last a life time.

However, a life time of disability requires a life time of disability payments and huge medical bills; something no government or private health insurance provider wants to be responsible for. The only way to avoid medical and disability payments for the sick is to claim the illness is due to a psychological disturbance or mass hysteria, blame the patient for their illness and offer cheap psychological treatment and exercise therapy.

As long as no one discovers the true cause of the disease, these entities are safe from any expectation of actual medical intervention.

A physical disease may remain in the psychiatric domain if it is called a psychosomatic illness; “meaning a disorder in which mental factors play a significant role in the development, expression, or

resolution of a physical illness.”

Despite years of private research and thousands of papers describing the physical deficits found in these patients with this illness, our government and medical entities continue to ignore the evidence in favor of those who espouse a simplistic psychological theory of illness.

But those who stand to gain by misdirecting research funding can not stop the truth from being revealed. What greater evidence is required to support the request for responsible action than the finding of a new human retrovirus replicating in this population of patients? Knowing the significance of this discovery, why has the US government not asked CFS patients to stop donating blood until the cause of this disease is better understood?

Prostate cancer and XMRV research has been made a priority at the National Cancer Institute and major universities as evidenced by the publication of new findings. Yet, there has been no such commitment by those at the National Institute of Allergy and Infectious Disease. Why is this?

Are we to blindly and meekly accept that those who suffer from XMRV (who have been inappropriately branded as having a fatiguing illness called “CFS”) are undeserving of the same medical care afforded others infected with a retrovirus?

I believe this is not the time to end the CFSAC but rather a time for the CFSAC to exhibit its commitment by sending its strongest recommendations to the Secretary of Health and following those recommendations with actions:

- Educate the research and medical communities about the number of individuals impacted and the severity of this disease. Recommend that the CDC define ME by the immunological and neurological abnormalities that exist, the many co-infections that are frequently found and the physical complications of this long term illness. It is time to agree on a proper name for this disease and to reflect the most current scientific knowledge in the definition of this disease.
- Seek congressionally mandated research dollars



that more closely match the number of individuals impacted by the disease and the severity of the illness. Millions of Americans are ill with ME and yet the NIH allocates a mere \$1.00 to \$4.00 per year per person. The loss in economic dollars is conservatively estimated to be \$9 billion per year. With that kind of economic loss to our society, why isn't this disease funded at the level of hepatitis C which is currently at \$93 million a year? Patients diagnosed with ME also suffer from inflammatory bowel disease, cognitive impairment, fibromyalgia, anaemia, gall bladder disease, chronic Lyme disease, sleep disorders, chronic pain, depression, hormonal dysregulation, frequent viral infections, heart disease, and cancer. Yet these sick Americans are forced to seek unproven medical treatments for symptomatic relief due to the lack of scientific understanding of the underlying immune deficiency that is driving this disease.

- Request that research be conducted on XMRV in infectious disease by the NIAID and outside researchers to continue the valuable work begun at the WPI. The human retro virus, XMRV, has been found by WPI researchers in diverse disease populations, including cancer, autism, fibromyalgia, gulf war illness and ME, in men, woman and children. Yet four of WPI's most recent grants were denied funding on the basis that not enough is known about XMRV to warrant further investigations.

- Create and fund Centers of Excellence in neuroimmune diseases to care for patients with complex disorders caused by infectious agents. Scientific medical criteria should be developed that hold these Centers to standards of performance that include timelines and effectively measure demonstrated outcomes. All such Centers should be interconnected to provide medical consistency in care. They should include research, clinical care and medical education components from classroom lectures, to residencies and fellowships in neuroimmune disease.

- Request a congressional hearing to determine why this disease has been so poorly managed by the CDC and NIH, in order to assure the American public that the failure to recognize a serious threat to the nation's health will not be repeated.

There is no question that the CFSAC, as defined by its charter, can be an important avenue to a meaningful discourse between those who care

about M.E. and those who are capable of initiating action from within the government. The question is: Has the CFSAC achieved the goals stated in their charter?

The charter states its purposeas established to provide science-based advice and recommendations to the Secretary of Health and Human Services and the Assistant Secretary for Health on a broad range of issues and topics pertaining to chronic fatigue syndrome (CFS).

Is this goal being aggressively pursued? Is scientific evidence being reported to the Secretary of Health? What actions have been taken by the Secretary of Health that would provide evidence that this information is being acted upon?

The Function of the committee is stated below:

The Committee shall advise and make recommendations to the Secretary, through the Assistant Secretary for Health, on a broad range of topics including: (1) the current state of knowledge and research about the epidemiology and risk factors relating to chronic fatigue syndrome, and identifying potential opportunities in these areas; (2) current and proposed diagnosis and treatment methods for chronic fatigue syndrome; and (3) development and implementation of programs to inform the public, health care professionals, and the biomedical, academic and research communities about chronic fatigue syndrome advances.

The WPI took the earlier recommendations of this committee seriously.

In fact, we built our Institute on the premise that this disease and others very similar to it, deserves "Centers of Excellence" that can bring answers to patients and doctors, in the same manner as multiple sclerosis and muscular dystrophy have successfully done. We believe that to find answers to this complex disease we must combine the translational efforts of basic and clinical researchers working in collaboration with knowledgeable physicians. This is the dream of the WPI: to bring discovery to a disease which has impacted millions of lives, to develop effective treatments and to one day provide preventative measures that will stop the spread of the disease.

This is not something that we can afford to do

Letter from America

Annette Whittermore – Testimony to CFSAC

alone. If this committee will confirm that it is more than a sounding board for frustrated patients and doctors and that it can effectuate the necessary changes in this field, then the WPI fully supports the renewal of its charter.

Martin Luther King, Jr. once said,

“The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy”.

I believe that courage is the combination of knowing the right thing to do and then doing it. Please show us you have the courage to make this happen.

Thank you for your time and attention.



ME STORY

The person writing the story (..) values life. Yet she has spent hers in isolation from those she ever loved, without seeing friend or family member.

She stresses that she is not being negative in sending this (*an appeal to the CMO*), only "wanting people to acknowledge the seriousness of this illness and thereafter funding all that is necessary".

"I just want to be better.
To be less ill on a daily basis.
To receive some help with this appalling illness and for it not to be too late for me.

I am 53 years of age and have been living with ME for 30 years.
But inside I am still 23 years old because I never got to live those 30 years fully or otherwise."

- from
The UK Chief Medical Officer 1998 – 2010
A Testament to Failure
[<http://tinyurl.com/39d7mzx>]

ME FACTS

The MRC's secret files on ME/CFS



It is unknown whether or not the refusal of the MRC to investigate David Sampson's legitimate complaint has anything to do with the fact that the MRC has a secret file on ME that contains records and correspondence since at least 1988 which, co-incidentally, is about the time that (Professor) Simon Wessely began to deny the existence of ME. The file is held in the UK Government National Archives at Kew (formerly known as the Public Record Office) and was understood to be closed until 2023, but this closed period has been extended until 2071, at the end of which most people currently suffering from ME will be conveniently dead

<http://www.nationalarchives.gov.uk/catalogue/displaycataloguedetails.asp?CATLN=7&CATID=-5475665>.

As one puzzled ME sufferer recently noted: "*why on earth have a 73 year embargo on these documents on an illness where a load of neurotic people, mostly women, wrongly think they are physically ill?*"

The MRC's secret files on ME/ CFS are closed (i.e. unavailable to the public) for an unusually lengthy period of 83 years. The standard closure period is 30 years but, as in the case of these files on ME/CFS, the standard closure period may be extended. The 30- year rule usually applies to documents that are exempt from release under a Freedom of Information Act (FOIA) request and include, for example, documents concerning the formulation of government policy, documents related to defence, to national security, to the economy, and documents that are considered very confidential.

It may be recalled that during the life of the Chief Medical Officer's Working Group on ME/CFS (1998- 2002), lay members were ordered not to discuss the deliberations and were even threatened with the Official Secrets Act, for which no explanation was proffered.

(Hooper, Williams, *Magical Medicine*, February 2010)

[<http://www.investinme.org/Article400%20Magical%20Medicine.htm>]

Ampligen® in Severely Debilitated CFS Patients

Introduction

Chronic fatigue syndrome (CFS) is a seriously debilitating disorder characterized by disabling fatigue and a combination of flu-like symptoms. The fatigue is not improved by bed rest and may be worsened by physical activity. The Centers for Disease Control (CDC) has identified CFS as an economically and emotionally devastating illness whose functional impairment can be equivalent to multiple sclerosis, heart disease, chronic obstructive pulmonary disease, or end-stage renal disease. The etiologic basis for CFS is unknown and may be multifactorial. With no approved drug therapy available, treatment is aimed at symptom relief and improved ambulatory function.

Ampligen® [rintatolimod; poly(I)·poly(C₁₂,U)] is a double-stranded RNA compound in late-stage clinical development for treating CFS and a New Drug Application (NDA) has been filed with the US Food and Drug Administration (FDA). Exercise tolerance (ET) testing is an objective measurement of treatment efficacy and is accepted as a standard test for drugs ameliorating exertional fatigue. AMP-516, the key Phase 3 multi-center, double-blind, placebo controlled trial, used ET as its primary endpoint in the evaluation of Ampligen® in the treatment of CFS through its action as a selective Toll-like receptor 3 (TLR3) agonist. TLRs are evolutionary preserved host defense systems which recognize various “microbial mimics”. TLR3 specifically recognizes double-stranded RNA, part of the replicative cycle of many pathogens including viruses. Given the likely multifactorial etiology of CFS, the rationale of the study was to determine whether chronic exposure to a selective TLR3 ligand would result in quantitatively and medically significant ambulatory/exercise improvements.

As has been previously communicated, Hemispherx Biopharma received a completed response letter from the FDA regarding the NDA for the use of Ampligen® to treat CFS. In this letter, the FDA has recommended at least one additional clinical study which shows a convincing effect and confirms safety in the target population.

Since receiving the letter, Hemispherx has instituted a new clinical study protocol to

Ampligen® in Severely Debilitated CFS Patients

^{1,2}

Article submitted by Nancy McGrory Richardson, Education and Outreach Director for Hemispherx Biopharma, Inc.

Hemispherx Biopharma, based in Philadelphia, is a biopharmaceutical company engaged in the manufacture and clinical development of new drug entities for treatment of viral and immune-based disorders.

Hemispherx's flagship products include Alferon N Injection® and the experimental immunotherapeutics/antivirals Ampligen®.

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HEMISPHERX®
BIOPHARMA, INC.

retrospectively monitor blood from patients enrolled in the key pivotal study, AMP-516. The primary purpose of this study protocol is to identify target subsets of patients who are most likely to benefit from active treatment with Ampligen®. This study specifically is monitoring patients for evidence of xenotropic murine leukemia virus-related virus (XMRV) which has recently been implicated as having a strong association with CFS. One of the key research organizations, The Whittmore Peterson Institute, is performing the analysis for this on-going study. We anticipate that this data will be available for analysis by late summer.

The information gained from this study and the recommendations made by the FDA in the complete response letter along with their review of the new subgroup analysis, when completed, will guide the design of the next clinical study using Ampligen® to treat CFS.

This article will review the findings of a number of clinical studies which explore the use Ampligen® in

Ampligen® in Severely Debilitated CFS Patients (continued)

CFS patients. The studies reviewed in this article examine the following: 1.) QT interval prolongation in CFS and increase in exercise tolerance, and 2.) interferon and cytokine levels in a Phase 3 clinical trial.

QT Interval Prolongation in CFS and Increase in Exercise Tolerance

Method:

Data was analyzed from two well-controlled (double-blind, randomized, multi-center, placebo-controlled) studies, AMP-502 and AMP-516 (totaling >300 subjects), of poly(I)·poly(C₁₂,U). The purpose of this research was to determine the effect of treatment with rintatolimod on exercise tolerance and the use of concomitant medications, including medications known to prolong the QT interval.

Summary of Results:

In both studies, poly(I)·poly(C₁₂,U) resulted in a statistically significant ($p < 0.05$) increase in mobility and stamina (exercise tolerance) compared to placebo supported by patient responses to twice weekly dosing.

The results from the two key studies are summarized in Table 1. Exercise treadmill testing (ETT) was the primary endpoint in the largest ($n=234$) placebo-controlled trial (AMP-516) and the proportions of subjects with changes from mean baseline ETT duration at Week 40 of at least 25% and 50% were 1.7- and 1.9 fold greater for the poly(I)·poly(C₁₂,U) cohort than placebo, 39% vs. 23% and 26% vs. 14%, respectively ($p \leq 0.036$). Of AMP-516 subjects, who took concomitant medications, 72% receiving poly(I)·poly(C₁₂,U) decreased use of concomitant medications used to control the signs and symptoms of CFS versus 56% of subjects receiving placebo ($p=0.015$). An integrated analysis of efficacy shows that poly(I)·poly(C₁₂,U) increases ETT and decreases

the medications needed to suppress and control the symptoms of CFS.

Voluntary use of concomitant medications significantly decreased in the poly(I)·poly(C₁₂,U) group compared to the placebo arm in both studies ($p < 0.05$). Many of these drugs used for symptomatic relief are known to prolong the QT interval. Drugs which prolong the QT interval are associated with an increased risk of Torsades de Pointes and sudden death. The list of drugs that prolong the QT Interval and/or induce TdP are shown in Table 2. An analysis of the QT interval in the Phase 3 study showed an increased risk of proarrhythmic potential in the placebo group compared to the poly(I)·poly(C₁₂,U) treated group. Within the placebo group, patients who were prescribed one or more medications known to prolong the QT interval had a significant increase from their baseline QT interval. The use of concomitant medications (known to prolong the QT interval) used to alleviate symptoms of CFS was significantly decreased in the poly(I)·poly(C₁₂,U) cohort. Patients randomized to receive poly(I)·poly(C₁₂,U) were approximately three times more likely to have reduced exposure to medications known to prolong the QT interval, compared to patients randomized to receive placebo in AMP-502.

Assessment of Interferon and Cytokine Levels

Objective:

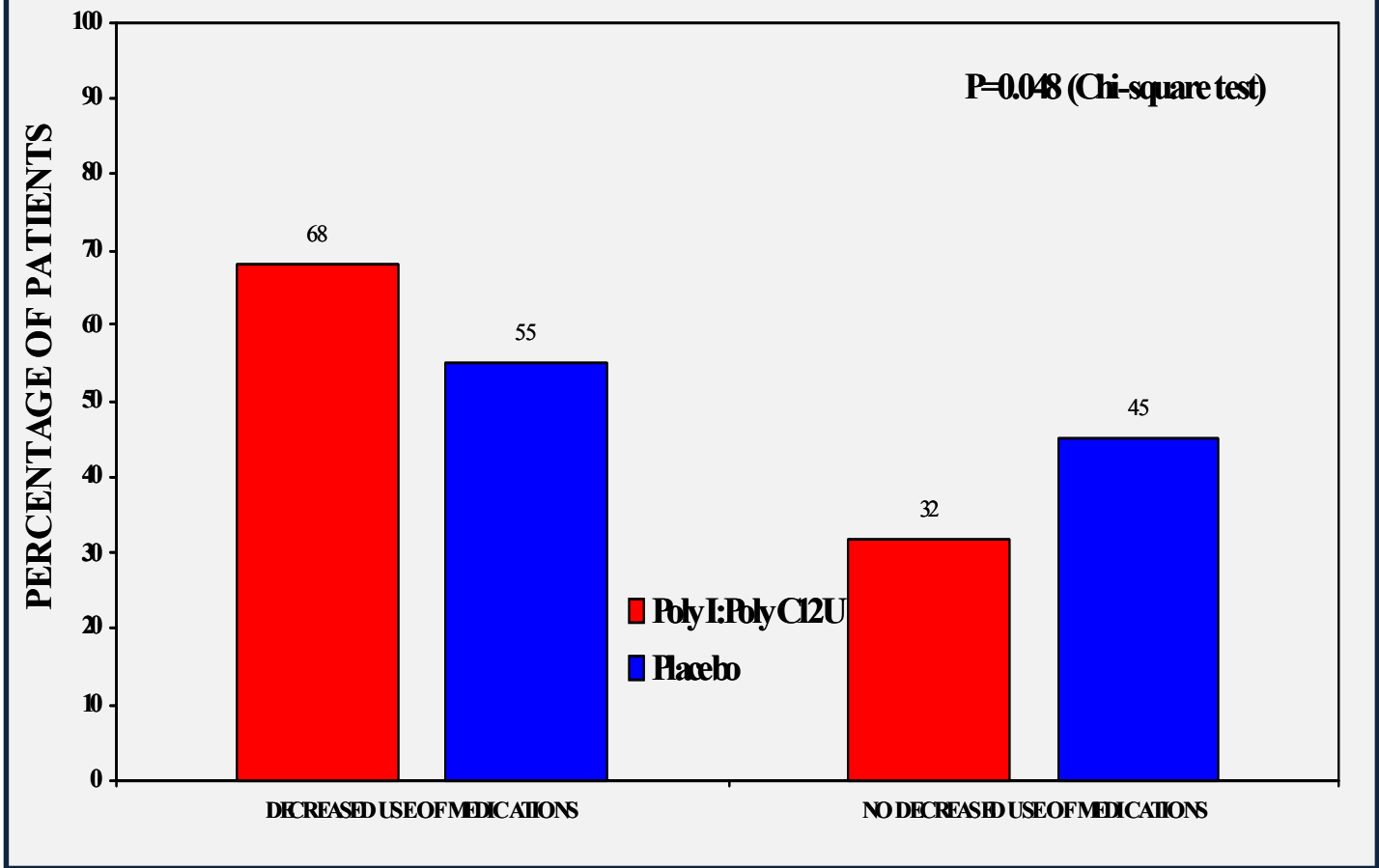
To perform assessments of stored serum samples from CFS patients who participated in the AMP-516 study for markers of innate immune response (interferon and cytokine induction). The pre-treatment interferon and cytokine levels, and the intra-patient changes from baseline, were also compared between the randomized groups to determine if Poly I : Poly C₁₂U had a significant effect on serum levels.

Table 1: Summary of ETT Efficacy Findings (Intent-to-Treat) from the Well-Controlled Trials

Trial	Time-to-Endpoint (Weeks)	Mean Change (Seconds)	p-value
AMP-502	24	95	0.010
AMP-516	40	96	0.047

Ampligen® in Severely Debilitated CFS Patients (continued)

**Figure 1: Use of Medications Known to Cause QT Prolongation:
Individual Study Results from AMP-516**



Decrease is defined as a reduction in the total number of days of exposure during the first 4 weeks of the study compared to the total number of days of exposure during the last 4 weeks of the study, only considering medications known to prolong QT.

Methods:

Elevated cytokine and interferon levels have been reported for a myriad of disorders, including CFS. Although the safety of poly(I)·poly(C₁₂,U) has been demonstrated in over 30,000 patient treatment weeks and a wide dosing range without evidence of significant acute or cumulative toxicity, additional analyses of interferon and cytokine levels in patients' sera were examined. A random sample of 48 patients (active and placebo) who completed the AMP-516 (Stage I) study plus subjects who discontinued prematurely were selected for analyses of serum levels of interferons (α, β, and γ) and cytokines (TNF-α, IL-6, IL-10, and IL-12) at Baseline and Week 32 (or last observation for patients who discontinued prematurely).

Results:

Elevated levels of interferons α, β, γ or cytokines IL-6, IL-10, IL-12, or TNF-α, were seen at the baseline/pre-treatment visit for a subset of active and placebo patients, but no significant modulation of interferons or cytokines was seen. For each of the interferons and cytokines monitored, the data showed that the group changes from baseline levels in the poly(I)·poly(C₁₂,U) treatment group over the treatment period up to Week 32 were indistinguishable and overlapped the observed levels in the placebo group. Two placebo treated subjects had the greatest increases in interferon levels and both completed the study. One poly(I)·poly(C₁₂,U) treated subject had the greatest increases in the four cytokines, tolerated the treatment well, and completed the study. The data

Ampligen® in Severely Debilitated CFS Patients (continued)

Table 2: Drugs That Prolong the QT Interval and/or Induce Torsades de Pointes Which Were Taken by Subjects in AMP-516 Study

Generic Name (Brand Name)	Drug Class / Clinical Usage
Amitriptyline (Elavil®)	Tricyclic Antidepressant/depression
Azithromycin (Zithromax®)	Antibiotic/bacterial infection
Ciprofloxacin (Cipro®)	Antibiotic/bacterial infection
Clarithromycin (Biaxin®)	Antibiotic/bacterial infection
Doxepin (Sinequan®)	Tricyclic Antidepressant/depression
Fluconazole (Diflucan®)	Anti-fungal/fungal infection
Fluoxetine (Prozac®)	Anti-depressant/depression
Fluoxetine (Sarafem®)	Anti-depressant/depression
Levofloxacin (Levaquin®)	Antibiotic/bacterial infection
Salmeterol (Serevent®)	Sympathomimetic/asthma, COPD
Sertraline (Zoloft®)	Anti-depressant/depression
Sumatriptan (Imitrex®)	Migraines/cluster headaches
Tizanidine (Zanaflex®)	Muscle relaxant
Venlafaxine (Effexor®)	Anti-depressant/depression
Zolmatriptan (Zomig®)	Migraines

suggested that, relative to placebo treatment, poly(I)·poly(C₁₂,U) treatment is not associated with consistent increases or decreases in interferon or cytokine levels in this population. None of the group changes from Baseline to Week 32 (or last observation available) were considered to be clinically relevant. Results from the 2-factor analysis of treatment assignment and completion status revealed there was no significant difference in interferon or cytokine serum levels, suggesting similar profiles between active and placebo.

Conclusion

Poly(I)·poly(C₁₂,U) treatment in this debilitated population of CFS patients resulted in a medically and statistically significant increase in exercise treadmill duration, compared to placebo.

Poly(I)·poly(C₁₂,U) treatment allowed CFS subjects to reduce their dependence on concomitant medications used to treat debilitating symptoms of CFS, coincidentally reducing exposure to drugs known to prolong the QT interval. This may suggest a new therapeutic strategy to potentially

mitigate the incidence of heart failure/sudden death in this relatively young predominantly female population.

Poly(I)·poly(C₁₂,U) therapy improved physical performance of CFS patients without significant modulation of serum levels of interferons α , β , γ or cytokines IL-6, IL-10, IL-12, or TNF- α . In addition, no differences were observed between poly(I)·poly(C₁₂,U) and placebo patients in either the interferon or cytokine profiles between patients who completed the study vs. patients who discontinued early. No safety concerns were raised regarding interferon and cytokine levels and the poly(I)·poly(C₁₂,U) therapy was generally well-tolerated.

Overall, there have been over 90,000 drug exposures in the combined CFS and non-CFS studies. The most frequently seen adverse event was flu-like symptoms. An integrated analysis of safety (over 1200 subjects in 13 studies) shows that poly(I)·poly(C₁₂,U) is generally well-tolerated in both CFS and Non-CFS populations. At present, only supportive, symptom-based care is available

Ampligen® in Severely Debilitated CFS Patients (continued)

for CFS patients.

Over its developmental history, this experimental therapeutic has received various designations, including Orphan Drug Product Designation (FDA), Emergency (compassionate) Cost Recovery Sales Authorization (FDA) and “promising” designation by the Agency on Health Research Quality (AHRQ). Hemispherx Biopharma remains committed to the development of Ampligen® as a treatment option for patients suffering from debilitating CFS.

Reference

1. DR Strayer, BC Stouch, JC Horvath, SR Stevens, WA Carter and AMP-516 Investigators. Interferon and Cytokine Levels in a Double-Blind, Randomized, Placebo-Controlled, Phase III Clinical Trial (AMP-516) of Ampligen® (Poly I : Poly C₁₂U) in CFS. Presented at the 9th International IACFS/ME Research and Clinical Conference, March 12-15, 2009, Reno, Nevada.

ME FACTS

Myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) is a severe systemic, acquired illness that is defined by the WHO in the ICD-10 code G93.3 as a neurological illness. In the UK ME/CFS is estimated to be five times more prevalent than HIV/AIDS.

ME/CFS has clear clinical symptoms which manifest predominantly based on neurological, immunological and endocrinological dysfunction. While the pathogenesis is suggested to be multifactorial, the hypothesis of initiation by a viral infection has been prominent. A wide range of viruses and other infectious agents, such as Epstein-Barr Virus, Human Herpesvirus-6 and 7, Enterovirus, Cytomegalovirus, Lentivirus, Chlamydia and Mycoplasma have been investigated.

Before acquiring the illness most patients were healthy, leading full and active lifestyles. Recent research has discovered a new retrovirus – XMRV – as being implicated in ME/CFS. ME/CFS most frequently follows an acute prodromal infection, varying from upper respiratory infections, bronchitis or sinusitis, or gastroenteritis, or an acute “flu-like” illness.

Biomedical research has provided evidence of distinct subgroups within ME/CFS.

Objective signs in ME/CFS

.... despite the Wessely School's insistence that there are no objective signs of organic disorder in ME/CFS, there are numerous objective reproducible abnormal signs that are discernable by any reasonably competent physician. They include the following:

- labile blood pressure (this is a cardinal sign); low systolic BP -- <100 in 50%
- nystagmus and vestibular disturbance (vestibular dysfunction seen in 90%)
- sluggish visual accommodation
- fasciculation
- hand tremor
- neuromuscular incoordination
- cogwheel movement of the leg on testing
- muscular weakness
- marked facial pallor
- postural orthostatic tachycardia syndrome (POTS)
- positive Romberg
- abnormal tandem or augmented tandem stance
- abnormal gait
- evidence of Raynaud's syndrome and vasculitis (vascular signs cross dermatomes)
- mouth ulcers
- hair loss
- singular reduction in lung function (shortened breath-holding capacity seen in 60%)
- enlarged liver (not usually looked for by psychiatrists)

The problem is that many doctors refuse to examine ME/CFS patients – or even to lay a finger on them – because ME/CFS patients are largely despised by the medical profession. Indeed, in 1994 one of the medical trade magazines published an article entitled “GPs despise the ME generation” (GP: April 1994). The article itself said at the time: “*studies have shown that that most ME patients rate contact with medical services as unhelpful*” and little has changed in the intervening fifteen years. Abnormal findings on testing include flattened or even inverted T-waves on 24 hour Holter monitoring; abnormal glucose tolerance curves; elevated lactate levels in the ventricular system (seen in 70% of patients); neuronal destruction and elevated choline peaks (seen in 10% of patients); punctate lesions consistent with small strokes (seen in 78% of patients); very poor oxygen transport on pulse oximetry readings (seen in 90% of patients) and an abnormal venous blood gas picture.

None of these can rationally be explained as evidence of a behavioural disorder.

from “**Magical Medicine: How to Make a Disease Disappear**”. See <http://tinyurl.com/2uv8j95>

European ME Alliance

Around Europe - European ME Alliance

Spain



Liga SFC, Spain, May 2010 Clara Valverde

In Spain Liga SFC have been busy. This is a brief summary of what we have done in the past year, since May 2009.

Informing and Educating Doctors and Patients

- a- Distributing and promoting the Canadian Criteria in its Spanish translation
- b- Writing, publishing and distributing a manual (150 pages) for health professionals on ME/CFS, fibromyalgia and MCS (Multiple Chemical Sensitivities), the illnesses (including the Canadian Criteria) and how to communicate with the patient (the social and emotional aspects of living with these Central Sensitivity Illnesses). 10,000 copies of the manual ("Nuevos retos en la consulta"... "New challenges in the doctor's office") have been distributed by hand to primary health care doctors throughout Spain and more than 20,000 digital copies have been distributed by our web and other webs. We are having tremendous feedback.
- c- We made a one-hour long documentary on ME, the first in Spanish. It is the voices of ME patients and also includes Dr Nancy Klimas and another Spanish doctor. We have taken the film on tour and have given copies to ME associations in Spain for their own viewing events.

The European ME Alliance (EMEA)



The European ME Alliance (EMEA) was created in 2008 and is a group of European organisations/charities which works together to improve the situation for people with ME/CFS and their families in Europe. It now comprises nine countries -Ireland, UK, Norway, Denmark, Sweden, Belgium, Spain and Switzerland.

EMEA's aims are to -

- Establish correct recognition of myalgic encephalomyelitis as an organic illness requiring biomedical research to treat and cure
- Establish correct diagnosis of patients
- Establish specialised biomedical centres for education/treatment/cures

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Working on behalf of patients with ME
(myalgic encephalomyelitis)

Around Europe - European ME Alliance

- d- We have written and published a book on living with ME from one person's viewpoint. The book was published by Spain's largest publishing house, Planeta. The book has gone on tour with the documentary. The media has covered this book extensively.
- e- We have written and published an 18 page social science article criticising the use of CBT in ME. The article was published in a major Spanish psychiatry magazine. The article consisted of a bibliographical review of all the research that has been performed proving that CBT is either useless or harmful for ME and of our own qualitative research with Spanish patients on their experiences with CBT. This article was also distributed digitally extensively and it has had much impact. As a result, the main hospital in Spain that treats ME (well, treats would be an overstatement for what they do...they diagnose), Hospital Clinic in Barcelona, is rethinking their CBT treatment.
- f- Upkeep of our website www.ligasfc.org: no small feat because of the heavy traffic it has and the amount of hackers who are determined to knock it down. Every day we receive about 100 emails mostly of patients who are caught in the medical or legal ME pilgrimage. We give the information, encourage contacts with their local associations, and give support.
- g- Informing of ME information, research, events, news, etc through our web which is linked to hundreds of Spanish webs and blogs

2. RESEARCH INVOLVEMENT

- a. In November 2009, we met with the top retroviral research team in Spain (Dr Clotet's team at the IrsiCAixa lab) that worked solely on HIV and persuaded them to start an XMRV research project. It has taken a lot of work! But it is now underway. Dr Judy Mikovits is working closely with Clotet's team and in April 2010 she spent a week working with them on the lab. We have worked closely with doctors and patients on this research and on the blood bank issue.
- b. We organized a lecture by Dr Mikovits in Barcelona
- c. We are fundraising for the study: campaign, a concert, etc.
- d. We are educating and giving talks about the XMRV and the research and taking much flack for it (which takes up energy and time). We are very excited and hopeful about this research. Dr Mikovits said she was very impressed by the high level of competence of the research team which has been one of the leading retrovirus research team in the world since the mid 1980s.

3. POLITICAL WORK

- a. We continue our political work in the follow up of the Resolution 203/VIII, passed unanimously by the Catalan Parliament on May 21, 2008 to create ME/CFS-FMS treatment units in Catalonia. The Department of Health (Ministry) is, of course, trying all possible tricks in order not to carry out the Resolution, so we work very hard in the Resolution Follow-Up Commission, researching the "progress" of the implantation of the Resolution in each region of Catalonia. We have written massive reports with details provided to us by patients, health workers, etc. This Resolution is the result of two years of major work: writing legislation, meeting with politicians, gathering 150,000 signatures (Catalonia has a population of 7 million), meeting with leading Catalan figures to get their support, etc.
- b. We have researched and written a report on the type of training that the Catalan government is giving doctors and nurses. This training is outrageous, attempting to say that ME is actually a mild form of fibromyalgia and that it has psychological aetiology. The report was presented with a PowerPoint presentation at the Parliament's Health Commission in the fall of 2009. The report was distributed by our web massively both in Spanish and in Catalan.

4. ALLIANCES

- a. We work in alliance with the other Central Sensitivity Syndrome patients' associations: fibromyalgia and MCS. We have been involved in major initiatives in Spain concerning the recognition of MCS and education regarding toxics and Environmental Control.
- b. We give presentations to groups such as health rights coalitions, universities, nursing congresses, etc on ME and the issues around it.

5. MAY 12, 2010

- we are doing, for this May 12, a campaign, in collaboration with No Fun (the MCS-ME must

Around Europe – European ME Alliance

frequented blog in Spain) and Delirio (a digital artists collective that do social issues), on the topic of the lies of government, doctors and pharmaceutical companies. The idea is to reach out to the people with ME, MCS or FMS who are younger, more radical and feel that the patient's association are too old fashioned for them (too full of middle-age housewives who only want to complain). This Manifesto that we have released will be in 9 languages. In Spain it is being taken up and published by news services, political magazines and being read at various May 12 events. The early response to the Catalan and Spanish versions of the Manifesto ("We Know They Are Lying") is massive. Just the first day we had 1200 visitors and a lot of debate. We also have a Vimeo version with rock music.

Current status of ME in Denmark



In Denmark ME has been registered in our NIH's Classification of Diseases as a neurological disease – following the WHO ICD Classification to which DK has submitted.

In spite of this very few people has been given the diagnosis ME during the last two decades.

In 1992 the diagnosis ME/CFS (defined by CDC Holmes et al) was introduced by the first ME/CFS Association in Denmark, considering it to be identical to ME.

This year ME/CFS has officially been declared a psychosomatic, functional illness.

The patients will be offered treatment like CBT, ACT and GET, like recommended by the NICE Guidelines.

A new diagnostic term has been invented by the Danish psychiatrist Per Fink and his colleagues at the University Hospital in Aarhus, Functional Disease Research Unit, called Bodily Distress Disorder, under which ME/CFS will be placed.

Letters of protest have been sent to our Secretary of Health and our National Institute of Health.

The answers have been, that ME/CFS in Denmark has always been defined by CDC (Holmes et al), but since this definition was revised in 1994 (Fukuda et al), ME/CFS is considered identical to Chronic Fatigue Syndrome (CFS).

A very interesting conclusion that seems to be shared by health authorities in practically most countries worldwide.

Only a handful of doctors in Denmark know what ME is. Those who know claim that ME is identical to CFS. So here we go ...

The Danish ME Association is, as one of its goals, committed to spread information and knowledge about ME – the original ME – and we have prepared medical information material from the original scientific papers on ME or medical professionals and have already sent out to some doctors, social workers and jobcentres.

We have chosen to let the patients tell their GP, specialist or social worker about ME and our association and about our information material, so that the doctors can relate the material to a patient of theirs in stead of throwing it away without even having looked at it.

They have all accepted that we send this material to their office, and through the feed-back from their patients we know, that they have been reading it, which in most cases is reported to have been of great help for both doctors and their patients.

Also the very seriously ill patients report, that they have been treated with greater respect and understanding – something they have never experienced before.

Right now we are in the process of contacting one of our local health spokesmen in order to bring this huge problem with ME and ME/CFS to the government's attention.

Within the huge bunch of ME/CFS diagnosed patients, people with ME need to be located, separated and treated in the appropriate way by doctors, carers and social workers.

There is still long way to go – but taking one step at a time we hope to get there.

on behalf of the Danish ME Association
Lajla Mark
Chair

Around Europe – European ME Alliance

NEWS FROM GERMANY

New ME/CFS Alliance in Germany



Several groups advocating for people with ME/CFS, including the national charity Fatigatio e.V. formed a new national alliance, the Bündnis ME/CFS. Its members want to join forces to have more clout when calling for the recognition of ME/CFS by German health care providers, for research and special treatment facilities for people with ME/CFS.

Its first activity was a demonstration in front of the venue of the annual general meeting of the main organisation of German doctors, the "Deutsche Ärztetag" in Dresden this year – on May 12. The alliance prepared big banners with photos of people with ME/CFS – with the aim to "Give ME/CFS a face". We published an open letter, sent it to the federal chancellor, the minister of health and other top politicians, a press release and printed a short booklet to provide basic information for physicians – on the cover "30 of 300.000 faces of ME/CFS". For photos and results of this demonstration have a look on www.cfs-aktuell.de or on www.fatigatio.de

New ME/CFS Foundation to be established

On the basis of her professional expertise in banking business Nicole Krüger, a young woman, suffering from ME/CFS, is about to establish a foundation for neuro-immune diseases, mainly ME/CFS. We were so impressed by IiME's book "Lost Voices" we decided to call it "Lost Voices Stiftung" because the foundation's mission is to give a voice to those unheard and unseen by society, by health care professionals and often even by friends and family. We are still in the process of collecting an amount of money required for the registration of a foundation and to satisfy all the red tape, but we are optimistic to have overcome all these hurdles within the next two years.



Hardly any treatment options for patients

Still the situation in Germany is quite bad and progress is coming very slowly: only a few physicians are experts in treating multisystem disorders like ME/CFS, and they are inundated with patients so that some of them take refuge in only treating private patients.

The majority of patients have no specialised treatment at all and try to get along with their often badly informed GPs and some kind of "home made" treatment, i.e. they draw some information on treatment approaches from the Internet or from Fatigatio's publications. There's just one clinic in the south of Germany (Spezialklinik Neukirchen) who may offer some treatment for people with ME/CFS but the waiting list is very long. Yet this clinic is not prepared to care for severely ill people, they simply don't have the necessary equipment and provisions. There are no other clinics or centres of excellence for people with ME/CFS, and the majority of the doctors still follow our official treatment guidelines ("AWMF-Leitlinien") which are dominated by the "biopsychosocial" model. These guidelines are more or less identical to the British NICE guidelines.

The standard treatment is based on the assumption that ME/CFS is a somatoform disorder which is best treated with CBT and GET. Most patients are sent or even forced to go to a "Psychosomatic Clinic" and are forced to "activate" themselves, rendering them more ill than ever. More often than not people get a psychiatric diagnosis (depression, somatoform disorder, all kinds of unproven "diagnoses"), are declared as physically healthy and sent back to the work market. Because they are simply too ill to come up with the demands of a job, they remain unemployed and, consequently, they have to live on "Hartz 4" or other minor social benefits. So the majority of the German patients is very sick and impoverished, with no appropriate treatment and too poor to pay for supplements and other helpful medication. The compulsory health insurance

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fund and most insurance companies don't pay for supplements and other helpful medication like antioxidants etc.

There is, however, a very small group of physicians and researchers, organised in the "European Academy for Environmental Medicine" (EUROPAEM, see <http://www.europaem.de>) who try to withstand to the mainstream medical system and to spread their expertise on multisystem disorders like ME/CFS and related disorders. Only recently they had their annual conference in Wuerzburg (23 – 25 April) which conveyed not only a wealth of information but also hope for a better future – there *are*, after all, sensible and intelligent doctors who fight for us.

Research

Apart from the physicians and researchers, organised in the above mentioned EUROPAEM, there's a famous clinic in Berlin, the Charité Berlin Mitte, which is doing a *little* research on EBV-associated ME/CFS. The only funding they have is 20.000Euro from Fatigatio, an amount which is nothing more but a drop in the ocean. Prof. Scheibenbogen will present the results of her work on our International ME/CFS Conference in September in Dortmund. They neither have the necessary funding nor the personnel to start studies or offer treatment approaches. Moreover, Prof. Scheibenbogen is cooperating with some researchers at the Robert Koch Institute, the leading state funded medical research institute in Germany which is comparable to the MRC in Great Britain. The results of their search for XMRV in people with ME/CFS was presented at the Centennial Retrovirus Meeting in Prague (29 April – 4 May 2010).

Media reports

Several articles and TV reports on ME/CFS published within the last 12 months were quite different in quality, yet the number of good reports is increasing. While the renowned (or notorious...) weekly magazine "DER SPIEGEL" repeated only in March this year the old rubbish of CBT/GET and conveyed the message that it were only up to the patients whether they' become healthy again or stay ill, the reputable weekly "DIE ZEIT" published a very balanced and well informed article. Several TV reports, though short, depicted the desperate situation of the patients appropriately.

Conclusion: there's a lot of work ahead to change

the situation of ME/CFS patients in Germany for the better, and we desperately need our international network to achieve some progress.



ME STORY

For a significant percentage of us deterioration is a one-way street. The NHS should aim to avoid making people more ill.

In the clinics and hospitals in which I have spent time the most respect and consideration was always shown to the person most likely to die or most visibly impaired.

M.E. was not seen as life- threatening and not considered to be a 'serious' illness.

In 1999 Dr. David Bell, a researcher and experienced clinician with a vast caseload of field experience in M.E. gave a lecture at Christie's in London entitled: "M.E. and the Autonomic System". He stated that: "People with M.E. have less activity than people, dying of HIV/AIDS, who are within two months of death." Dr. Bell was explaining that quite moderately affected M.E. patients are less able and active than terminally ill AIDS patients.

The NHS needs to be educated about this patient group: A group of people who are living at a lower level of functioning than the terminally ill but who must continue in this way for years, often decades.

For the severely affected M.E. sufferer management of one's health and care at a daily level is often an unsuccessfully waged battle.

It is impossible to stabilise one's condition and therefore deterioration is ongoing

- A person with ME

International CFS/ME Conference

CFS/ME in the 21st century –

Search for groundbreaking diagnostics and treatment approaches

Organised by Fatigatio e.V. – member of the European ME Alliance

**25-26 September 2010 in
Dortmund/Germany**

Venue: Best Western Parkhotel
Wittekindshof Westfalendamm 270 · 44141
Dortmund

Registration: Contact Fatigatio e.V.,
Albrechtstr. 15, 10117 Berlin/Germany or
send a fax to: 0049-30-310 188 920 or visit
www.fatigatio.de or (try to) call 0049-30-310
188 90. The conference is a “ticket only”
event. Conference rates for patients: 30 €, for
professional health care staff: 60€



Conference Speakers

Prof. Dr. Rüdiger von Baehr	IMD Berlin	Personal experiences and conclusions resulting from working with CFS patients
Dr. Kurt E. Müller	Waltenhofen	Impact of the COMT defect in Chronic Fatigue Syndrome
Dr. Annedore Höck	Köln	Critical Analysis of the theoretical foundations of psychotherapeutic approaches in case of fatiguing diseases
Dr. Lorenzo Lorusso / Dr. Enrica Capelli	Pavia	CFS/ME in Italy: Clinical Approach and Research in Progress
Dr. Judy Mikovits	WPI Reno Nevada	XMRV in CFS and Cancer
Prof. Dr. Carmen Scheibenbogen	Charité Berlin-Mitte	Chronic viral infection as cause of CFS
Priv. Doz. Dr. Wilfried Bieger	Lab4More, München	Viral genesis of CFS, is XMRV involved?
Prof. Dr. Wolfgang Huber	Heidelberg	Therapeutic approaches in CFS and differential diagnostics of fibromyalgia and multiple chemical sensitivity as related diseases
Dr. Barbara Baumgarten	Oslo	The ME/CFS-Centre at Oslo's university hospital. Approach in diagnostics and treatment and provisions for patients.

Around Europe – Film on ME

"Make me well!"



"Make me well!"

I became interested in ME when a colleague told me he had a family member who had to be sheltered in a dark room. And that family member had done this for several months already. I had met them at work just one year earlier. He was 26 years old then and had all his life ahead of him. I could almost not believe that was true. I had to find out more about this. I began to read a little on the subject and talking more with my colleague about how the situation was in their home. This was a young couple who had just become parents. Also a very difficult situation when one of the parents cannot participate in the development of the child. I fully understand that they did not want to have a camera close in the next few years. But my interest in the topic had developed by then.

My colleague meets a lot of people, among them 38 year old Anette Gilje, one Sunday evening at McDonalds. She had rested all day to join her friend for a little outing. My "man" comes into conversation with the ladies. They start talking about ME and he said that I'm interested in doing something on the subject. Anette had by then been ill for 12 years after having caught glandular fever in 1995. In 2000 she was diagnosed with ME. Anette was now so determined to find out how she could get rid of this something that was in her body that she was willing to let a camera follow her. Anette was used to being in the spotlight when she released a book about the controversial father of the Norwegian princess. But even for her, it was unusual that someone would film her while she was poorly. There were only very few who had seen her like that.

We began the long and winding road to the target "Make Me Well!" First there was the new miracle cure that had just arrived in Norway, the Lightning Process in which 85% are cured after three days. And those who do not recover do not do the process correctly. Anette had to go through an interview process before she was to be found worthy of a place on the course. And the course would begin on nothing less than the 17th of May, the Norwegian National Day. Happily and optimistically Anette drives the wheelchair down the city centre to the course. I can only film the introduction, not the course itself. Then I wait in the hallway and watch the 17 May procession that

moves up to the castle.

Back home Anette moves out furniture and objects that remind her of the disease. She has been told that she has imagined herself ill in all these years. But now it is over. Now she has to create a new positive thinking pattern. And then she has to begin to live like others, write, exercise, walk, dance, meet friends, etc.

Course days are over and Anette has not been cured. Yet she continues to do the process, hoping that things will loosen up over time. But weeks go by and the more Anette lives like others, the more distant she becomes and the less her body seems to be functioning. In Norway there are several experts who believe that the reason people do not get better from ME is because their brains have not realised that the body is healed. Anette talks to a doctor who has a PhD in this line of thinking - an approach similar to the theories of the Lightning Process. Has Anette really kept herself sick all these years?

Anette's doctor, Barbara Baumgarten (who attended the Invest in ME conference last year), asks her anyway to stop the process if it is not helping her. She thinks it is not helpful to say that you are healthy if the body is not functioning. Anette retrieves her furniture and starts to rest again as before. But she has not lost her courage. She is a positive person.

In Norway there is a centre that uses pulse diagnostics among other things to cure ME patients with a focus on massage, meditation, and healthy food and rest. Anette received full boarding for a week. But when the week was over Anette still felt that the main problem had not disappeared. The flu like feeling was still there.

But then she heard that there was a Belgian doctor in Norway, Kenny De Meirleir, working with a group of ME patients. Anette managed to get a place in this group. Blood samples were taken and sent to different places in the world. Anette was excited. She felt that this was to be or not to be believed that something was wrong with her body. Weeks go by and then the appointment with Dr. De Meirleir arrives. He says that Anette has a systemic mycoplasma infection which they need to begin to treat before they get more information from the other blood samples. Anette is delighted that something is wrong with her?! It seems like

Around Europe – European ME Alliance

with this disease patients will be happy when someone finds something. Contrast this with cancer patients for example. The months go by, and new appointments. De Meirleir says that Anette has a bowel problem with overgrowth of bacteria and that this is something she was born with. This has kept her sick for all these years. Now she will start on a cocktail of drugs and syringes costing thousands of dollars. This she must cover from her own savings, because she does not have the right diagnosis for them in Norway. Anette is angry at the Norwegian health services, because she had asked the infectious disease department if they could check her bowel problems. But no luck. Now she must pay the bill.

It was impressive to observe the commitment and the willingness of Anette putting herself into the clinical picture and witness the medications she had to take. I felt nauseous over everything she would put or stick in her body over the next year. First, she became worse and rested a lot and then there was sudden improvement due, in particular, to the pig liver preparation Nexavir. That did the trick for Anette. But it was an untrained body which had to begin to function again. So she got help at a rehabilitation centre in Norway with simple exercises and physiotherapy. The previously optimistic Anette actually floated now. On a rose tinted cloud. That was how it was to have a body that was not feeling sick. Anette began to engage in the situation of ME patients and went to among other things to this London conference last year. She followed and understood most of the conference, without falling apart.

For me, this has been an exciting journey that has opened my eyes to the fact that what we now refer to as ME is something more than a problem in the head.

And if one starts with the physical problems first, and takes care of them, I think the positive thinking comes by itself.

Without having to pay a lot of money for it.

Anette says that she feels 80-90% recovered since the autumn and hopes to be able to consider job opportunities, either as a student or a 50% position in book writing on the side. She is now working on a book about the journey out of darkness, which she hopes will be ready for next year's conference.

Good luck with this year's conference!
Best Wishes,
Pål Winsents, documentary filmmaker



Anette pictured at home with Pål filming

Make Me Well was shown first on 12th May 2010 in Oslo. Invest in ME is providing help with English subtitles and it is hoped that the film will be available to a wider audience soon.

ME RESEARCH

In this review we invalidate the (bio)psychosocial model for ME/CFS and demonstrate that the success claim for CBT/GET to treat ME/CFS is unjust. CBT/GET is not only hardly more effective than non-interventions or standard medical care, but many patients report that the therapy had affected them adversely, the majority of them even reporting substantial deterioration. Moreover, this review shows that exertion and thus GET most likely have a negative impact on many ME/CFS patients.

Exertion induces post-exertional malaise with a decreased physical performance/ aerobic capacity, increased musculoskeletal pain, neurocognitive impairment, "fatigue", and weakness, and a long lasting "recovery" time. This can be explained by findings that exertion may amplify pre-existing pathophysiological abnormalities underpinning ME/CFS, such as inflammation, immune dysfunction, oxidative and nitrosative stress, channelopathy, defective stress response mechanisms and a hypoactive hypothalamic-pituitary-adrenal axis. We conclude that it is unethical to treat patients with ME/CFS with ineffective, non-evidence-based and potentially harmful "rehabilitation therapies", such as CBT/GET.

- *A Review on Cognitive Behavioral Therapy (CBT) and Graded Exercise Therapy (GET) in Myalgic Encephalomyelitis (ME) / Chronic Fatigue Syndrome (CFS)*

Frank N.M. Twisk and Michael Maes
published by *Neuroendocrinology Letters* Volume 30 No. 3 2009 (<http://www.ijcem.com>)

SPEAKERS and ABSTRACTS of the 5th INVEST in ME INTERNATIONAL ME/CFS CONFERENCE

Our 2007 conference was spread over two days, as a trial of developing the conference into a larger event going forward.

The job of conference chair needs to be professionally performed.

It became evident then that we should consider inviting a known professional to chair the conferences in order to provide greater depth and some impartiality during the conference day. Our intention was also to enable a wider awareness of the conference and the information provided. Invest in ME approached Professor Malcolm Hooper to chair the major Invest in ME conference of 2008 which dealt with sub grouping of ME. For 2009 we invited Professor Jonathan Brostoff of King's College to chair. Both chairmen performed excellently and enhanced both conference days.

This year we again welcome back Professor Hooper.

Conference Chair:

Professor Malcolm Hooper

**Emeritus Professor of Medicinal Chemistry
Sunderland University, UK**

Professor Malcolm Hooper has served at many UK universities as well as in India and Tanzania. He has inaugurated links with Indian research institutions and universities and celebrated 25 years of productive and on-going links which have, particularly, involved the design and development of new drugs for tropical diseases and an exploration of natural products associated with Ayurvedic medicine. He has published some 50 papers in peer-reviewed journals in the field of medicinal chemistry together with major reviews on the Chemotherapy of Leprosy, the Chemistry of Isatogens. He edited one book on the Chemotherapy of Tropical Diseases.

He acted as a referee for a number of important journals and served on one editorial board. He has served on committees of the Council for National Academic Awards (CNAA), the World Health Organisation (WHO) and the Science and Engineering Research Council (SERC).

Professor Hooper is a member of a number of learned bodies, including the Royal Chemical Society, the British Pharmacological Society and the Society for Medicines Research, where he has

served on the committee for 12 years and served as Chairman for 2 years. This involved the planning and organising of major national and international conferences. He was appointed Chief Scientific Advisor to the Gulf Veterans Association (GVA) and accepted by the Ministry of Defence (MoD) as their nominee on the Independent Panel established to consider the possible interactions between Vaccines and NAPS tablets.

He has also served on the Gulf Support Group convened at the Royal British Legion. His involvement with the GVA brought contact with Chronic Fatigue Syndrome/Myalgic Encephalomyelitis (CFS/M.E.) and related disorders. Gulf War Illness/Syndrome (GWI/S) has much in common with M.E./CFS.

He is Patron of the Sunderland and South Shields M.E. Association and a member of the John Richardson Research Group, which includes eminent physicians and scientists performing research into CFS/M.E.. He has addressed meetings of the Pesticide Exchange Network and consulted to the Organo-Phosphate Information Network (OPIN).

He worked with the Autism Research Unit (ARU) at the University of Sunderland for over 20 years, leading to involvement in biochemical studies to offer help, support and treatment for people with autism. This has also lead to research and urine-analysis of Indolyl-Acroyl-Glycine (IAG), which is an unusual metabolite found in excess of 90% of people examined in different groups of GWV, M.E./CFS and Organo-Phosphate (OP) poisoning sufferers. He served on the General Synod of the Church of England from 1970 to 1980 and he is a Christian Lay Leader, Preacher and Teacher. He has been involved in three environmental campaigns:

- Toxic waste dumping, including campaign against sewage in the sea presenting to the Select Committee on Sewage Treatment and Disposal
- GWI/S, presenting to the Defence Select Committee
- M.E./CFS and OP/Pesticide poisoning

Invest in ME invited Professor Hooper to chair the 3rd Invest in ME International ME/CFS Conference 2008.

For additional articles by Professor Hooper on the IiME web site see <http://tinyurl.com/2wkbaar>

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Professor Leonard Jason PhD

**Prof. of Clin. & Community Psychology,
Director, Center for Community
Research, DePaul University, Chicago**

Professor Leonard Jason, Ph.D., is among the most prolific of all CFIDS researchers. For more than a decade, Professor Jason and his team at DePaul University's Centre for Community Research have worked to define the scope and impact of CFS/ME worldwide.

Professor Jason was Vice President of the International Association for Chronic Fatigue Syndrome (now the IACFS/ME) and has been a key driver of CFS research since 1991, and is uniquely positioned to support collaboration between CFS researchers, patients, and government decision makers.

His studies have shown that the direct and indirect costs of ME/CFS amount to \$20 billion in the U.S. each year, and more than 1 million people suffer from ME/CFS as opposed to the estimated 20,000 people originally reported by the CDC (Centers for Disease Control and Prevention).

Professor Leonard Jason – Abstract:

The scientific enterprise depends on reliable and valid ways of classifying patients into diagnostic categories, and this critical research activity can enable investigators to better understand etiology, pathophysiology, and treatment approaches for CFS and other disorders.

When diagnostic categories lack reliability and accuracy, the quality of treatment and clinical research can be significantly compromised. A misdiagnosis may lead to improper treatment and in cases of severe illness, the matter of an incorrect diagnosis can have serious consequences. In other words, the validity (i.e., usefulness) of a diagnostic category is inherently limited by its reliability.

Therefore, to the extent to which a diagnostic category is unreliable, a limit is placed on its validity for any clinical research. The poor understanding of the pathophysiology of ME/CFS may be due case definitions lacking reliability and validity, and improving the case definition

may prevent complications in identifying biological markers in this illness.

In this presentation, issues concerning reliability of clinical diagnosis will be presented, and they are complex and have important research and practical implications

Professor Nora Chapman Ph.D.

**Associate Professor
Department of Pathology and
Microbiology
University of Nebraska Medical Center
986495 Nebraska Medical Center**

Professor Nora Chapman is a Research Scientist at the University of Nebraska Enterovirus Research Laboratory and Associate Professor at the University of Nebraska Medical Centre.

Professor Chapman studies persistent coxsackie infections in murine models of chronic myocarditis and dilated cardiomyopathy. She and her associates have demonstrated that selection of defective enterovirus in heart and other tissues leads to persistent infections despite active antiviral immune responses.

Dr. Chapman is presently studying the mode of selection of these viruses and the effects of replication of these viruses upon infected cell function.

Dr. Chapman and her associates at the University of Nebraska are further investigating Dr. John Chia's work in regards to enterovirus in the gut biopsies.

Professor Nora Chapman – Abstract: Persistent Enterovirus Infections

Enterovirus infections have been found in patients with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS).

Enteroviruses are readily cleared by the immune response in most individuals. However work on inflammatory heart disease has demonstrated the presence of enteroviral RNA in human hearts after enterovirus infection cannot be detected by cytopathic assays.

We have demonstrated that this type of

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persistent infection by a group of enteroviruses, the coxsackievirus B viruses (CVBs), is due to the continued but low level infection by defective CVBs. These defective viruses have a defect which lowers the level of enterovirus RNA but does not preclude the expression of the viral proteins.

This mode of persistent infection normally occurs in tissues which do not have a high level of cell division. The defective enteroviruses are selected by the absence of a nuclear protein in the cytoplasm of non dividing cells.

This mode of persistent infection leads to a number of conclusions:

- (1) persisting defective enterovirus can only be detected by assays for viral protein or RNA, not by cytopathic assays,
- (2) if enterovirus is persisting, the level of viral RNA per cell will be low, leading to a requirement for a high level of sensitivity and
- (3) the effects of an enterovirus infection can persist for a period of months.

As enteroviruses infect a number of tissues, muscular or neurologic effects of this infection may be associated with some of the symptoms of ME/CFS but confirmation of this type of persistence requires sensitive assays.

Dr John Chia MD

Dr Chia is an infectious disease specialist practicing in Torrance, California, USA and has published research recently (***Chronic fatigue syndrome associated with chronic enterovirus infection of the stomach***) on the role of enteroviruses in the aetiology of ME/CFS – an area which has been implicated as one of the causes by a number of studies. There are more than 70 different types of enteroviruses that can affect the central nervous system, heart and muscles, all of which is consistent with the symptoms of ME/CFS.

By analyzing samples of stomach tissue from 165 patients with CFS, Dr. Chia's team discovered that 82% of these individuals had high levels of enteroviruses in their digestive systems. Dr Chia's research may result in the development of antiviral drugs to treat the debilitating symptoms of ME/CFS.

Dr. John Chia - Abstract:

Enterovirus Infection in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: Diagnosis and Treatment. John Chia, Andrew Chia. EV Med Research

ME/CFS is an elusive illness without a clear etiology and treatment. Emerging evidences suggest that enteroviruses can persist in the tissues of ME/CFS patients and may be responsible for the various symptoms.

Enteroviruses are common causes of respiratory, gastrointestinal and non-specific flu-like illnesses.

Major epidemics of enterovirus infections including but not limited to meningoencephalitis, myocarditis, pleurodynia, myositis and hand-foot-mouth diseases have been well-documented in the past decades. In some cases, acute enterovirus infections can cause CD8+ T lymphocytopenia predisposing to reactivation of endogenous herpes viruses.

Initial isolation of enteroviruses from patients with acute infections followed by demonstration of persistent viral infection in tissues years after the patients developed chronic symptoms lends support to the pathogenic role of enteroviruses in ME/CFS. Presumptive clinical diagnosis of chronic enterovirus infection requires a high index of suspicion, familiarity with the protean manifestations of acute infections and understanding of chronic viral persistence.

There is not yet a specific diagnostic test for ME/CFS. Significantly elevated neutralizing antibody titer over time suggests persistent immunologic response to specific enterovirus(s) infection in the tissues. Neutralizing antibody test for non-polio enteroviruses is not widely available. In contrast to other types of viremic infections, EV RNA levels in whole blood of ME/CFS patients are extremely low, which likely explain the discrepancy of results reported from different research laboratories over the past two decades. Immunoperoxidase staining for viral protein in the stomach biopsies is more sensitive than the neutralizing antibody test or EV RNA detection, and furthermore, demonstrates the antigens in tissues where viruses are expected to replicate and persist based on the route of

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transmission. The finding of enteroviral RNA and growth of non-cytopathic viruses from the same tissues support the validity of protein staining.

As enteroviruses have been largely forgotten since the eradication of poliomyelitis through effective vaccination, there is no specific antiviral therapy for acute or chronic infections.

Pleconaril, an anti-capsid agent, showed limited benefit in 1/4 patients with ME/CFS associated with chronic enterovirus infections.

Intravenous immunoglobulin, given monthly or every few months, can ameliorate inflammatory symptoms in less than 1/3 of adult patients, but may be more effective in pediatric patients. The combination of alpha and gamma interferon can induce short-term remission in about 45% of ME/CFS patients with debilitating myalgia, but is quite expensive and often poorly tolerated.

Oxymatrine, or Equilibrant, have beneficial effects in 52% of 500 ME/CFS patients, but transient increase in pre-existing symptoms are expected in most of the patients.

Cytokine gene expression study during therapy demonstrates an increase of IL12/IL10 ratio in 7/7 responders but in 0/10 non-responders. A decrease of stainable enteroviral protein is demonstrated in the stomach biopsies of few responders on oxymatrine or Equilibrant therapy.

Previous evidence for enterovirus infection in ME/CFS from over a decade ago has been confirmed and extended in recent studies. Development of antiviral therapy against enteroviruses is paramount; and the importance of enteroviruses in ME/CFS can be realized with a randomized, placebo-controlled antiviral drug trial.

Dr. Paul Cheney MD, PhD

Dr. Paul Cheney, MD, PhD, is Medical Director of the Cheney Clinic in Asheville, North Carolina. For more than 25 years, Dr. Cheney has been a pioneering clinical researcher in the field of ME/CFS and has been an internationally recognized authority on the subject of ME/CFS. He has published numerous articles and lectured around the world on ME/CFS. Dr. Cheney has been interested in many aspects of ME/CFS, and is author or co-author of numerous publications

and scientific presentations in a range of fields relevant to the illness. While practicing in Lake Tahoe in 1984-1987, Dr. Cheney, along with Dr. Dan Peterson, helped lead a research effort with the NIH, the CDC and Harvard University School of Medicine studying a localized outbreak of what would eventually be known as ME/CFS.

He was a founding Director of the American Association of CFS (now the International Association for CFS/ME). Dr. Cheney holds a PhD in Physics from Duke University in Durham, NC and is a graduate (MD) of Emory University School of Medicine in Atlanta, GA where he also completed his internal medicine residency. He is a board certified internist.

Since 1990, Dr. Cheney has headed the Cheney Clinic, presently located in Asheville, NC. The Cheney Clinic specializes in evaluating CFS patients and has expertise in diagnosis, disability support for and treatment of chronic fatigue syndrome. No single clinic has drawn as many CFS patients (currently over 5,000) from as many states (48) and foreign countries (22) as has the Cheney Clinic.

Dr. Paul Cheney – Abstract:

Oxygen Toxicity as a Control Point in the Management of Chronic Fatigue Syndrome

By

Paul R. Cheney MD, PhD

BACKGROUND

The subject of oxygen utilization, and especially the lack of it in CFS, has been the focus of many investigations. The oxygen response deficit with exercise in CFS is very appealing as an avenue of explanation for fatigue. Whether it is cause or effect, however, is unknown. We began our studies on oxygen itself by noting with echocardiography that patients with CFS had a much higher incidence of diastolic dysfunction than control groups. Cardiac diastolic dysfunction has a strong energy dependent component and therefore potentially related to oxygen utilization and to CFS.

METHODS:

During a ten-month period, 67 consecutive patients plus 24 additional patients presenting for either initial or follow-up evaluation for CFS were evaluated using echocardiography coupled to a series of varied interrogations on the echo

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table in real time. After routine, though expanded echocardiography, each patient was evaluated for IVRT response before, during and after oxygen administration for 5 minutes each, initially at 4 lpm NC and then typically at progressively higher doses up to 40% FIO₂ mask oxygen at 10 lpm flow rate if they were non-toxic to 4 lpm NC. IVRT or isovolumetric relaxation time is an internal timing measurement in milliseconds (msec) on echocardiography, which is inversely related to cellular free energy in myocardial cells. All 67 patients were categorized as either new patients or patients on various treatment algorithms if they were follow-up patients. The various treatment algorithms are complex as well as novel and cannot be fully discussed here but serve to illustrate the power of the proposed oxygen toxicity model to discriminate among various treatments.

RESULTS:

The 91 total patients were segregated into a) new patients, b) patients treated in this clinic with standard therapies, c) patients treated in this clinic with standard therapies plus one novel, low molecular weight (LMW), cell signaling factor (CSF) peptide in a transdermal gel and d) patients treated in this clinic with standard therapies plus an expanded set of LMW, cell signaling factor gels. Of the 67 consecutive patients, less those who did not meet criteria for CFS and/or were deemed atypical (6 were so categorized), 26 were new patients and 25 of 26 or 96.1% were toxic to oxygen as evidenced by a rise in IVRT on exposure to oxygen and indicating a reduction in myocardial cellular energetics. 26 of 26 new patients or 100% were toxic to 40% mask oxygen. This contrasts to 6 of 17 or 35% of the controls that were toxic to oxygen at 4 lpm and 11 of 17 or 65% of controls that were toxic to 40% mask oxygen. When patients from the group of 67 consecutive cases, excluding the 6 outliers as well as treatment responders, were statistically compared (N = 53) in their IVRT response on oxygen to the controls (N = 17) on oxygen at 4 lpm NC, there was almost no chance they could have been the same group ($p < 0.0004$).

CONCLUSION:

These results demonstrate that within certain well defined limits of the case definition for CFS, the relative cardiac cellular energetic response to oxygen in CFS (strongly negative) compared to

controls (strongly positive to weakly negative) is significantly different ($p < 0.0004$). Furthermore, that the absolute response to oxygen (toxic vs. tolerant) yields 96% sensitivity (CFS being essentially a strongly oxygen toxic state) and 65% specificity compared to controls (35% are weakly toxic) at 4 lpm NC. At 40% mask oxygen, 100% of CFS cases are toxic, but so were 65% of controls. When patients were sub-categorized according to increasingly powerful treatment algorithms, they were increasingly transformed to an oxygen tolerant state, which in the case of the most powerful algorithm, was associated with a significantly ($p < 0.006$) improved clinical status. We conclude that CFS is an oxygen toxic state and that oxygen toxicity status appears to determine outcome in therapeutic trials and is therefore, a control point in the evaluation of chronic fatigue syndrome.

DISCUSSION:

These findings appear to force a narrowing of potential causes of CFS because whatever pathophysiology one puts forth must explain universal oxygen toxicity in chronic fatigue syndrome. It is also important to view oxygen toxicity as less a cause of CFS but rather a final common pathway whose presence is downstream from the issue of etiology or etiologies, though it appears to determine outcome.

Dr. Jonathan Kerr MD, PhD

“Sir Joseph Hotung Senior Lecturer in Inflammation” at St. George’s University of London and Consultant in Microbiology in the Dept. of Cellular and Molecular Medicine

Jonathan Kerr qualified in medicine from Queen’s University of Belfast (1987), and completed training as a medical microbiologist (1995).

He has worked as a microbiologist in Belfast, Manchester and London, taking up post as a Consultant Senior Lecturer in Microbiology at Royal Brompton Hospital / Imperial College in June 2001, and then Sir Joseph Hotung Clinical Senior Lecturer in Inflammation at St George’s University of London in 2005.

His interest in Chronic Fatigue Syndrome (CFS) began during a study of the consequences of

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parvovirus B19 infection, when he showed that a percentage of infected cases developed CFS which persisted for several years.

He is now the principal investigator in a programme of research in CFS. This involves development of a diagnostic test using mass spectrometry, analysis of human and viral gene expression in the white blood cells, and clinical trials of immunomodulatory drugs.

Dr. Jonathan Kerr and colleagues at St. George's University of London reported in the July 27, 2005 issue of the *Journal of Clinical Pathology* that a preliminary study of 25 CFS patients and 25 matched healthy controls revealed abnormalities in 35 of 9,522 genes analyzed using microarray technology. Polymerase chain reaction studies showed the same results for 16 of these genes.

The study, and its results, raises some important questions. The first of which pertains to the need for funding of microbiological CFS research. He is funded (>£1million) by the CFS Research Foundation (www.cfsrf.com), a charitable organization based in the U.K., and leads a group of 5 scientists at St George's.

His research on gene expression has resulted in several published papers – including evidence of 7 distinct sub types of ME/CFS. Dr. Kerr also runs a ME/CFS research program. He studied the consequences of parvovirus B19 infection in ME/CFS and showed that a percentage of infected cases developed ME/CFS which persisted for several years. He has reported 88 human genes whose dysregulation is associated with CFS, and which can be used to derive genomic CFS subtypes which have marked differences in clinical phenotype and severity.

Dr Jonathan Kerr – Abstract:

Study of single nucleotide polymorphisms (SNP) in Chronic Fatigue Syndrome / Myalgic Encephalomyelitis (CFS/ME) and CFS/ME subtypes

Nana Shimosako, Jonathan R Kerr.

¹CFS Group, Division of Clinical Sciences, St George's University of London, London, UK.

We have recently reported gene expression

changes in patients with Chronic Fatigue Syndrome / Myalgic Encephalomyelitis (CFS/ME) and the utility of gene expression data to identify subtypes of CFS/ME with distinct clinical phenotypes (Kerr JR et al. *J Infect Dis* 2008;197:1171-84). Due to the difficulties in using a comparative gene expression method as an aid to CFS/ME disease and subtype-specific diagnosis, we attempted to achieve such a method based on single nucleotide polymorphisms (SNP) alleles.

To identify SNP allele associations with CFS/ME and CFS/ME subtypes, we tested genomic DNA of CFS/ME patients (n=108), endogenous depression patients (n=17), and normal blood donors (n=68) for 454 - 504 human SNP alleles based within 88 CFS-associated human genes using the SNP Genotyping GoldenGate Assay (Illumina, San Diego, CA, USA). 359 Ancestry informative markers (AIM) were also examined.

21 SNPs were significantly associated with CFS/ME, when compared with depression, & normal groups. 148 SNP alleles had a significant association with one or more CFS/ME subtypes. For each subtype, associated SNPs tended to be grouped together within particular genes. AIM SNPs indicated that 4 subjects were of Asian origin while the remainder were Western European. Hierarchical clustering of AIM data confirmed the overall heterogeneity of all subjects.

This study provides evidence that human SNPs located within CFS/ME associated genes are associated with particular gene expression subtypes of CFS/ME. Further work is required to develop this into a clinically useful aid to subtype-specific diagnosis.

Dr. Nancy Klimas MD

Dr Nancy Klimas MD, is a Professor of Medicine, Psychology, Microbiology and Immunology at the University of Miami School of Medicine.

She is the University's director of the Allergy and Immunology Clinic as well as Director of Research for the Clinical AIDS/HIV Research at the Miami Veterans Affairs Medical Centre. She is a member of the federal CFS Advisory Committee (CFSAC) and former President and

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current Board Member of the International Association of CFS/ME (IACFS/ME) and a founding editor of the Journal of Chronic Fatigue Syndrome.

Dr Klimas has been a leader in the field of ME/CFS research for many years and recently opened a model clinic for CFS patients with the aim to treat patients as well as train doctors.

Dr Klimas has published over a 130 peer reviewed scientific papers.

As the principal investigator of one of the NIH sponsored CFS Research Centers she leads a multidisciplinary research team representing the fields of immunology, autonomic medicine, neuroendocrinology, behavioral psychology, rheumatology, nutrition, and exercise physiology.

The University of Miami CFS Research Center is exploring interactions between the immune, autonomic and neuroendocrine.

Dr Nancy Klimas – Abstract: Immunologic Biomarkers in ME/CFS

Nancy Klimas, M.D*# , Gordon Broderick, PhD**, Mary Ann Fletcher, PhD*
University of Miami Miller School of Medicine, Miami VAMC*
Medical Director, CFS Clinic www.CFSclinic.com# University of Alberta**

In this presentation the current data supporting immune biomarkers will be presented and the sorts of interventions suggested will be explored. The search for biomarkers in ME has become increasingly urgent, both in their potential role in diagnostics and in the design of clinical trials. Biomarkers can be used to define subgroups of patients appropriate for specific interventions such as immunologic abnormalities suitable for immunomodulatory trials.

Within the immunologically impacted patient ME/CFS populations there are two primary areas ripe for immune interventions: interventions that would enhance cytolytic function promoting antiviral activity and improve cancer surveillance, and interventions to quiet immune inflammatory pathways or quiet chronic immune activation.

The evidence supporting each of these areas of immune dysfunction will be presented, as well as their clinical implications. Chronic immune activation has been documented by many investigators, including our group. The potential causes of chronic immune activation will be discussed, as well as concerns for health consequences related to living in a state of chronic immune activation. These sorts of therapy are possible, have promising preliminary data and deserve further clinical trials.

There is another interesting area of potential intervention coming from ongoing studies of immune-autonomic and immune endocrine linkages. Data will be presented from an ongoing exercise challenge study that has discovered substances made by the immune system that directly turn on sympathetic (adrenaline) responses in the autonomic nervous system. By discovering these biomarkers in our studies, we have also discovered pathways that could be targeted in interventional trials.

Finally, by putting the immune dysregulation into the bigger context of systems biology this lecture will conclude with the concept of virtual clinical trials to expedite and focus clinical trials efforts in the most effective and efficient fashion.

Professor Brigitte Huber PhD

Professor Huber studied immunogenetics at University of London and is currently Professor of Pathology at Tufts University, Boston, USA.

Dr. Huber joined the faculty of Tufts Medical School in 1977, and her laboratory has investigated the cellular and molecular mechanisms involved in the immune response since that time.

She has studied the presence of retrovirus HERV K-18 as a marker for those who might develop ME/CFS after an acute infection such as mononucleosis.

Her research shows that EBV induces the HERV K-18 envelope gene to trigger the expression of a specific superantigen and that

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there are more HERV K-18 alleles in post-mono ME/CFS patients than in controls.

Professor Brigitte Huber – Abstract:
Presence of Retrovirus as a Biomarker for ME/CFS

The etiology of Chronic Fatigue Syndrome (CFS) is far from understood and is likely due to multiple genetic components. Infection with EBV (Epstein-Barr virus) and treatment with IFN- α have been implicated in the pathogenesis.

Our laboratory has shown that EBV-infection, as well as exogenous IFN- α , activate transcription of the *env* gene of a Human Endogenous Retrovirus, HERV-K18. This provirus is normally silent, but when induced it encodes a superantigen (SAg), which is a class of proteins that is capable of deregulating the immune system.

In preliminary studies we had observed that HERV-K18 mRNA levels are significantly higher in B cells from CFS patients compared to the baseline expression seen in healthy controls. Thus, we hypothesized that HERV-K18 is a risk factor for CFS.

To address this working model in more detail, we are collecting a cohort of blood samples from patients who developed CFS after suffering from infectious mononucleosis, caused by EBV infection.

Each individual is bled 3x over a two-year period, in order to check for fluctuations in HERV-K18 expression, in relation to disease symptoms. This cohort is compared to two other cohorts, consisting of 1) CFS patients who did not have infectious mononucleosis, and 2) healthy controls that have baseline HERV-K18 expression only.

The data we have obtained so far from these ongoing studies will be presented.

These patients have also been tested for XMRV, a newly discovered g-retrovirus, xenotropic murine leukemia virus-related virus, that has been claimed to be prevalent in CFS patients.

Our data on this work will be presented and discussed.

Annette Whittemore

Founder and President of the Whittemore Peterson Institute for Neuroimmune Diseases, Reno, Nevada, USA

Annette Whittemore graduated from the University of Nevada with a BS Ed in Elementary and Special Education. Teaching children who had neuro-cognitive deficits, like those found in autism, ADD, and learning disabilities, provided her with a unique experience to later use in her pursuit of answers to her daughter's serious illness.

Annette is the parent of a young adult who was severely affected by CFS and HHV-6. She and her husband are business owners and philanthropists in Reno and Sparks. Annette Whittemore was President and Co-founder of the foundation and became active in starting the HHV-6 foundation. She started the foundation with Kristin Loomis from California after a brief meeting in Incline, NV. with Dr. Daniel Peterson, a leading clinical researcher in CFS and HHV-6.

When her daughter became ill with a chronic neuroimmune disease, Annette began to seek appropriate medical care. Annette found that few doctors understood the reasons for her daughter's continuing physical decline. For this reason, Annette has committed her time and resources to bringing attention to the serious nature of neuroimmune diseases and change her community in a positive way. She began this important mission in 1994 by supporting a Think Tank on ME/CFS, led by Dr. Daniel Peterson of Incline Village. In 2004 she and another patient advocate began a medical foundation to support research to find biomarkers of disease and treatments for patients impacted by the HHV-6A virus.

In order to provide solutions for patients and bring new doctors into this field of medicine, Annette, legislators, and others supported a bill to build a biomedical research center at the University of Nevada, Reno with an Institute for Neuro-Immune disease and the Nevada Cancer Institute. Annette founded the Whittemore-Peterson Institute for Neuroimmune Diseases which is being built on the medical campus with its mission to serve those with complex neuro-immune diseases such as ME/CFS, viral induced central nervous system dysfunction and

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fibromyalgia.

In addition, Annette and Harvey have contributed over one million dollars and pledged another four million dollars in support of the building and programming to bring this project to fruition.

As the Founder and President, Annette supports the basic and clinical research programs, recruitment of physicians and support personnel, while also leading fundraising activities. Researchers at the University of Nevada Medical School have also become collaborators on projects that are vital to our understanding of the immune deficits seen in these patients.

Dr Judy Mikovits PhD WPI, Reno, Nevada, USA

Dr. Mikovits obtained her Ph.D. in Biochemistry and Molecular Biology from George Washington University. She served as a senior scientist at Biosource International, where she led the development of proteomic assays for the Luminex platform that is used extensively for cytokine activity assessment in therapy development. Dr. Mikovits spent more than 20 years at the National Cancer Institute in Frederick MD during which time she received her PhD in Biochemistry and Molecular Biology, investigating mechanisms by which retroviruses dysregulate the delicate balance of cytokines in the immune response. This work led to the discovery of the role aberrant DNA methylation plays in the pathogenesis of HIV. Later at the NCI, Dr. Mikovits directed the Lab of Antiviral Drug Mechanisms (LADM) a section of the NCI's Screening Technologies Branch in the Developmental Therapeutics Program. The LADM's mission was to identify, characterize and validate molecular targets and to develop high-throughput cell-based, genomic and epigenomic screens for the development of novel therapeutic agents for AIDS and AIDS-associated malignancies (Kaposi's sarcoma).

Formally trained as a cell biologist, molecular biologist and virologist, Dr. Mikovits has studied the immune response to retroviruses and herpes viruses including HIV, SIV, HTLV1, HERV, HHV6 and HHV8 with a special emphasis on virus host cell interactions in cells of the hematopoietic system including hematopoietic stem cells (HSC).

Dr. Mikovits' commercial experience includes serving as a senior scientist and group leader at Biosource International, where she led the

development of proteomic assays for the Luminex platform that is used extensively for cytokine activity assessment in therapy development. She also served as Chief Scientific Officer and VP of Drug Discovery at Epigenx Biosciences, where she led the development and commercialization of cell and array-based methylation assays for drug discovery and diagnostic development. She is Research Director at the Whittemore Peterson Nevada for Neuro-Immune disorders and has co-authored over 40 peer reviewed publications that address fundamental issues of viral pathogenesis, hematopoiesis and cytokine iology. *(thanks to the WPI web site for this information)*

Dr Judy Mikovits - Abstract: Implications of XMRV Research for ME/CFS

In 2006, sequences of a novel human retrovirus, XMRV, were identified and reported to be associated with a subset of hereditary prostate cancer. Although the public health implications of this finding were not immediately clear, the seminal study published late in 2009 showed XMRV is clearly a health concern (Lombardi et al, Science 2009;326:585-589). This study describes the detection of XMRV in about two-thirds of patients diagnosed with ME/CFS. Moreover, it was the first demonstration of the replication and production of infectious XMRV in human blood cells. Because of the potential risk of blood transfusion transmission of this emerging virus, national transfusion services in Canada, Australia, and New Zealand took the precautionary step to defer donors with CFS from giving blood. Data will be presented showing in both prostate cancer and ME/CFS as well as other neuroimmune diseases and cancers, the host mounts a humoral response to XMRV and infected patients are viremic for transmissible virus present in the plasma. Despite the fact that XMRV research is in its infancy, considerable attention has been focused on this recently discovered human retrovirus.

This discovery opened up a new area of research with many unanswered questions: What is the prevalence of XMRV in the human population? Is XMRV a direct cause of one or both of these diseases or does it contribute their development or progression? How is XMRV transmitted? What are the tissue reservoirs of XMRV? Does XMRV affect innate and/or adaptive immune responses? What is

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the key immune cell target? It is present in other immune compromised individuals? Does XMRV play a role in malignancy or other neuroimmune illnesses? XMRV is the first human infectious gamma retrovirus identified.

There are now three known human exogenous retroviruses, HIV, HTLV (both complex retroviruses) and XMRV (simple retrovirus). Human retroviruses are all associated with cancer and neurological disease.

The existence variants of HIV and HTLV with different pathogenic profiles suggesting there could be variants of XMRV which contribute to the divergent disease profiles seen in ME/CFS and may explain the inability to detect XMRV using PCR primers highly specific to the current infectious molecular clone VP62 constructed from prostate cancer sequences. Like other retroviral infections, XMRV integrates into host-cell DNA and becomes lifelong.

Information on murine xenotropic viruses as well as current research on cellular tropism, and cis-acting glucocorticoid response elements, provides intriguing clues for viral persistence, mechanisms of pathogenesis and opportunities for XMRV as a diagnostic biomarker and therapeutic target in ME/CFS.

ME STORY

For a significant percentage of us deterioration is a one-way street. The NHS should aim to avoid making people more ill.

In the clinics and hospitals in which I have spent time the most respect and consideration was always shown to the person most likely to die or most visibly impaired.

M.E. was not seen as life- threatening and not considered to be a `serious' illness.

In 1999 Dr. David Bell, a researcher and experienced clinician with a vast caseload of field experience in M.E. gave a lecture at Christie's in London entitled: "M.E. and the Autonomic System". He stated that: "People with M.E. have less activity than people, dying of HIV/AIDS, who are within two months of death." Dr. Bell was explaining that quite moderately affected M.E. patients are less able and active than terminally ill AIDS patients.

The NHS needs to be educated about this patient group: A group of people who are living at a lower level of functioning than the terminally ill but who must continue in this way for years, often decades.

For the severely affected M.E. sufferer management of one's health and care at a daily level is often an unsuccessfully waged battle.

It is impossible to stabilise one's condition and therefore deterioration is ongoing

- *A person with ME*

Comments of doctors to ME patients:

- "Throw away your crutches – it's your head that needs them, not your legs"
- "Women of your age imagine aches and pains—are you sure you're not attention-seeking?"
- "I'm not prepared to do any tests, they cost money"
- "Shut up and sit down"
- "You area menace to society—a pest. I wish you'd take yourself away from me"
- "You middle class women have nothing else to worry about"
- "Its one of those thing you silly young women get"
- "Hypochondriac, menopausal, you have the audacity to come here and demand treatment for this self-diagnosed illness which does not exist"
- "Stop feeling sorry for yourself – I have patients with real illnesses, patients who are dying from cancer"
- "ME is a malingerer's meal ticket"
- "Your inability to walk is in your mind"
- "I'm not going to further your career of twenty years of being ill"
- "Nothing at all wrong with this woman – Put her on valium" (to GP from Consultant).

from "Magical Medicine: How to Make a Disease Disappear". See <http://tinyurl.com/2uv8j95>

Dr. David Bell European Lecture Tour

Autumn 2010

European ME Alliance Members Sponsor Dr. David Bell on European Lecture Tour

Members of the European ME Alliance are to sponsor a series of lectures in Europe by Dr David Bell. The lectures are to take place in late September and EMEA are hoping that Dr. Bell will be able to visit most of the countries included in the EMEA group - Ireland, UK, Norway and Sweden with Belgium and Spain being possibilities.

In the UK Invest in ME will be arranging the schedule with Oxford, Norwich and Sunderland being likely venues for presentations.

Dr Bell has recently been performing studies on XMRV and will have results in time for the lectures.

For more information on the David Bell Lecture Tour please contact EMEA - <http://www.euro-me.org/contact.htm>

For more information on the David Bell Lecture Tour in the UK please contact IiME at info@investinme.org.



The Invest in ME International ME/CFS Conference DVDs

Invest in ME have available the full presentations from the International ME/CFS Conferences in London of 2009, 2008, 2007 and 2006. We shall also have the 2010 conference available on DVD.

These professionally filmed and authored DVD sets each consist of four discs, in Dolby stereo and in PAL (European) or NTSC (USA/Canada) format. Containing between six and nine hours for each DVD set they contain all conference presentations plus interviews with ME presenters and news stories from TV programmes. Because the conferences are CPD accredited these DVDs may also be used for CPD training and count towards healthcare professionals' training quota.

These DVDs have been sold in over 20 countries and are available as an educational tools - useful for healthcare staff, researchers, scientists, educational specialists, media, ME support groups and people with ME and their carers/parents. Full details can be found at -

<http://www.investinme.org/InfoCentre%20Education%20Homepage.htm> or via emailing Invest in ME at meconference@investinme.org.

UK Price £12 each - including postage and packaging.





5th Invest in ME International ME/CFS 24th May 2010 Conference Agenda

07:45	Registration	
08:55	Welcome	Invest in ME
09:05	How Case Definitions Can Stigmatize: Implications for Epidemiology, Aetiology, and Pathophysiology	Professor Leonard Jason PhD
09:50	Persistent Enteroviral Infections	Professor Nora Chapman PhD
10:35	Enteroviruses in ME/CFS, Diagnosis and Treatment	Dr John Chia
11:15	Coffee/Tea Break	
11:35	Diastolic Dysfunction in ME/CFS: A Cardiac Manifestation of Cellular Energy Defects in ME/CFS.	Dr Paul Cheney MD, PhD
12:20	Study of SNPs to determine subtype status in CFS patients	Dr Jonathan Kerr MD, PhD
12:50	Lunch	
13:40	Immunological Biomarkers in ME/CFS	Dr Nancy Klimas MD
14:25	Presence of Retrovirus as a Biomarker for ME/CFS	Professor Brigitte Huber PhD
15:10	Coffee/Tea Break	
15:30	Future Pathways of Research into ME	Annette Whittemore
15:45	Implications of XMRV Research for ME/CFS	Dr Judy Mikovits PhD
16:40	Plenary Session	Professor Hooper + Presenters
17:30	Adjourn	



Ways to help Invest in ME

- Support biomedical research into ME – IiME Wristbands
- Donate to the Invest in ME Biomedical research Fund
- Donate to IiME
<http://www.investinme.org/helpus.htm>



Support ME Awareness Invest in ME www.investinme.org