Defiance of Science

A comparison of quotations about ME/CFS from the MERUK International Research Conference held on 25.05.07 in Edinburgh with quotations from the Wessely School (who call it "CFS/ME")

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In many important matters that affect the nation, the British Establishment is in denial. It has become seduced by the vested interests that now control Government. It is failing to acknowledge significant problems right under its collective nose and is failing to take appropriate action to protect and support its citizens, which should be a primary responsibility of any government. As Sir Menzies Campbell MP said on the BBC Radio 4 Today programme on 3rd July 2007, the public no longer has any influence on the way decisions are taken and has become alienated from the democratic process. The broadsheets are replete with examples of an incompetent New Labour administration that is obsessed with securing central government control over everyone at every level from conception to the grave and which irrationally sweeps away all reasoned opposition.

There seems to be a similar problem in the US: according to ex-Surgeon General Richard Carmona, *"Anything that doesn't fit into the ideological or political agenda is often ignored, marginalized or simply buried. Much of the discussion was being driven by preconceived beliefs that were scientifically incorrect. I was told that the decision had already been made. There was already a policy in place that did not want to hear the science"*. He is the latest in a string of government employees to complain that ideology is trumping science in the Bush administration (Rick Weiss, Washington Post, 11th July 2007).

One important matter that is persistently ignored by the UK Government and its Departments of State is the scandalous situation regarding myalgic encephalomyelitis (ME), an alternative term being chronic fatigue syndrome (CFS) and known as ME/CFS by those who accept it as an organic disorder, but as "CFS/ME" by certain UK psychiatrists who assert it is a mental disorder.

Core problems remain the lack of a standardised case definition and the damaging confusion over terminology.

Instead of being taught *how* to think about ME/CFS, medical students and clinicians in the UK are now taught *what* to think about it – in other words, all thinking that is "outside the political box" is proscribed, as is now the case with pharmacotherapy, where clinicians have been deprived of their autonomy regarding best medical practice. Most politicians don't want to think about ME/CFS at all. The people who exploit this vacuum

are psychiatrists of the Wessely School (a small UK group led by Professor Simon Wessely of King's College and The Institute of Psychiatry who are deeply involved with the medical insurance industry).

Whilst ME/CFS is classified by the World Health Organisation (WHO) in the International Classification of Diseases (ICD-10) as a neurological disorder at G93.3, some other states of chronic fatigue are classified in the ICD under mental and behavioural disorders at section F48.0. It cannot be stressed enough that the WHO does not permit dual classification of the same disorder, so the Wessely School's spurious argument that ME/CFS and "CFS/ME" have dual classification (once in the psychiatric section and again in the neurological section) because they are the same disorder falls away entirely.

What needs to be done urgently is to educate both professionals and public alike that ME/CFS is not at all the same as the disorder that the Wessely School calls "CFS/ME", even though the Wessely School insists they are indeed the same and its adherents refer to chronic tiredness interchangeably as chronic fatigue, chronic fatigue syndrome and myalgic encephalomyelitis (see below). Essentially, the psychiatric lobby has corrupted the term "CFS/ME" to include any medically unexplained fatigue or tiredness of at least six months duration.

Unlike the Wessely School who are intent on dropping the "ME" from what they call "CFS/ME" (which they openly admit retains the initials "ME" merely to placate patients: Fischhoff and Wessely: BMJ 2003:326:595-597), the initials "ME" have recently been included in the name of the disorder by the US-based International Association for Chronic Fatigue Syndrome / Myalgic Encephalomyelitis (IACFS/ME). It is regrettable that the term CFS/ME now used by the IACFS/ME is the same one used by the Wessely School to mean an ill-defined behavioural disorder. To compound the confusion, the IACFS/ME sometimes uses the term "ME/CFS" on its website, which provides a further illustration of the chaos surrounding the terminology.

No matter how passionately the purists call for the term "ME" to be used in order to mitigate the damage perpetrated on ME patients by the use of the term "CFS" that was introduced in 1988, the reality is that much of the significant international biomedical research data refers to "CFS" and rarely mentions the term "ME".

Without the acceptance in the UK of a sound clinical and/or teaching case definition for ME (such as the Carruthers et al Canadian Guidelines of 2003), it would be a retrograde step to call for the abolition of the term "CFS". If the term "CFS" is summarily dropped, the psychiatric lobby might claim that none of the important research data on CFS that has emerged over the last two decades relates to ME.

This would then strengthen their dictum that ME does not exist except as an aberrant belief held by (i) those who think they suffer from it and whose intention is secondary financial gain in the form of State and /or insurance benefits and (ii) those clinicians who are naïve enough to pander to such dysfunctional "body-watchers" who augment "normal

bodily sensations" to an imagined pathology, as those clinicians are not skilled enough to recognise a behavioural disorder when they see one.

There is without doubt a pressing need to restore the rightful status of ME as an organic disorder and to separate it once and for all in the mind of Government Ministers from other states of chronic fatigue that may more appropriately fall within the domain of psychiatry.

It is the determined actions of the Wessely School psychiatric lobby to lump together *all* states of what they refer to as "medically unexplained fatigue" as "CFS/ME" that has resulted in the political denial of the existence of ME as a specific entity.

Given the lip-service paid by the psychiatric lobby to "evidence-based" medicine, is not the best way forwards *to look at the evidence* and thereby distinguish the various subgroups – one of which being ME --that have been become subsumed within the heterogeneous label "CFS"?

International ME/CFS experts such as Professor Leonard Jason and Professor Fred Friedberg from the US, as well as many others, have long called for the need for subgrouping, but in the UK the psychiatric lobby and those who support its influence upon Government policy ignore the evidence that underpins the call for subgrouping, which they insist is merely a matter of "semantics". One of those who refuses to accept the need for subgrouping is immunologist Professor Tony Pinching, Principal Medical Adviser to the charity Action for ME, who plays such a key role in regard to the Government-funded nation-wide network of CFS Centres that deliver only psychotherapy (see http://www.meactionuk.org.uk/Subgroups.htm).

Even though the UK Government Health Minister (Lord Warner) confirmed in writing on 11th February 2004 that the Department of Health accepts the WHO neurological code for ME/CFS, it seems that patients continue to suffer unnecessarily due to the ever-spreading domination of the Wessely School, and in the current political climate this is unlikely to cease.

As Dr Jonathan Kerr, Principal Investigator of a research group on gene expression in ME/CFS at St George's, London, stated at the Invest in ME conference on 1st / 2nd May 2007 in London, while the Medical Research Council (MRC) is controlled by psychiatrists, it will never fund biomedical research into ME/CFS. In relation to his own work on uncovering a genetic profile for ME/CFS and the MRC's refusal to fund his studies, Kerr said the MRC psychiatrists had complained about patient selection. (The Second International IiME Conference is reported in the Environmental Issues Forum Spring / Summer 2007 Newsletter, page 19. Copies available at cost price from 0208-554-3832).

The Government tactics of denial are very simple: no matter what evidence is put before it, if that evidence does not accord with current policy, the response is "We do not accept that". This expediently leaves the door wide open for bodies such as the DWP and NICE

to reject the biomedical evidence by using the same technique of implacable denial. It may be recalled that a recent charge against Prime Minister Gordon Brown is that he uses the denial of evidence as an instrument of power (Financial Times, 21st March 2007). As the UK ME/CFS community knows to its cost, such a strategy is very effective.

It is profoundly ominous that so much existing evidence about ME/CFS can be so systematically ignored throughout the UK, from Government control of the media via the Science Media Centre (a body set up under New Labour which operates like a news-room and whose team is guided by a Scientific Advisory Panel, of which Professor Simon Wessely is a member) right up to the Judiciary, where judges appointed by New Labour believe that ME is "psychological self-indulgence". Such media manipulation is inevitably linked to the suppression of justified concern from a disempowered population, as has been shown to be the case – at least two broadsheet Health Editors have confirmed that it is not editorial policy to report biomedical findings in ME/CFS and almost without exception, journalists have shunned biomedical research conferences, despite invitations and prior Press Releases.

Speaking at the US Centres for Disease Control Press Conference on 3rd November 2006 at the launch of the CDC's Toolkit to raise awareness of ME/CFS, Professor Anthony Komaroff of Harvard Medical School said there are over 4,000 papers documenting the evidence of biomedical aberrations found in ME/CFS (www.cdc.gov/od/oc/media/transcripts/t061103.htm). The Wessely School, however, (and thus Government Departments) continue to ignore this significant body of evidence, but some of that evidence deserves further mention because it directly counters the Wessely School's ill-informed beliefs about the alleged value of cognitive behavioural therapy (CBT) and graded exercise therapy (GET) for those with ME/CFS.

The evidence that CBT/GET does not work

It was in 2005 that Black and McCully from the Department of Kinesiology, The University of Georgia, USA, published their paper "Time course of exercise induced alterations in daily activity in chronic fatigue syndrome" (Dynamic Medicine 2005:4:10:doi:10.1186/1476-5918-4-10) in which they re-visited their previous conclusions that people with (ME)CFS could increase their daily physical activity over a period of four weeks by following a prescribed physical exercise programme.

The authors performed a re-analysis of their data and a distinct pattern was observed. Not only were patients unable to reach daily levels similar to sedentary controls, the daily exercise programme was accompanied by a worsening of (ME)CFS symptomatology.

The authors concluded: "*Unlike our previous interpretation of the data, we feel this new analysis suggests that (ME)CFS patients may develop exercise intolerance as demonstrated by reduced total activity after 4 – 10 days. The inability to sustain target activity levels, associated with pronounced worsening of symptomatology, suggests the*

subjects with (ME)CFS had reached their activity level. Our results provide information on the time course by which people with (ME)CFS may develop exercise intolerance".

This important finding was replicated in May 2007 by another group of researchers from the University of the South Pacific, Stockton, CA (Post-exertional Symptomatology in Chronic Fatigue Syndrome. Stiles, TL; Snell, C; Stevens SR; Moran M; Van Ness JM. Medicine & Science in Sports and Exercise: 2007:39(5): S445).

These authors explored symptom exacerbation in (ME)CFS patients following an exercise challenge when compared with sedentary controls. They concluded: *"The results of this study indicate that (ME)CFS patients suffer from symptom exacerbation following physical stress. As with MS, lupus and RA, post-exertional symptom exacerbation appears to be both a real and incapacitating feature of the syndrome. The delayed recovery response evoked by a single bout of exercise stress is distinctly different from that of sedentary controls. The debilitating effects help to explain activity avoidance, which should be considered when prescribing exercise and activity management programmes for (ME)CFS patients".*

There is existing acknowledgement that there is no long-term benefit from CBT:

- at the American Association for CFS (AACFS, now the IACFS/ME) International Conference at Cambridge, Massachussets on 10-11th October 1998, Wessely School psychiatrist Michael Sharpe went on record stating that the benefits of CBT faded with time

- in a personal communication dated 12th October 1998 to Professor Fred Friedberg, Michael Sharpe stated about his often-quoted 1996 study (BMJ 1996:312:22-26) that outcome measures have begun to decline 17 months after treatment termination (quoted in JCFS 1999:5:3/4:149-159)

- on 3rd November 2000, Sharpe again confirmed "*There is a tendency for the difference between those receiving CBT and those receiving the comparison treatment to diminish with time due to a tendency to relapse in the former"* (www.cfs.inform/dk)

- the very modest benefit in only some patients who have undergone CBT has been shown to last for only 6-8 months and *"observed gains may be transient"* (Long-term Outcome of Cognitive Behavioural Therapy Versus Relaxation Therapy for Chronic Fatigue Syndrome: A 5-Year Follow-Up Study. Alicia Deale, Trudie Chalder, Simon Wessely et al. Am J Psychiat 2001:158:2038-2042)

- in his Summary of the 6th AACFS International Conference in 2003, Charles Lapp, Associate Clinical Professor, Duke University and Director, Hopkins-Hunter Centre, NC, stated about CBT that Dr Daniel Clauw (who had studied 1,092 patients) found that at 3 months there were modest

gains, but at follow-up at 6 and 12 months, those modest gains were lost (this being an example of "evidence-based" medicine)

- Wessely himself is on record stating that CBT doesn't work for all: in his Editorial (JAMA 19th September 2001:286:11) he stated that CBT and GET are only "*modestly effective*" and that neither is "*remotely curative*"

- Wessely is also on record as stating: "*It should be kept in mind that evidence from randomised trials bears no guarantee for treatment success in routine practice. In fact, many CFS patients, in specialised treatment centres and the wider world, do not benefit from these interventions*" (The act of diagnosis: pros and cons of labelling chronic fatigue syndrome. Marcus JH Huibers and Simon Wessely. Psychological Medicine 2006:36: (7): 895-900).

The March 2007 magazine of BABCP (British Association for Behavioural & Cognitive Psychotherapies) contains a really striking critique of CBT from the centre of the citadel itself. It is written by David Richards, Professor of Mental Health at the University of York. The following is an extract:

"One of the major planks to which we CBT therapists constantly return is that of 'evidence'. We believe that the scientific method has delivered us a cast-iron evidence base 'proving' that CBT works. In the December 2006 issue of the BABCP magazine, Henck van Bilsen bids us become more cocksure, more dismissive of those that question our approach. He suggests we browbeat the opposition. Sadly, we have botched our transition from heresy to orthodoxy. Proponents of CBT are now seen as supercilious and imperious. At the brink of unprecedented success CBT finds itself vilified in professional and public media (and this) is down to a lack of humility, openness and a naïve belief that the RCT (random controlled trial) is the only weapon we now need. Such assertions are many miles wide of the mark. One must also consider the issue of what research has been conducted, when, where and by whom. It is an unproven contention that it is possible to take the results of experiments conducted by charismatic product champions in highly controlled environments and implement them in the widespread manner suggested by Layard. And yet that is where we are heading. Our detractors are right to accuse us of a selective use of the evidence. They have many other objections: we ourselves write the research questions which now get funded; reviews have shown that RCTs can both exaggerate and under-estimate the likely effect of a treatment; RCTs are fiendishly difficult to use in order to understand how we should organise care; most CBT trials are small and poorly executed; quality thresholds for RCTs in NICE guidelines are notoriously low, allowing the results of meta-analyses of small poor quality studies to direct policy (and) we pay no attention to qualitative evidence. The criticisms are endless. Given the old adage that power corrupts, but absolute power corrupts absolutely, no wonder CBT is the subject of such hostility".

The reference to "Layard" is to Lord Layard, a Government adviser who has been dubbed "the happiness tsar" because of his plans to introduce CBT throughout the NHS for those

diagnosed with a "mental" disorder (including people who are unhappy), in order to remove such people from receipt of State benefits.

In relation to the potential dangers of exercise for people with ME/CFS, there is evidence that in some ME/CFS patients, their antioxidant defences against free radicals (which can cause damage to the cells of the body) are overwhelmed, resulting in cell injury, a process known as oxidative stress. Exercising muscle results in excessive free radical generation, and research has demonstrated that incremental exercise challenge induces a prolonged oxidative stress in ME/CFS patients, who are known to carry a heavy load of oxidative stress.

Another pathway for excessive free radical generation has been shown to be associated with immune activation, with free radical generation being activated by white blood cells, either as a consequence of infection or as the result of environmental stressors. For further information, see http://www.meactionuk.org.uk/A_FINAL_FAREWELL_TO_THE_PSYCHIATRIC_FALLCY.htm and http://www.meactionuk.org.uk/Facts_from_Florida.htm .

The seven Random Controlled Trials (RCTs) of CBT and four RCTs of GET which underpin the Wessely School beliefs have been dissected and demolished by Dr Ellie Stein (see below).

Thus there is real concern that not only is CBT ineffective, but that GET is potentially harmful to patients with ME/CFS. It is known that GET may leave up to 82% of ME/CFS patients who have undertaken it irreversibly house or bed-bound. Given what is known about the disorder as reported below, this is hardly surprising.

As was noted by Jim Wilson on Co-Cure on 8th July 2007:

"*CBT is not a treatment when used for(ME)CFS because it basically is merely advice to the (ME)CFS patient not to over-exert themselves. That is common sense – not a therapy. Yet (an) industry has sprung up of some health care professionals who get paid for giving (ME)CFS patients this simple advice, claiming it is therapy. And CBT is cynically and falsely claimed to be a therapy for (ME)CFS by certain government and business interests who use that false claim to imply that (ME)CFS is due to some psychological problem of the patient, and not to a biological illness. Those who claim CBT has cured (ME)CFS have never proved that claim".*

There has been much unrest at the grant of £2.6 million by the MRC to Wessely School psychiatrists to carry out more "research" into CBT and GET for people with "CFS/ME" (the PACE trials).

In comparison, in May 2007 the British Polio Fellowship, in association with the Lane Fox Unit at St Thomas' Hospital London, produced an exemplary 15 page booklet entitled "Pacing for Activity and Exercise: Lifestyle adjustment tips for everyday life to ease symptoms and maintain independence". In 1995, it was shown that the mechanism

of extreme fatigue of post-polio was identical to the fatigue of ME/CFS (Annals of the New York Academy of Sciences 1995: vol. 753: 1-409), so the booklet may be helpful for those with ME/CFS. The advice includes the following:

- *"It is thought that too much activity can lead to an increase in weakness and fatigue in people with (post) polio. There is a theory that over-use can lead to a further decrease in function"*

- *"The practice of resting before you become tired or exhausted is so effective that it should be your number one priority in energy conservation"*

- *"Muscle tightness may sometimes be the body's way of compensating for muscle weakness"*

- *"Exercise for people with PPS (post-polio syndrome) should be non-fatiguing"*

- *"Never carry out aerobic exercise on two or more days in a row"*

- *"Symptoms that last longer may mean muscle over-work and possible injury"*

- *"Symptoms of over-use that may show a need to stop or decrease the amount of exercise include: muscle cramps and spasms, muscle twitching, muscle pain and extreme fatigue"*

- *"Any exercise that causes additional weakness or unusual muscle twitching should be stopped"*

- *"It is important to respect these symptoms in order to avoid doing permanent harm to your muscles"*

- *"Remember the key to achieving lifestyle balance is to avoid pushing yourself beyond your abilities".*

Such advice does not feature in the Wessely School curriculum; indeed the Wessely School teaches that "CFS/ME" patients must disregard their symptoms and continue exercising even if they are absolutely exhausted (see below).

Extracts from The ME Research UK (MERUK) International Research Conference, 25th May 2007, Edinburgh Conference Centre, Heriot Watt University, Edinburgh

There were six keynote lectures and eight presentations, with several Question & Answer sessions. The following notes are taken from the keynote lectures and presentations.

It is understood there is to be a DVD of this conference, so people will be able to confirm for themselves the accuracy of these quotations. The two-disk DVD will shortly be available, price £6, from MERUK, The Gateway, North Methven Street, Perth, PH1 5PP, Scotland. Tel: 01738-451234.

The Conference was opened by Alex Fergusson MSP, Presiding Officer (Speaker) of the Scottish Parliament, who spoke movingly of his own family's struggle for recognition and treatment of his son's illness which left the 14 year old boy barely able to move for three years.

Mr Fergusson went on to say that he had been contacted by a constituent asking for help: *"She's had ME for some time and been refused DLA (Disabled Living Allowance) and the State support that comes along with that on the grounds that whilst she has been recognised as having ME, she has not sought or been given psychiatric treatment. Now that to my mind absolutely sums up the principal concerns of the Scottish Cross Party Group on ME, which is that the cold grip of psychiatry is still far too deeply rooted in the world of ME".*

Mr Fergusson said that was why he warmly welcomed everyone to the Conference, which was the first international conference on ME/CFS biomedical research in the UK.

He pointed out that the colloquium was co-sponsored by ME Research UK and the Irish ME Trust.

He mentioned that there were delegates from all parts of Scotland, England, Norway, Canada and Egypt, and that presentations would be made by researchers from Scotland, England, the USA, Canada, Belgium, Spain and Japan. He said *"The aim is to bring together healthcare professionals, scientists and representatives of ME patients' support groups, all of whom are working towards the common goal of understanding the biomedical basis of ME/CFS and to raise awareness of the need for biomedical investigation of the illness. It is heartening to see the combined efforts and energies that are going into uncovering the biomedical basis of the illness".*

He concluded his welcome by saying *"Although we often think we're going nowhere, there is a <u>huge</u> amount internationally that is being done".*

This was followed by a welcome from Dr Vance Spence, Chairman of MERUK, who then introduced the first keynote speaker, Dr Jonathan Kerr, Senior Lecturer in Inflammation and Honorary Consultant in Microbiology in the Department of Cellular and Molecular Medicine at St George's Hospital, University of London.

<u>Keynote Lecture by Dr Jonathan Kerr: Molecular studies of (ME)CFS</u>

This was an extremely technical lecture, but some of the key points that emerged include the following:

"Preceding virus infection is definitely a feature and outbreaks have occurred which have been shown to be due to or triggered by different virus infection, (and to) exposure to toxins, chemicals, pesticides and vaccination".

"Studies of pathogenesis have shown various things, but top of the list are abnormalities of the immune system and infection".

"I'm gong to talk today about our efforts to define the gene expression signature of (ME)CFS and to develop a diagnostic test based on protein biomarkers and our own initial efforts to identify viruses that are involved in (ME)CFS".

"All the patients in the study had neurocognitive defects – spatial span (and) verbal recognition memory test – both of these are quite abnormal in (ME)CFS".

Kerr's team analysed the gene levels in patients versus gene levels in controls and found there were 3,000 genes that were different between the groups.

They tested 225 of these, and confirmed 80 human genes – and the number one <u>function</u> of those genes is the immune response, followed by neurological functioning, mitochdondrial genes, transcriptional and translational regulation and apoptosis, and these are the "*canonical pathway functions for these genes, so our work fits in with what's been found before, and all these studies tend to implicate the immune system in the pathogenesis".*

Kerr went on to talk about 16 of the abnormal genes seen in (ME)CFS, saying "*15 are <u>upregulated</u> and one of these genes is <u>downregulated</u> and the one that is downregulated is IL-10 receptor alpha, and this gene is critical for T cell activation".*

He said *"What we need to do now is to confirm the specificity of these genes to (ME)CFS".*

Kerr spoke about the various protein abnormalities that have been found in (ME)CFS and about the finding of *"(ME)CFS-related proteome in human cerebrospinal fluid, which was published in 2000 – this includes several genes that are important and may be relevant in the development of amyloidosis".*

(Amyloidosis is a generalised disease process of infiltration of the tissues with amyloid, a glycoprotein seen in chronic inflammatory conditions; the organs mostly affected are the liver, kidneys, spleen and heart. It also occurs in B lymphocyte disorders such as multiple myeloma. Amyloidosis is also seen in Hodgkin's disease).

Kerr said they are *"looking for protein biomarkers in (ME)CFS which can reliably differentiate cases from normal people and other diseases".*

He said there are already many differences: *"We now have 15 protein biomarkers which are statistically significant"*.

Kerr spoke about viruses in (ME)CFS: *"These can be acute, where we have an acute trigger of the disease such as acute enterovirus infection, which may go on to develop a persistent or chronic infection which may keep the immune response working. The other way viruses may contribute to (ME)CFS is by reactivation, and we know that DNA viruses persist in the body following acute infection"*.

He then spoke about the relationship between stress and infection: *"You get production of certain enzymes which can activate human genes and these genes are known to be involved in the pathogenesis of (ME)CFS. We pulled out 14 viruses whose signature sequences were upregulated in (ME)CFS patients compared with normal people. Interestingly, certain of these viruses are in common with the viruses found by Dan Peterson in Nevada"*.

Kerr summed up his lecture:

"I thought I would put all this stuff in context by presenting a slide which has been produced by Robert Dancer to account for chronic immune and inflammatory diseases. Here we have the macrophage with viruses which are ingested; peptides presented to the T lymphoctyte which becomes activated and produces cytokines. These may affect the brain cytokines by various different mechanisms, particularly glial cell activation. This scenario then leads to activation of the efferent vagus and the HPA axis to attempt to control the immune response, and these two together then give rise to the symptoms of (ME)CFS and sickness generally. This is a biological marker for the pathogenesis of chronic inflammatory disease".

Responding to a question from the floor, Kerr explained the relationship between a high stress index and infection: *"It's been shown that pre-existing emotional stress leads to an increased infection rate upon exposure to the common cold virus and also to the development of symptomatic compared with asymptomatic infection upon exposure, and other viruses have been studied in the same way"*.

Following a question from the floor about increased emotional lability in (ME)CFS, Kerr said *"It is known that in chronic inflammatory disease your mood is altered and your emotions are more labile, and emotional stress is known to depress the ability of the immune system to cope with infection"*.

Keynote Lecture by Dr Estibaliz Olano: Genetic Profiles in Severe Forms of Fibromyalgia and Chronic Fatigue Syndrome

Dr Olano from Spain explained that their aim was to identify genetic profiles that might distinguish between fibromyalgia (FM) and ME/CFS. She said there are many significant

differences in prevalence and there are important consequences on an individual's quality of life in both diseases.

"*There is an increased interest in finding markers to allow the stratification of both diseases. We think that the most severe forms are subgroups that have a bad prognosis. There is a need for markers for diagnosis and for a definition of subtypes".*

"To date, there (have been) only some questionnaires which help to differentiate subtypes and classify the severity of diseases (and to) validate them".

They used a different approach from the one just explained by Jonathan Kerr --- they wanted to look at genetic variation and to see if the genetic profiles of people with (ME)CFS and FM are different.

"*We are looking at DNA, not at the RNA, so we are not looking at the expression, we're looking at the DNA itself".*

"The DNA of humans is 99.8% homogenous (but) people are all different and respond differently to diet (and) treatment (and) have different diseases. SNP (single nucleotide polymorphism) analysis has the potential of identifying the markers that separate people for specific diseases (and those who are) predisposed to FM and (ME)CFS, and might help find subtypes within the diseases".

"Our aim was to test the hypothesis that FM and (ME)CFS are indeed two different diseases with different genetic entities and to develop a DNA chip as a tool to discriminate with specificity between most cases of FM and (ME)CFS".

Dr Olano then described the study and the subsequent validation study and the data analysis, explaining that they had chosen genes that they knew were related to (ME)CFS and FM and that they had no genotyping problems.

She emphasised the need for a population certification analysis, because "*if you have different populations and you do a SNP analysis, that can jeopardise a lot the results because we don't want to end up with an analysis that differentiates, for example, American people and Spanish ones -- it has to be only one population".* (Note that this is the opposite of the UK MRC PACE trials, which from the outset intentionally mix patients with FM and "CFS/ME").

The study revealed *"two very defined differences (with) a very clear discrimination between FM and (ME)CFS, with 95.4% specificity. The models can be trusted and are a good fit for the data".*

"It means that both these diseases have a very strong genetic background – they are not genetic diseases; something triggers them (and there is a) predisposition if triggered by environmental factors".

"The conclusion we obtained from the study was that FM and (ME) CFS are two separate diseases with an important genetic component that gives them different genetic profiles".

"(It) also demonstrates that the genetic profiles between the most aggressive forms and the milder forms are <u>different</u>. We propose the use of SNP analysis to (determine) the most severe cases of FM and (ME)CFS".

Dr Olano said they are developing a DNA chip, called a Fibro chip, as a predictive tool for the most aggressive forms of FM and (ME)CFS which she said could help with obtaining disability benefits.

In the Question and Answer session, Professor Nancy Klimas said this is an extremely important study and offered her congratulations, saying this study goes a long way to what we all want, ie. a biomarker. She then asked "*What happened to the FM/CFS group when you put them into groups if they met <u>both</u> criteria?"*, to which Dr Olano replied "*If they met the (ME)CFS criteria, we considered them as CFS, even if they met the (American College of Rheumatologists') FM criteria. The most severe groups were the most pure in FM and (ME)CFS".*

In response to another question from the floor, Dr Olano said "*If you look at the genes that were involved with the diseases, (ME)CFS has an important autoimmune background to it – we had cytokines, among them IL-10, (and) many polymorphisms in the genes related to immune and inflammation markers were different in (ME)CFS people but not in FM people. In (ME)CFS, the genetic background has to do with immune genes and neurological genes (and) in FM it was more neurological genes which were involved, so there are two different diseases with two different genetic backgrounds".*

Dr Olano was also congratulated by a male speaker from the floor, and Dr Vance Spence said it was a very, very interesting presentation.

<u>Presentation by Dr Akikazu Sakudo: Visible and Near-infrared Spectroscopy for Diagnosis of Chronic Fatigue Syndrome</u>

Dr Sakudo, Research Assistant in the Department of Virology, Osaka University, Japan, gave a presentation on the use of visible and near-infrared (Vis-NIR) spectropscopy and chemometrics to examine the blood sera from ME/CFS patients compared with healthy controls.

The team found that it was possible to discriminate between the two groups, 100% correctly identifying healthy blood donors and 93.3% of the ME/CFS patients.

"*In conclusion, the results presented in this study indicate that near-infrared spectroscopy can be used for (ME)CFS diagnosis. It is a rapid, objective and non-invasive method to diagnose (ME)CFS".*

Dr Vance Spence said "*What we've had is three very interesting papers: Jonathan (Kerr) looking at a protein biomarker and a protein signature; Dr Olano has a method of separating out (ME)CFS from fibromyalgia, and Dr Sakudo has a really very impressive screening method. I'm really surprised at the data and the very clear separation using the data".*

He then invited questions for Dr Sakudo from the floor, and Nancy Klimas warmly congratulated Dr Sakudo before asking "*What do you think causes the difference in the blood of patients versus controls?"* to which Dr Sakudo replied that they are trying to identify the molecule.

Before asking his own question, Dr Jonathan Kerr said "*Thank you for your excellent presentation. Have you tested for other diseases apart from (ME)CFS?"*, to which Dr Sakudo replied in the affirmative.

Before announcing the coffee break, Vance Spence commented that *"It would be a very good screening method if used in a clinical situation".*

<u>Presentation by Dr Gregor Purdie: Towards a Scottish Clinical Network</u>

Dr Purdie is a General Practitioner Adviser to the NHS in Dumfries and Galloway on service development. He has been involved with ME/CFS since the 1990s. One of his roles in Public Health is Clinical Lead in ME/CFS.

At the start of his presentation, Dr Purdie announced: *"This is something that has come through in the last few days, and I hope will be of benefit to all".* He then read out from a letter: "*As far as our Health Board and Council is concerned, ME is a physical illness and therefore will be managed in mainstream Health Board and Social Service planning for physical illness and physical disability".*

This was greeted with prolonged applause.

Dr Purdie continued: *"I hope this will be of particular value to our friends at the 25% end of the spectrum of ME".*

"Up to now, ME planning has appeared to be more on the periphery of health service planning, therefore it is vitally important that it is now up there with the biggies – with heart disease, with cancer, and with diabetes".

"The ME Clinical Network is there to provide high quality, seamless care through the NHS, the development of clinical guidelines, bringing together clinicians from all

disciplines for the common good, and through that, good programmes of education and training. That education and training must be at undergraduate level for all clinical professionals, as well as post-graduate. It's heartening to speak to friends and colleagues here, where that door has been opened, but that door must be universally opened".

Dr Purdie went on to speak about a managed clinical network at local, regional and national level, and of the need to bring together the three groups: research groups, the clinical development group of practising clinicians, and the user and carer group.

"We humble physicians are inter-acting with the research group so that we can turn research into clinical practice that we can use in the consulting room and hospital clinic".

He said that the user and carer group is overlying the whole of this, and provides the perspective which directs them all, both researchers and clinicians.

"We need to disseminate good practice throughout Scotland. Clinical isolation is clinical death. A doctor or nurse working on their own does not have that interaction with their peers to keep themselves up-to-date, therefore the national network will develop and co-ordinate the training of all clinicians, and for clinicians training as specialists in ME. A consultant in ME is not something we have – it's a discipline that needs to be developed".

"Health Boards now have people in place to develop and manage long term conditions planning, and this is a natural home particularly for people more severely disabled with ME".

Dr Purdie said planning for long term conditions like diabetes is *"bedded into Board planning"* and that *"we should be doing the same for people with ME, so that the services we develop are tailored and empathic to the needs of people with ME. It allows the close working of people with ME themselves and their clinicians, for the common good. So – what is the outcome? It's responsive, empathic, person-centred care of high quality, delivered by clinicians who have kept abreast of the latest research, and seamless working between primary, secondary and tertiary care".*

"We are all part of a nascent coming-together of individuals, researchers, clinicians and people with ME who can influence and drive the future of the service in Scotland".

Keynote Lecture by Professor Jill Belch: Vascular and Inflammatory Aspects of ME/CFS

In his introduction, Dr Spence said that Professor Belch is Deputy Head of the Division of Medicine and Therapeutics and Head of the Vascular Diseases Research from the University Department of Medicine, Dundee. Her main clinical interest is vascular

medicine and inflammatory disease and she has been very supportive of ME/CFS research over the last ten years.

Professor Belch began by saying that she is of an older generation and therefore is very lucky, because this allowed her to train for six years as a doctor, instead of the five years as now, and then to train for ten years as a consultant, unlike the current five years, and this allowed her to train in general internal medicine, in rheumatology and in vascular medicine, and what all this has given her is a very broad base: *"It has allowed me to develop an interest in a very difficult group of conditions – the connective tissue diseases, of which (ME) forms a part"*.

She described how in the early 1990s she began to have patients with (ME)CFS, and she looked at the next 100 patients who turned up at her clinic and did standard tests on them, but what she found was quite seminal: there were quite a few patients with the label of (ME)CFS who had connective tissue disorders including dermatomyositis, anti-phospholipid syndrome, endocrine disorder, infection and multiple sclerosis, but what was most stunning of all was that 72% of people had "*this disease that we <u>didn't</u> learn about as undergraduates and that we had no diagnostic test or treatment for"*.

"I began to recognise that (ME)CFS was under-recognised – it is <u>under-recognised</u> by patients themselves, because what happened was they became unwell, they didn't realise what was happening, and they pushed themselves, and that made (them) even more unwell and prolonged the incapacity. So it was under-recognised by the <u>patients</u>, (and was) <u>under-diagnosed</u> by us as doctors. I think Greg (Purdie) gave a wonderful discourse of the progress we've made in terms of medical recognition of that disease, although that is not countrywide, and we have to act to ensure it <u>is</u>. Most importantly, it is <u>under-investigated</u>. It was wonderful to hear how close we may be to a diagnostic test".

"Because of these things, patients are under-treated, with misdiagnoses, and we don't have available treatments".

"Our expertise was in vascular disease and it had already struck us that some of the symptoms might have a vascular nature, for example, the temperature sensitivity of the patients – temperature sensitivity is controlled to some extent by blood vessels—gut problems and sleep abnormalities (and) when you stand up, you feel dizzy because the blood pressure falls. All these are functions of blood vessel disease and this suggested to us that there might be a cholinergic vasodilator activity: the blood vessels might be pathologically dilating".

Professor Belch said they developed a painless and safe way of investigating blood vessels – the technique of iontophoresis, which is "*an effective way of getting acetylcholine into the blood vessels to test their behaviour. It measures blood flow – how quickly the blood is flowing and how open the blood vessels are. It's a very sensitive test"*.

"What we found is exactly the opposite from coronary disease – the blood vessels open more than they should do, and this explains the flushing, the swelling of the legs and ankles".

"We've heard a lot about the difficulty in making a diagnosis in these patients – there is no doubt that even using the Canadian classification, we still tend to lump together everybody who has this group of symptoms, and this does cause us problems, because if you lump a hundred people together because they have "fatigue", ten of them may have it because of a different reason and may respond differently to treatment, but you fail to pick this up, or, indeed, somebody may study those ten, publish a finding, and then somebody studies another ten and they don't get the same thing, and that leads to a lot of confusion in the scientific literature and has contributed to the bad name of this condition because there doesn't seem to be consistency".

Professor Belch then described three groups of patients they had studied – a post-infectious group, a group of Gulf War Syndrome (GWS) patients, and a group of people who had been exposed to organophosphate (OP) poisoning.

The post-infectious group had clear vasodilatation compared with the controls. In contrast, the GWS group did not have significant vasodilatory responses, nor did the OP group.

"So essentially, what we're finding is that you can have the same symptoms but you don't necessarily have the same disease".

"So if you look at the group that had the increased vasodilatation (the ME/CFS group), the question is, why? There are three possible solutions (i) you are making too much vasodilatation chemical, or (ii) the patient is more sensitive to the same amounts or (iii) it is made in the normal quantities, but is not broken down. In fact, it was the duration of the response that was prolonged, so that there was diminished breakdown".

"In the control subjects, the blood vessels dilate and then the chemical is broken down and the blood flow returns to normal in about 20 minutes. In contrast, if you look at the (ME)CFS patients, blood flow goes up and it does <u>not</u> go down -- you get enhanced vasodilation".

"If you then say, OK, the problem is that the blood vessels are too open, let's constrict them, you run into other problems. The drugs that do vasoconstrict cause other problems, for example, beta blockers enhance fatigue".

"OK, this is a vascular abnormality, but a lot of people think ME/CFS is an inflammatory disease – how does this link with this? I'd like to mention free radicals. They cause essentially the same problem as rusting. Free radicals are good in that they kill bacteria and get rid of foreign bodies and help break them down <u>but</u> they can also be responsible for too much inflammation and cause vascular disease, both directly and indirectly –

directly, because they rust the blood cells and blood vessels, and indirectly, through a series of chemical reactions".

"All the cells have a membrane and you have a cascade down this pathway that leads to the production of prostacycline, which is a vasodilator chemical, and free radicals promote this response. Free radicals also produce isoprostanes, which are oxidised lipids – rusting lipids, which are fats – cholesterol –(and) if you oxidise that lipid -- rust it with the free radicals – this lipid core is taken into the blood vessels and forms a plaque of atheroma because of the ingress of oxidised lipids".

"Again, our (ME)CFS patients had very much higher levels of this inflammatory oxidised chemical".

"What we have here is an abnormality but it doesn't translate directly into treatment, but we're an awful lot further on than we were five years ago".

"One of the key figures of oxidative stress is exercise, and this is one of the main problems experienced by our patients – post-exertional fatigue".

Professor Belch showed overhead slides of a normal group of subjects who had their oxidised lipids measured and then went on a treadmill, and the readings went up, which happens to everybody – they start low and they go high. She then compared that group with the ME/CFS group, and showed that patients start high, in fact they start above the levels of normals who exercise, and they go even higher, so what is happening is that ME/CFS patients' levels of isoprostanes – this inflammatory chemical – are actually at the level of post exercise in normal controls, "*so no wonder they feel unwell".*

"Here's another interesting finding – and this is that the level of this oxidised lipid correlates with post-exertional myalgia --- the higher the level of this chemical, the worse the myalgia".

"*So what about other markers of inflammation? Are they up? There were a lot of reports in the early literature about inflammatory markers, but we're very lucky now, because we've very high sensitivity tests (hsCRP) – now that our tests are sensitive enough, we're finding genuine abnormalities within this population that you couldn't find with low sensitivity assays five or ten years ago".*

"So far, then, we've got the enhanced vasodilator response; we've got inflammation because of oxidative stress and CRP. Where does that take us? It actually takes us full circle. Our interest in the vascular diseases research unit is atherosclerosis – hardening of the arteries – and it's very interesting that this is also a vascular and inflammatory disease".

Professor Belch talked about cardiovascular events, saying *"chronic inflammation is not good for your blood vessels".*

She then moved on to apoptosis (programmed cell death) and said "*patients with ME/CFS have increased white cell apoptosis, so there is very definitely inflammation on-going, which we can now measure, and which is helping to go some way in allowing us to designate this disorder as truly physical".*

"Some of these patients with longer term (ME)CFS may be at increased risk of cardiovascular disorders".

Professor Belch then thanked Vance Spence, saying everyone knows Vance, but "*what you may not know is that I actually left Glasgow – which of course is fairly heinous for a Glaswegian -- because I wanted to work with Vance Spence. He has one of the most excellent minds I've ever known, and it's been thanks to him that he has pushed and pulled us into ME/CFS research, and I would like to acknowledge this here".*

It should be noted that at the same time as Professor Belch was presenting evidence of chronic inflammation in ME/CFS and that Dr Purdie was promoting training and education about ME/CFS for clinicians, the Wessely School was once again claiming it as a mental disorder and were promoting their dogma that it is a *"classical psychosomatic disorder where response to social threat is expressed somatically (and) in which aberrant emotional processing is the maintaining factor"* (see below).

Presentation by Dr Faisel Khan: Arterial Stiffness and ME/CFS

Dr Khan is a Clinical Scientist and Senior Lecturer in the Department of Medicine at Dundee. He is a Vascular Medicine Specialist with a particular interest in blood vessel activity in patients with vascular disease.

Dr Khan began by explaining that acetylcholine is a very good marker of endothelial function. He said that what you'd expect is that in conditions where there is increased cardiovascular risk and associated inflammation and increased oxidative stress that there would be endothelial damage.

"ME/CFS is a pro-oxidant and a pro-inflammatory state and it's important to look for other potential markers of vascular function. One such good marker is arterial stiffness, which describes the mechanistic properties of the arterial wall".

Dr Khan then explained the importance of arterial stiffness: *"As the heart contracts, a pressure wave travels down the aorta. When it comes into contact with the bifurcations, the wave is reflected, and all the reflected waves ultimately summate to produce a reflected wave, which in a normal healthy person would appear late in the systolic portion of the cardiac cycle".*

"There's a very important consequence of this reflected wave – during this phase of the cardiac cycle, we have most of the perfusion to the myocardium, and therefore the pressure of this reflected wave ensures an adequate coronary artery perfusion. The

speed at which the wave travels out and back is determined by how stiff the arteries are, so in someone who has stiffer arteries, the wave is going to appear earlier in systole".

Dr Khan showed slides comparing the significant differences between normals and those with ME/CFS.

"*There are three important implications of this earlier reflected wave -- the first is that we increase the systolic pressure of the person and we increase the pulse pressure, which are both risk factors for stroke. Secondly, by definition, the area under the systolic portion of the pressure wave is a measure of the left ventricular load and therefore by increasing this portion of it, we're increasing the work that the heart has to do, which can lead to left ventricular hypertrophy. Thirdly, there is a decrease in the aortic pressure during the diastolic phase, which means there is a reduction in the coronary artery perfusion pressure".*

" So we can see why arterial stiffness is indeed a very important measure of vascular function".

"We also know now that the changes in arterial stiffness can occur very early in the course of the development and progression of cardiovascular disease and there are many studies now that show that arterial stiffness is a good, independent predictor of future cardiovascular events such as heart attack and stroke. The higher the arterial stiffness, the more likelihood there is that you might suffer from a cardiovascular event".
"To date, as far as we are aware, there's only been one study that has looked at arterial stiffness in ME/CFS – this is a study in 12 to 18 year olds, which implicated arterial stiffness".

Dr Khan then described the team's interest in determining whether adults with ME/CFS have increased arterial stiffness, and went on to discuss his methodology and data of their own study, in which all patients met the 1994 CDC criteria and the technique was non-invasive.

"*The particular measure we are interested in is something called the augmentation index, which is the amount of augmented pressure due to the increase in the reflected wave as a percentage of pulse pressure, and because the augmentation index is influenced by heart rate, we normalised all our measurements to a heart rate of 75 beats per minute".*

ME/CFS patients were heavier and had a greater body mass index (BMI) and had higher blood pressure and a high heart rate, all of which could potentially affect the augmentation index, "*and indeed, when we looked at the augmentation index, we found that there was a significantly higher value in patients with ME/CFS, and when we corrected for the heart rate, we see that the difference is even more pronounced".*

"Our measure of augmentation significantly correlated with increased blood pressure, increased CRP (C-reactive protein, a marker of inflammation) and increased oxidative stress".

"We can see that the inflammatory process is having a major impact on arterial stiffness".

"In conclusion, what we have found is that there is indeed an increased arterial stiffness, which is a good marker of cardiovascular risk, and that the increased arterial stiffness is associated with increased levels of inflammation".

Dr Khan said that their future work would include looking at the elasticity of the tissues.

Presentation by Dr Gwen Kennedy: Overview of a Study of Inflammatory Markers in Children

Dr Kennedy is a post-doctoral Fellow in the Department at Dundee, specialising in research into inflammatory and autoimmune diseases.

"As you've just heard from Jill and Faisel, we believe that ME/CFS may be a chronic inflammatory disorder, resulting in an unusual combination of blood sensitivity to acetylcholine, with a significant risk for cardiovascular events".

"The vascular system of children should be less affected by environmental changes that are likely to exist in adults. One group have shown increased arterial stiffness in children with ME/CFS, so it's important to know if they have a genuine cardiovascular risk".

Dr Kennedy described their methods and data, which are not yet fully entered into the study, and went on to the describe the clinical findings: the heart rate was significantly higher in ME/CFS children; 40% of children said their illness came on over weeks, not over days; the duration was from six months to ten years; one child was six years of age when he became unwell, but the average age was 11.5 years; an unknown viral infection was noted as the most common initiating cause of ME/CFS; only one child attended school full time; eight had home tuition and four were too unwell to have any schooling of any sort.

On the Child Health Questionnaire scores (on which the higher the score, the better the health functioning), ME/CFS children had particularly low scores, especially in the physical health and bodily pain areas, but things like family cohesion were no different from normals.

This shows that although the illness affects family activities, it does not affect the family's ability to work together as a unit.
"To summarise: 96% of children had schooling affected by their illness; the majority of children with ME/CFS report a viral infection as the initiating factor; more than half self-reported having been very active in sports and outdoor activities before becoming ill;

both the physical and psychosocial well-being in children with ME/CFS have low scores, indicating poorer health and well-being".

In the Question and Answer session to the three members of the Vascular Diseases Unit, Dr Ellie Stein raised the issue of the apparent dichotomy between raised and low blood pressure seen in ME/CFS, and Professor Belch replied: *"That's absolutely right – they do clinically have a lot lower blood pressure and indeed that makes them susceptible to things like Raynaud's and microvascular spasm, because the blood pressure is very low but if you look at what has been measured, you can have a low blood pressure but you can still have a wider pulse pressure. Really, what we're saying is that not only are the findings slightly different depending on whether they are the regulatory blood vessels in the skin or in the arteries, but even the arteries themselves may be different, and the results are fairly consistent. I think it would be fair to say that these patients have low blood pressure, both systolic and diastolic, in the arm, but what we don't know is what's happening in the aorta, and most importantly, in the coronary arteries which are supplied from the aorta".*

In response to another question from the floor, Professor Belch replied: "*In some patients there is increased vascular tone, so there is vasoconstriction, and patients do get cold hands, so there are people who respond to calcium blockers, but only about 12 – 15% get some benefit --- it's all down to classification".*

In response to a question about cerebral perfusion, Professor Belch replied: *"There are PET CT and other most exciting neuro-imaging techniques that are now coming on board and already these are showing definitive abnormalities in ME/CFS, so it's a hugely exciting area, but not one that our group particularly focuses on -- it will make huge advances in this area".*

Finally, Professor Belch said: "*We now are beginning to get stories that fit together for the first time, so these discoveries are not in isolation but they actually make sense as a whole, and I think that often happens just before you get to the stage of breakthrough therapy".*

Presentation by Joan Crawford: Attitudes to ME/CFS among healthcare professionals: a survey and literature review

Ms Crawford is a chemical engineer who is undertaking a Master's degree on the differences in attitude of healthcare staff to those with ME/CFS compared with those with multiple sclerosis and rheumatoid arthritis.

Ms Crawford began by explaining her own interest in ME/CFS and noted that in the last seven years, there had been six surveys on the attitude of primary care physicians towards those with ME/CFS, and that there is a fair bit of anecdotal evidence that sometimes nurses' attitudes are not at their best, particularly in Accident and Emergency departments: *"We find a pretty corrosive attitude (amongst) healthcare people".*

Ms Crawford looked at the surveys of GPs' attitudes, mentioning that in the Bowen et al study of 2005, 28% of UK general practitioners did not recognise ME/CFS as a clinical entity on a sample of more than 1,000 GPs. She commented that a negative attitude by GPs can have profound implications.

She mentioned the 2005 study of Thompson and Smith, which stated that the level of specialist knowledge of ME/CFS in primary care remains low, and that only half of the respondents believed ME/CFS exists. There are huge numbers of medical doctors in primary care who have no understanding of the implications of this illness, and are quite dismissive towards such patients.

In the Raine et al study of 2004, Ms Crawford noted the finding that "*GPs tend to stereotype ME/CFS patients as having certain undesirable traits"*.

She looked at an Australian study carried out in 2000 (Stevens et al) on over 2,000 doctors: *"31% did not believe that ME/CFS was a distinct syndrome, which is just under one third, which is quite extraordinary, and 34% stated that ME/CFS 'is a convenient diagnosis that enables patients to avoid their psychological problems' "*.

"The Canadian criteria are there and are available, but I don't think that many doctors, particularly in general practice who don't have a great deal of interest in (ME/CFS) will (have these criteria) brought to their attention, unfortunately. The diagnostic criteria are there and are published – it's a case of awareness".

Ms Crawford said that many GPs viewed ME/CFS patients in moralising terms – they were ambitious, or illness-focusing, or demanding, or medicalising: *"The stereotypical ME patient is still very much alive and well in primary care"*.

Looking at the quality of life and sickness impact profiles, in reality it is often lower in ME/CFS than in MS and RA, and ME/CFS is often more disabling.

"Summary of main results: there is a significant difference in the overall attitude towards those with ME/CFS compared with those with MS and RA. ME/CFS was seen as being psychological in aetiology compared with MS – 100% of nurses had a positive attitude towards those with MS (but not towards those with ME/CFS). Nurses report that they are untrained in working with ME/CFS patients and they lack confidence in the nurse / patient encounter".

"There is a history in medicine of psychologising what we do not understand".

"ME/CFS is seen as far more trivial, when the reality in the literature is very different".

Keynote Lecture by Dr Jo Nijs: Chronic, widespread pain in people with ME/CFS: recent developments and therapeutic implications

Following the lunch break, Dr Jo Nijs, who teaches human physiology at the Vrije University, Brussels, and musculoskeletal physiotherapy at the University of Antwerp, gave an overview of chronic widespread pain in people with ME/CFS.

He said that the self-management of pacing and pain neurophysiology education are part of the treatment package for musculoskeletal pain in ME/CFS.

Presentation by Mark Robinson: Response of plasma cytokine IL-6 and its receptors to exercise in ME/CFS

Mark Robinson works with Professor Myra Nimmo in the Department of Applied Physiology, University of Strathclyde. He described a pilot study, not yet published, looking at the cytokine interleukin 6 (IL-6) during a standard exercise test in ME/CFS patients.

"The physiological role of IL-6 has classically been studied in the context of the immune response, since it is able to exert both pro and anti-inflammatory activities. More recently, IL-6 has been of keen interest to exercise physiologists, with the observation that, even without skeletal muscle damage, plasma levels of this cytokine increase dramatically. In 2000 (researchers) demonstrated that the source of this increased IL-6 can almost exclusively be attributed to the working of skeletal muscle, where it is both produced and subsequently released".

"Exercise-induced IL-6 in the muscle acts in a hormone-like manner, helping to maintain the fuel homeostasis during exercise and when skeletal muscle glycogen levels become depleted".

"IL-6 can be considered an energy sensor".
"Very importantly, there were no differences in the time to exhaustion between the groups (controls and ME/CFS patients), which gives us a good indication that the metabolic strain on the different groups was well-matched".

"The main finding of the study was a clear trend towards a lower resting level of the soluble IL-6 receptor in ME/CFS patients".

Robinson pointed out that whilst it would be advantageous to repeat the study with more patients, they could not ethically justify exposing more ME/CFS patients to the often severe consequences of the exercise bouts involved in the study.

He also pointed out that they had obtained a result showing a clear distinction between ME/CFS patients and patients with fibromyalgia, which could potentially serve as a biomarker helping to differentiate between these two conditions.

Presentation by Rebecca Marshall: Studies of Pain and Activity in ME/CFS

Rebecca Marshall is a PhD student with Dr Lorna Paul at the School of Health, Glasgow Caledonian University.

Introducing her, Dr Vance Spence said *"Pain is a very dominant symptom and very disabling"*.

Rebecca Marshall talked about her cross-sectional study of 50 participants and said the problem of pain in ME/CFS is *"a chronic, widespread problem"*. The different types of pain were mentioned, as well as the quality, intensity and location of the pain. The most painful symptom was said to be muscle pain, which impaired cognitive function.

Since little support is available on the NHS and because the pain is so intrusive, ME/CFS patients have been driven to try over 20 treatments in their pursuit of pain relief. An overwhelming number of patients are paying for pain relief out of their own pockets.

Out of 50 patients only 12 people in the study had tried graded exercise therapy, and of those, 11 reported that it made their symptoms worse.

The conclusion was that people with ME/CFS are seeking a variety of treatments to help manage their pain.

The study is expected to provide objective data to support clinical reports of the problem of pain in ME/CFS.

Keynote Lecture by Professor Nancy Klimas: The Immunology of ME/CFS

Nancy Klimas, Professor of Medicine & Immunology at the University of Miami and world-renowned expert on the immunology of ME/CFS, delivered an excellent and compelling keynote lecture. She said there is a real genetic component in ME/CFS (HLA-DR, which predisposes to autoimmune illness). She stressed the findings of an Australian study which found that the severity of the initial infection is the single predictor of perpetuation of ME/CFS and that there is no psychological component in its perpetuation.

Professor Klimas explained the imbalance seen in ME/CFS between Type I and Type II cytokines: in ME/CFS they see a lot of Type II cytokine expression, which means there is an inhibition of Type I expression, which in turn triggers the inflammatory cascade of tumour necrosis factor (TNF), IL-6 and IL-1. This is important, because Type I cytokines are needed for the function of cytolytic T cells and NK cells and are part of the whole immune mechanism, which is being inhibited in ME/CFS.

She pointed out that what has been seen over many years of research by many different groups is (quote) *"a LOT of evidence of this chronic immune activation, looking at*

expression of activation markers on the cells, looking at cytokine levels, looking at cytokine expression. The consequence, or may be a part of this, is a lot of functional abnormalities of cytotoxic T cells and NK cells, macrophage abnormalities, antibody production abnormalities and neutrophil abnormalities. NK cell function is very poor—NK cells should kill in a certain unit of time: in normals this is 30-40% in four hours, but in ME/CFS it is half of that".

Professor Klimas said the most important thing that has come out of her group recently is the discovery of very low perforin (which she described as "*the killing stuff of the cell"*). She said that very low perforin levels in the cytotoxic T cell matters, because the anti-viral defence is impaired. In ME/CFS the perforin is half what it should be.

She emphasised that in addition to poor cell function, the cells are very activated and very stimulated, and there are consequences of an activated cell – what is seen is not only "*this big immune activation, but apoptosis – a lot of cell death"*, resulting in a constant drive to make more cells, especially neutrophils and lymphocytes. Thus there is "*a constant drive to keep the system in overdrive in trying to keep up with cell loss"*.

Her group has also seen a CD26 cell receptor in ME/CFS – this is seen in an activated cell, and the number of cells expressing this receptor is elevated, even though there are fewer molecules per cell. This matters, because the number of these activated receptors on the cell determines the function of that cell (which cannot "*activate up"* the function).

Professor Klimas summarised all this as (i) an over-activated system; (ii) a system that is not functional and (iii) what she described as "*the stuff of the cell – the thing you need to make the cell function well – being under-produced"*.

She then spoke about neuropeptide Y, which is a very important neuropeptide of interest to the vascular biologists' findings in ME/CFS. It has a large number of regulatory functions, including the immune system and the autonomic system. It is a biomarker. They looked at more than 100 patients and found a significant difference between ME/CFS patients and controls. Klimas said this is important.

She went on to speak about clinical correlates: they had found that people who had low cognitive difficulties had good T cell function but people who had very high cognitive difficulties had the poorest T cell function, so there is a definite clinical correlate. This correlate has also been shown with NK cells, and once again Klimas emphasised that this immune connection matters.

She discussed the fact that genomics have put some focus on the HPA axis dysregulation and said that IL-6 is associated with the intensity of that dysregulation.

(Note that Trudie Chalder of the Wessely School claims "*CBT does normalise the HPA axis*" – see below).

She mentioned the role of infection, saying she herself had needed to be convinced about the role of viruses and it was the work of Dr Peterson that had convinced her. Peterson had shown transmissible living virus in spinal fluid cultures of ME/CFS patients (which definitely should not be there): *"You should not be able to culture anything out of anybody's spinal fluid in the way of a virus or bacteria or anything – it's not OK. That was impressive"*.

Klimas went on to talk about enteroviruses in ME/CFS: "*Enteroviruses keep reappearing – they keep coming back (into the picture). Most recently at our conference in January (the IACFS/ME conference in Florida), Dr Chia from Los Angeles had looked at more than 100 intestinal biopsies (and showed) slide and slide after slide with enteroviruses – it was phenomenal"*. Klimas said that people had previously looked at enteroviruses in muscle, but *"looking at the intestine was a place no-one had ever looked before, and yet the intestine is, beyond the skin, the second biggest immune system component you have, and a tremendous place to have a lot of antigen exposure and a good reason to have chronic immune activation"*.
Klimas said *"there's some very good data now*" showing that *"you don't need a whole virus – all you need to do is to activate a cell that has the virus in it and if that cell makes the stuff that the virus lent to it in its DNA"*, then it is the case that all that is needed is "*viral pieces*". This might have important implications not just for ME/CFS but in oncology as well. Klimas said "*This turns Koch's postulate on its head and changes the way we see things"*. (Koch's postulates are a set of criteria to be obeyed before it is established that a particular organism causes a particular disease).

Klimas also mentioned the work of Dr Martin Lerner, who had done cardiac biopsies and had shown viruses to be present in the heart of ME/CFS patients. She said Lerner's work had not received the support it deserved. She discussed the ME/CFS work of Dr Montoya, a senior infectious diseases specialist at Stanford.

She then pointed out that the genomics work is very exciting as applied to immunology and virology, as it replicates the immune data by a completely different method.

Klimas mentioned outstanding work from ME/CFS specialists in Spain and Japan, as well as that of Dr Jonathan Kerr from the UK.

Professor Klimas had begun her lecture by saying: "*People are finding things that fit. This all makes sense. It's a very exciting time because the puzzle we've talked about all these years is really fleshing out into a real picture"*.

She concluded by conveying her own excitement and enthusiasm, saying that due to new techniques that were not available even five years ago, "*there's been tremendous progress*" and that both patients and investigators should be heartened.

Keynote Lecture by Dr Ellie Stein: Behavioural Interventions in ME/CFS: What a difference a decade makes

Dr Stein began by saying she was a psychiatrist with a dedicated ME/CFS practice (in Calgary, Canada). She immediately referred to "*the charged political atmosphere in the UK"*. She stated that ME/CFS is a chronic condition and that it is very clear that it has "*a host of physiological abnormalities that cannot be explained by psychiatric, attitudinal or behavioural hypotheses"*. She stated from the outset that behavioural interventions "*are unlikely to be curative"* but may be extremely helpful in helping people to cope better with any chronic illness.

Stein stated that the UK strategy about graded exercise therapy (GET), which she described as "*no pain, no gain"*, is wrong.

She said that in the early 1990s there had been emphasis on the "*psychological, not the biological"* and that this transition "*informed about a decade of research, especially in the UK. Early UK models were based on the belief that acute illness behaviour – avoidance of activity, elevated autonomic arousal – were causing or perpetuating ME/CFS. Therefore it follows that if you have that causal hypothesis, you have to adjust those variables in order to get people better. It's never been overtly stated, but it's clear that the 'bio' of the biopsychosocial model is somehow forgotten in those early UK papers"*.

Stein strongly denounced the UK Oxford (Wessely School) criteria, which she said "*could describe almost anybody. I do not believe that studies which use the Oxford criteria can be generalised to patients which most of us in this room would consider to have ME/CFS"*.

Stein then discussed the seven random controlled trials (RCTs) that exist of CBT in ME/CFS and expertly demolished them. She said that out of those seven RCTs, two had used the Oxford criteria; two further studies had negative results "*meaning that it didn't work*"; one of the studies supposedly used the Fukuda criteria but "*if you actually read the paper, it actually used the British criteria"*. Stein said there is one study with good methodology, but it was on adolescents. There is one more RCT (the O'Dowd study) which had very detailed methodology, and it is clear that the CBT used in that study *"looks nothing like the Sharpe and Wessely CBT of the 1990s – it's an entirely different animal"*.

Stein said it's clear " *that CBT has actually changed and evolved over the last 15 years, and current studies look little like the studies of the early 1990s"*.

Stein mentioned that there are a couple of non-randomised studies which claim CBT improved cognitive function. She noted that previous studies of CBT never looked at objective measures and that no-one has looked at other symptoms apart from how the patient feels (ie. subjective outcomes) and she noted that when measured objectively, CBT delivered no statistical change.

Moving on to graded exercise therapy (GET), Stein said there are four RCTs of GET in the 2004 Cochrane Review. Two used the Fukuda criteria and initially, both had positive results, but after 24 weeks there were no benefits at all. Another study had no control group, and its conclusion was that "*exercise capacity should not be used as an outcome criterion – the reason is because they could not find any change*". The final study (a Belgian study written in French) was not a controlled study but is notable because it was so big – 951 subjects received treatment, but the diagnosis and treatments differed between the five participating centres. The study's conclusion was that "*the results are less robust than expected and it was noted that complete recovery was never recorded*". Further, "*there was no objective improvement on the exercise test, which was the only objective measure used. They measured work hours prior and post, and there was no increase; the number of work hours actually decreased*".

Stein then addressed the self-management model and said it is being widely used round the world for all kinds of chronic conditions. This is a very different model from the early CBT used in ME/CFS: instead of telling patients that they don't have an illness, the model actually tries to educate people about their illness and encourages patients to note their symptoms -- and things that influence those symptoms -- so that patients can take control over their own health: "*patient empowerment is the key to this model*".

When speaking about the Stanford model of behavioural intervention *(of which the Wessely School is much in favour – see* http://www.meactionuk.org.uk/Proof_Positive.htm*)* Stein said that where life-style is not directly influencing health, the benefits of the Stanford model are less clear than in diseases where life-style is a significant factor. There was a recent Editorial in the Medical Journal of Australia that argued persuasively that the results of the Stanford model of CBT are not as good as had been hoped, and this did not relate to ME/CFS but to disease in general.

Stein made clear her views on the MRC PACE trial that is using the British (Wessely School) criteria, saying "*It's quite hard to watch millions of pounds being spent on a study that will tell us nothing*". This statement was greeted with spontaneous applause from both the audience and other speakers on the platform.

Stein summarised her lecture thus:

- "*most research has ignored symptoms other than fatigue, so we really don't know if behavioural interventions help things like swollen lymph nodes, fever, IBS, dizziness etc*"
- "*there is no evidence so far that behavioural interventions change objective, measurable things, but so far, the results have been negative*"
- "*we need research and we have to know what we're treating; unless we have research that allows us to clearly understand the pathophysiology of the illness, treatments are going to have disappointing results*"

- *"we need to educate professionals – only one out of 18 Canadian medical schools teaches anything about ME/CFS"*. Stein said she had offered her services in medical education but her offers had not been taken up
- *"unless doctors – who are the gate-keepers of the medical system – first acknowledge that ME/CFS exists and second, have a basic understanding, the average patient is not going to get better"*
- *"we <u>have</u> to sub-group: if we lump everybody together, we'll never learn <u>anything</u>, and in 20 years we'll still be in the same fuzzy mess that we were in 5 years ago"*
- *"we need to remember that everyone (with ME/CFS) has to be treated individually"*
- *"we need integrated research that includes biochemistry, environmental exposures etc"*.

In the Question & Answer session that followed her presentation, Dr Stein was outspoken: *"I would <u>never</u> in my practice use the Wessely model of cognitive therapy – I find it disrespectful to try to convince somebody they don't have an illness that they clearly have"*. Once again, this was greeted with applause.

Professor Klimas was still on the platform and was sitting next to Dr Stein; she obviously agreed with Dr Stein and at this point Professor Klimas said: *"To dismiss people as not being real – that's just <u>rude</u>"*.

In response to another question from the floor, Professor Klimas said *"What subgroup do people fit in? What we're down to now is looking for the biological markers that put people in the proper group to give us targeted treatment approaches that make sense for that individual –certainly that's the way, thank goodness, the field is finally moving"*. (It must be stressed that this is in direct contrast to the Wessely School, who are intent on lumping together <u>all</u> states of medically unexplained "fatigue" and rolling out CBT across the board of "fatigue").

From the audience, Professor Malcolm Hooper asked Professor Klimas (and the panel) for their views on finding international agreement on a definition of ME/CFS and asked if the Canadian criteria should be adopted internationally. Professor Klimas said she had been involved in the production of the Canadian criteria: *"the Canadian definition was developed as a <u>clinical</u> case definition versus a research case definition and it was in part intended to be both a <u>teaching</u> tool and as a <u>clinical</u> tool, so it broke its criteria into autonomic, inflammatory and endocrine symptoms, which I love – I think its just a phenomenal concept and I would love to see the '94 case definition come back together again now with empiric data. There's a problem with that – the CDC recently did a study that <u>broadened</u> rather than <u>tightened</u> (the definition) and when they did so, it <u>tripled</u> the population of patients with CFS, and so there's a real dilemma that it might have umbrella-ed a much larger group. I would be really nervous to bring <u>anyone</u> together right now for fear something really bad might happen. Using the Canadian case definition as a <u>research</u> case definition has some real possibilities if people who are using <u>both</u> would just publish the data comparing the groups, and then we would have*

empiric data that allowed us to redefine the case definition using this new criteria and make it a data-driven process". (Once again, this is in direct contrast to the Wessely School, who are intent in lumping together all states of what they deem to be unexplained, on-going "fatigue").

That was the last question from the floor, and Dr Vance Spence, Chairman of MERUK, then wound up the conference proceedings.

The MERUK Edinburgh conference adds in a very significant way to the substantial body of existing biomedical knowledge about ME/CFS.

The Beliefs of the Wessely School about "CFS/ME"

It has been noted that, following previous international research conferences on ME/CFS over the last 20 years at which biomedical data has been presented, Simon Wessely may adjust his language but not his beliefs or practice.

It is accepted that conference proceedings (known as the "grey" literature) may take time to enter mainstream medical consciousness, but since internet access became commonplace for patients and professionals alike, there can be little excuse for the Wessely School to continue to deny that evidence and to continue promoting their own beliefs that only minimal screening should be carried out on people with ME/CFS, that no biomedical research is necessary into the disorder, and that the only management regime should be CBT and compulsory graded exercise, especially given that there is a body of scientific evidence that demonstrates exercise may well result in permanent relapse for those with ME/CFS.

On the very day of the ME Research UK (MERUK) International Research Conference (25th May 2007) in Edinburgh (which not a single member of the Wessely School attended), Wessely School devotee Trudie Chalder, a former mental nurse who is now Professor of Cognitive Behavioural Psychotherapy at Kings College in London, delivered a lecture at St Olav Hospital, Trondheim, Norway, on Cognitive Behavioural Treatment for CFS, which she extolled. As customary, Miss Chalder's views remain uninfluenced by the biomedical evidence that shows her beliefs to be seriously misinformed.

It is worthwhile comparing the keynote lecture (above) given by Dr Stein (a psychiatrist of international acclaim and expertise in ME/CFS) with the views of Professor Trudie Chalder.

In the Elsevier journal PSYCHIATRY: 1st February 2006: vol 5: issue 2, pp 48-51, in the section entitled "Chronic fatigue syndrome" (which comes under "Disorders with Somatic Presentation"), Trudie Chalder and Tess Browne from the Institute of Psychiatry focus on "*Dysfunctional assumptions of the CFS patient"* and state categorically:

- *"CFS is generally considered as a syndrome of somatic symptoms"*

- *"The current international consensus favours the term CFS. Some patients, however, still prefer the term ME, probably because it implies the condition has a biological cause"*
- *"Previous psychological illness and lack of physical exercise may be risk factors for the development of the illness"*
- *"Many patients diagnosed with CFS also meet the criteria for common psychiatric disorders, particularly depression"*
- *"Diagnosis depends on whether the symptoms are interpreted as medical or psychological, the preference depending on the clinician"*
- *"This 'boom and bust' pattern worsens the symptoms, further reinforcing their belief that they have a serious illness"*
- *"Eventually, patients become increasingly preoccupied with their symptoms and illness, intensifying the experience and frequency of symptoms. Unhelpful illness beliefs and fear about symptoms further influence disability. For some, the belief that they have an on-going incurable illness results in chronic disability"*
- *"An alternative means of understanding CFS is the de-conditioning paradigm"*
- *"Cognitive strategies help combat unhelpful beliefs and assumptions that may be disturbing the rehabilitation process"*
- *"An objective of this treatment (CBT) is to establish a consistent level of activity everyday regardless of symptoms"*
- *"Predictors of poor response to CBT include focusing on physical symptoms"*
- *"RCTs evaluating GET have found that it has a positive effect on capacity for practical work"*
- *"Membership of a self-help group (and) receiving sickness benefit at the start of therapy are associated with poor response".*

It is noted that in Wessely's 2003/4 study funded by the MRC ("Patient perspectives on treatments and research priorities for chronic fatigue syndrome"), subjects who were members of a self-help group were excluded from Group 2.

The principal research questions were (a) "What are the views of patients with ME/CFS with regard to research priorities?" and (b) "What is the experience of those taking part in the MRC trial into different treatment options for CFS/ME?". Since participants who were current members of a "CFS/ME" self-help group were excluded from Group 2, it may be queried if this group was naïve about ME/CFS politics; if so, this could potentially facilitate an outcome that would show there is no call by patients for biomedical research into ME/CFS.

Exactly how such a study might advance medical research into the pathophysiology of ME/CFS, and how it meets the allegedly rigorously high standard that the MRC claims is essential for research proposals to be accepted, and how it justifies the generous grant of public funds (£47,000) remains to be determined.

No amount of evidence showing how wrong they are about ME/CFS seems to cross the Wessely School radar.

In the textbook "Biopsychosocial Medicine" edited by psychiatrist Peter White of St Bartholomew's Hospital, London (OUP: 2005), White reports a discussion between Simon Wessely and Brain Marien (a CBT psychotherapist formerly of the IoP who now works as an Associate Specialist in the Department of Psychological Medicine at St Bartholomew's Hospital, London and is Clinical Lead of an Occupational Health Service for West Sussex GPs that is funded by the Sussex Primary Care Trust. He is involved in a multi-centre study into the treatment of CFS. He organises and runs educational courses for doctors and professionals allied to medicine on CBT for chronic fatigue).

Wessely: *"In the field we work in, the alternative views on CFS are unbelievably reductionist. There is a group of people who consult alternative practitioners because they want the most biological explanations. They see (things) in a political framework: it's all the fault of governments and industry".*

Marien: *"Isn't that because they can't have a medical label?"*

MRC-funded research

From the National Research Register (NRR), it is clear that much of the UK research into ME/CFS has been undertaken by investigators with affiliation to Psychiatry, Psychological Medicine and Mental Health, and none of the 139 studies was conducted on the most severely ill patients.

Out of a current investment of £3,180,900.00, the MRC is funding no biomedical research into ME/CFS despite having received a range of applications from established researchers.

The influence of the Wessely School on ME/CFS patients' charities

The dissemination of misinformation by Wessely School psychiatrists and their influence on the (mis)perception of ME/CFS are unparalleled.

In 2002, even the UK ME Association itself published the following: *"These problems are not unique to CFS. There are a number of these so-called functional syndromes. Arguments still continue as to their psychological, physical or hysterical origin"* (MEA Research & Scientific Bulletin: 2002: 9: page 4). For an ME charity to have behaved in this way is a matter of concern, given that in the Charities and Public Service Delivery Booklet (CC37), it states that the following legal rules apply to all charities but are particularly relevant to charities delivering public services: *"trustees must act only in the interests of the charity and its beneficiaries"*

For the ME Association even to entertain, let alone publish, the notion that ME/CFS might be of "hysterical origin" would seem to contravene the Charities Commission legal requirements.

The Charities Commission Booklet (CC37) also states: *"charities must be independent of government and other funders"*.

The acceptance by the charity Action for ME of a Section 64 financial grant from Government – apparently in return for co-operating with the psychiatric lobby -- seems blatantly to disregard the Charities Commission rules. AfME has also received numerous grants from the Scottish Executive.

As AfME remains a registered charity (charity number 1036419), is it breaching charity law by accepting what seems from its accounts to be a major source of its income from Government?

If so, who is taking any notice of these apparent breaches of the law and who is protecting the vulnerable patients who trust AfME to look after their best interests?
The Centre for Policy Studies seems to be taking notice. In a Report published in 2006 ("Charity: the spectre of over-regulation and state dependency" by Richard Smith and Philip Whittington) the Centre for Policy Studies expresses concern about State funding of charities: *"As the charitable sector becomes more dependent on the State, there is a danger that the voluntary nature of the sector could be irretrievably undermined"*.

The Report notes that in three of the last four occasions when the Public Accounts Committee has examined the work of the Charity Commission, it has found *"severe shortcomings"* in the Commission's work. The Report calls for an end to the direct financial link between those charities providing a public service and the State. It seems that the Charity Commission has no teeth.

This concern was reflected in an article in Charity Times on 10th August 2006 ("State funding puts charities' independence at risk") which said:

- *"State funding for charities has outstripped public donations"*
- *"For larger charities, the State is now the most important paymaster"*
- *"The independence of charities is being put at risk"*.

From this, it seems that, by funding certain charities, it is Government that assumes and exerts control over them, and this now includes the charity Action for ME, which may explain why AfME (whose Principal Medical Adviser is Professor Tony Pinching, who is the lead clinical adviser on "CFS/ME" for the Department of Health and who was Chairman of the Investment Steering Group that devised the process and criteria for setting up the Government CFS Centres) is now collaborating with the psychiatric lobby and supporting the MRC PACE trials and the Centres that deliver only CBT and GET.

The influence of the Wessely School on NICE (National Institute for Health and Clinical Excellence)

Even though the NICE Guideline on "CFS/ME" is not due to be published until August 2007, the charities Action for ME (AfME) and AYME (Association of Young People with ME), in collaboration with the National Network for CFS/ME Therapists and the National NHS Collaboration (which grew from the national meetings of the Government Clinical Network and Coordinating Centres for CFS) are presenting a conference on 4th - 5th October 2007 in Milton Keynes. The programme was developed in collaboration with AfME and AYME. The title of the one of the 4th October afternoon workshops is "Implementation of the NICE Guidelines".

Speakers include mental health professionals Professor Trudie Chalder (who in an email about this conference wrote: *"Can I clarify whether speakers have to pay registration fees and other expenses. In the past they have been waved" [sic])*; Vincent Deary (a mental nurse psychotherapist who specialises in CBT for CFS and who, with Trudie Chalder, has pioneered the use of CBT to treat children and adolescents with CFS; he is currently MRC Research Fellow at the University of Newcastle; he is also a member of the BABCP but would seem not to concur with the critique of CBT expressed in its March 2007 issue quoted above) who will speak on "Using CBT with adults"; Dr Brian Marien – see above -- will speak on "The evidence supporting an integrated mind-body explanatory model for CFS/ME and other currently medically unexplained symptoms". Another speaker is neuropsychiatrist Dr Hugh Rickards (clinical lead of the Birmingham CFS Centre). Consultant Paediatrician Dr Esther Crawley (Medical Adviser to the Association for Young People with ME [AYME] will speak on "Collecting data to understand CFS/ME". Dr Crawley is a member of the NICE Guideline Development Group and at the All Party Parliamentary Group on ME meeting on 22nd February 2007 at the House of Commons, she declined (or was unable) to answer whether or not NICE supports the WHO classification of ME/CFS as a neurological disorder but she did make it plain that NICE will still publish its Guideline on CFS/ME even if it is clear that patients' representatives still regard it as unfit for purpose. The Royal College of Paediatrics and Child Health Paediatric CFS/ME Special Interest Group will have its inaugural meeting at the conference, chaired by Dr Tim Chambers. The keynote speaker on 5th October will be Professor Gijs Bleijenberg, Head of the University of Nijmegen Expert Centre for Chronic Fatigue, Netherlands, who will speak on CBT for CFS.

Thus it seems a forgone conclusion that the NICE Guideline Development Group has continued to ignore the evidence submitted to it in its alleged consultation period and that the NICE recommendations remain as in the Draft Guideline (ie. CBT and GET as the management of choice for "CFS/ME").

The Wessely School Training Video for Physicians

Apart from relentlessly flooding the journals, another vehicle used by the Wessely School for the dissemination of their misinformation about ME/CFS is the Institute of Psychiatry's training video for doctors. It is called "Training Physicians in Mental Health Skills" and is described as a *"training package specially designed and created for GPs. It features some of the Institute of Psychiatry's top academics and other experts in the*

field of mental health". The video includes five different presentations *"that demonstrate skills GPs need to help patients with mental health problems"*. The package also includes *"a training manual, a set of introductory lecture slides, lecture notes and a set of role plays"*.

"The Management of Chronic Fatigue Syndrome" lasts 45 minutes and is presented by Professor Andre Tylee and Professor Trudie Chalder. In the section "The treatment of chronic fatigue ('ME') in primary care, it states: *"The package demonstrates how not to get into arguments with the patient and how to carry out a plan of treatment aimed at restoration of normal function*".

Professor Wessely's wife (Dr Claire Gerada, a senior adviser to the Department of Health) features in the video as the GP in some of the role-playing vignettes.

The video itself can still be viewed from http://webcasts.prous.com/Chronic_Fatigue/program.asp

The following extracts from the video illustrate just what the Wessely School is teaching GPs and other physicians about ME/CFS.

Vignette 1: Chronic Fatigue Syndrome: Introduction

Professor Andre Tylee: "Tiredness is a very common presenting syndrome in general practice. **It can be very frustrating working with patients with chronic fatigue syndrome particularly as you can get into arguments about their preset ideas. This video is going to help you to manage these patients".**

Discussion: Professor Andre Tylee and Professor Trudie Chalder

Professor Andre Tylee: "Dr Trudie Chalder is a specialist in chronic fatigue syndrome at the Institute of Psychiatry" (it does not seem to be mentioned that Dr Chalder is not medically qualified). "Right, so we've got these people that come to see us in general practice with tiredness. How do we then know whether its normal tiredness or they've got chronic fatigue syndrome?"

Professor Trudie Chalder: "Well, chronic fatigue syndrome is not that common, about 0.2 to 0.5 percent of the population fulfil the criteria for CFS, although I have to say it feels a lot more when you think about how many people we're seeing in our clinic".

Professor Andre Tylee: "What are the sort of key criteria, how would you make the diagnosis?"

Professor Trudie Chalder: "In order to fulfil the criteria it's an arbitrary cut off, but they have to have had a fifty percent reduction in activity levels over a six month period".

Professor Andre Tylee: "At this point we've found it useful to give you an opportunity for discussion. We would like you to stop the video and have a discussion amongst yourselves on what a GP should ask during the first consultation with a tired patient".

Vignette 2: Assessing a tired patient: Reconstruction of a typical GP consultation

GP: "In terms of having the time off work what do you think's actually stopping you from going to work, what's happening with you, is it that you just feel you can't…..?"

Patient: "When I'm feeling really bad, if I push myself too hard then it just knocks me out. I've talked to a couple of colleagues and to me, it sounds very like ME"

GP: "From what you've told me I think you may well be right. **It's what I would call chronic fatigue syndrome, which is essentially just another name for the same thing. It means the same thing to, you know, the medical profession".**

GP: "**What I can tell you that certainly in the past people have speculated about the link between viral infections and ME or CFS and there's no definite link between one and the other. If you did have a virus some time ago which you link with this .. em… your body would have cleared the virus by now."**

Patient: "It does feel like as if there's some kind of physiological damage".

GP: "Well, em, there is a treatment that can help and I can give you some advice about that so we can talk about that".

Discussion: Professor Andre Tylee and Professor Trudie Chalder

Professor Andre Tylee: "Trudie, what was the, em, GP doing there in that illustration we've just seen?"

Professor Trudie Chalder: "She was doing two or three things. The first thing was that she was finding out how the fatigue affects his everyday life. **She also wanted to find out what he feels caused it, because that may be important in terms of how well he'll engage with treatment".**

Professor Andre Tylee: "Now thinking about what she asked about his beliefs about it, is it important to sort of put somebody right if they believe it's due to a virus?"

Professor Trudie Chalder: "I mean I think it's important to incorporate that belief in a more sophisticated model of understanding the illness than you would share with the patient. *(sic)*. **The important thing from the GP's perspective is looking for depression and anxiety, and we know that up to 75% of people with CFS also fulfil the criteria for depression and anxiety".**

Professor Andre Tylee: "So in that case should the GP be treating people with anti-depressants?"

Professor Trudie Chalder: "If the diagnosis is primarily CFS then there is no evidence that anti-depressants work and I think that line of treatment would be unhelpful because it may actually alienate the patient".

Professor Andre Tylee: "**Right, now on that idea of alienation, this is something we often find in primary care you know, we're trying to tell this person that it's a psychological problem, they're trying to tell us it's a physical problem, how do we manage that?".**

Professor Andre Tylee: "Here is another chance for discussion. We would like you to stop the video and discuss how the GP can avoid arguments with the patient".

Discussion: Avoiding Arguments

Professor Trudie Chalder: "I think first of all avoiding the term 'psychological' because it's unhelpful. Usually patients think that you think it's all in their mind if you use the term 'psychological'. Other people think that there's something lurking in the cupboard as yet undiscovered that is creating the problem and of course that's I think in their mind a bit silly *(sic)*. Just think about the problem in terms of how physiological, cognitive and behavioural factors are working together**. I think the way the GP describes the similarities between CFS and ME was fine, and I think seemed to satisfy the patient well enough, em, in terms of explaining how what, em, the way in which you behave influences your symptoms".**

Vignette 3: (a follow-up) reconstruction of a typical consultation

GP: "Thanks for coming back. Now what I wanted to do today was to go over with you, em, how we're going to try and look at ways of helping you with your symptoms, em, which is essentially a practical approach and the reasoning behind this is to try and break down the worry you have about undertaking an activity, em, the idea is that if we can break that down by you working out some structured activity that you can undertake, you will actually start little by little to feel better, because what's actually happened is that you've got yourself caught up in a vicious circle so you know the more you do the worse you feel the less you feel like doing, so you rest, then obviously if you do rest and you don't use your muscles, you know that they don't like it if you start using them again. **What I'm saying is that, em, what you will need to do is undertake some of the activities that you know are likely to make you feel bad and accept that even if you do feel bad, as long as you do it in a structured way and at regular intervals that it will help**. What I'm suggesting is that if you start off just doing a very little, and gradually build it up, it won't have that kind of effect. As I've said before, you may still feel tired but you shouldn't feel so awful".

Treatment Plan: Professor Andre Tylee and Professor Trudie Chalder

Professor Trudie Chalder: **"It's really important that the patients keep a detailed diary of their activities so that you can then re-order all of the activities so that they become more consistent**. People tend to get into the habit of stopping activity when they feel tired, so then of course the symptoms are controlling them rather than them being in control of the symptoms. **The factors which keep the problem going are usually people reducing their activity, because, if they're fearful that if they carry on with their activity then it will make the problem worse".**

Vignette 4: (a follow-up) reconstruction of a typical GP consultation. The GP in this excerpt is Dr Claire Gerada, wife of Professor Simon Wessely.

GP: "Hello. Nice to see you again. How have you been feeling since we last met?"

Patient: "**I'm still feeling tired all the time**".

GP: "I asked you to keep a diary over the last two weeks. Just looking at this (diary) it is obvious that you have a very erratic sleeping time. What I'd like to do is to look at ways of altering this sleep pattern, me and you together. You're doing an awful lot in the average day, you're studying, you're working in the pub, you're doing all this course work. Some people think it's very boring to have set routines but I think in your case it's gone a little bit over the top and that's why you've come to see me feeling tired all the time. **The other thing is the alcohol. You're obviously drinking erratically throughout the week. I just wonder again whether if we said let's limit the alcohol to two pints or two pints equivalent per night, whether that again would be something that you would be able to do?"**

Vignette 5 (another) reconstruction of a typical GP consultation. In the role-playing, the GP is Dr Claire Gerada and the patient is Alicia Deale (for comments on the published work of Alicia Deale in relation to ME/CFS, see http://www.meactionuk.org.uk/consideration.htm pages 23 - 25).

GP: "I'd like to talk about developing a consistent approach to activity. I think we talked about how important it was that activity was consistent throughout the week. **What we talked about was that it's important that we break this association between activity and your symptoms.** How can you consistently increase the amount, or consistently do some form of activity? What we're trying to do here as I've said to you is to break this association between activity and your symptoms, because equally **if you feel rotten, I still want you to do that activity".**

Patient: "**What, even if I feel really, really, really exhausted?"**

GP: **"Even if you're absolutely exhausted**".

Patient: **"Is that going to be safe?"**

GP: **"It will be safe. All the evidence that we've put together and all the research literature shows that it is absolutely safe. You will not do yourself any harm".**

Discussion: Professor Andre Tylee and Professor Trudie Chalder

This discussion purports to educate GPs about the need for tired patients not to "boom or bust" in relation to exercise and "fatigue", but warns GPs that it is likely to be a long haul for them.

Professor Andre Tylee: "Now when things do go wrong, I mean, presumably it doesn't always work this way, what's the point where the GP should be thinking about referral?"

Professor Trudie Chalder: "I think if you've given it your best shot for about a year, at that point I would think about why it's gone wrong and if you think a specialist referral would be helpful then at that stage then *(sic)*".

Professor Andre Tylee: "Yes, now what sort of specialist because there are immunologists, psychiatrists, psychologists, there's all sorts of people that specialise in this area aren't there, who would you recommend – resources willing, of course?"

Professor Trudie Chalder**: "I think the most important thing is that whoever you refer to, whether it be the immunologist or the psychiatrist, that they're committed to a practical rehabilitative approach".**

Professor Andre Tylee: "Right. Yes, so it's this pacing approach that's the sort of key to it, **so if a cognitive therapist is available, would you suggest that, sort of?"**

Professor Trudie Chalder**: "A cognitive behaviour therapist, absolutely. I think it's really important to focus on the behaviour rather than the way people are thinking because it's a bit threatening going in directly trying to change the way in which people think".**

Professor Andre Tylee**: "Yes, yes. Now the other situation that myself and my partners at my practice often find is that people go to the ME Association and newspapers and things and they come in with a whole wealth of different agencies that they'd like to be referred to but presumably it's more appropriate really to contain it….."**

Professor Trudie Chalder: "**Yes, absolutely….."**

Professor Andre Tylee: **"……and keep it simple in the way that you've just described it is it?"**

Professor Trudie Chalder: **"I think that's really important. I think if the patient's being investigated by a number of different specialists then it's going to be difficult to engage them in this sort of rehabilitative approach, so I would try and negotiate**

with the patient actually stopping…erm.. that process of having more investigations".

Professor Andre Tylee: **"that's very helpful. Now to summarise what we've discussed is that people can be taught how to relearn or change their behaviour and their sort of physiological processes in a way that can actually control chronic fatigue syndrome, is that correct?"**

Professor Trudie Chalder: **"That's absolutely right. We know the degree of pathology is not necessarily correlated with the degree of disability".**

Professor Andre Tylee: **"Despite the fact we've seen all these techniques that can be used, it does remain that a lot of GPs feel a bit pessimistic with these sort of patients, what do you think?"**

Professor Trudie Chalder: **"I think it's true that GPs and doctors in general feel pessimistic about patients with chronic fatigue syndrome, but I think it's misguided pessimism. I think there's absolutely no reason for them to feel pessimistic at all, in that I've been seeing patients for about thirteen years, most of them have made significant improvements both in terms of their symptoms and disability".**

Professor Andre Tylee: "**Right. What percentage would you expect to get better?"**

Professor Trudie Chalder: **"About 70% in hospital populations, which is actually very good".**

Professor Andre Tylee: **"And if they're left untreated the converse must be the case, surely?"**

Professor Trudie Chalder: **"Left untreated, these patients certainly don't get better and they deteriorate"**.

Professor Andre Tylee: "Right, thank you".

Round Up by Professor Andre Tylee

Professor Andre Tylee: **"Chronic fatigue syndrome patients are difficult, we hope you will persevere with them.** It helps to arrange firm follow-up and not expect too much. We've included with the package some guidance on using role plays to develop your skills in working with these patients, because we've found that it's only by rehearsing the skills that you need that you'll be able to use them when faced with the real situation. **All that remains now is to wish you the very best of luck".**

(End of video).

The video was produced by Sir David Goldberg and Trudie Chalder. Although it seems it was produced some years ago, it has been available on the IoP /KCL website and was placed online on 9th March 2006 with the IoP logo prominently displayed, indicating that the IoP believes it still to be relevant. Moreover, there is little difference in the views of the Wessely School as expressed in the video and the views contained in current documents such as the Department for Work and Pensions Draft Guidance on "CFS/ME", the NHS Plus / Department of Health "Occupational Aspects of the Management of Chronic Fatigue Syndrome: a National Guideline" and the NICE (draft) Guideline.

Many GPs and other physicians might consider instructions on role-playing extraneous to the practice of medicine. Some may even regard it as patronising.

Given that the training package states the video "*features some of the Institute of Psychiatry's top academics in the field"*, questions may be raised as to why people who claim to be leading experts in the field of ME/CFS (which they refer to as "CFS or ME") do not appear to take account of major international research findings in that field and appear to disregard the research that has been carried out by top academics in immunology, neuro-endocrinology, virology, vascular biology, cardiology, infectious diseases, biochemistry and nuclear imaging, amongst other disciplines.

Since the Institute of Psychiatry's top academics appear to be unaware of the general body of knowledge known about by other clinicians and researchers working in the field of ME/CFS, at what point will that body of scientific knowledge be so great that it will be considered serious professional misconduct to pretend that it does not exist?

Further questions might address (i) why these IoP top academics specifically state that "CFS" is the medical term for "ME" but then role-play with a patient who is "tired all the time" – they cannot pretend that they are not talking about ME/CFS and are referring only to states of chronic (psychiatric) "tiredness", as they specifically teach GPs and others that CFS and ME are the same thing; (ii) why they focus on "tiredness" and ignore other symptoms and signs that are cardinal to ME/CFS; (iii) why they advise a patient that it is acceptable to drink two pints (or equivalent) of alcohol on a daily basis when it is universally known that alcohol intolerance is virtually pathognomonic of ME/CFS; (iv) why they advise a patient that GET is safe for patients with ME/CFS when there is published evidence that exercise-induced oxidative stress may be potentially life-threatening for some patients with ME/CFS; (v) why they do not recommend that appropriate and essential investigations be performed but on the contrary, specifically advise against such investigations.

Of cardinal importance are the questions that trouble many patients, for instance, what has been the impact of that video on GPs; how has the (mis)information in the video affected GPs' dealings with people diagnosed with ME/CFS; have patients with ME/CFS been refused appropriate investigations as a result of the misinformation in that training package; have patients been damaged by the wrong advice contained in the video; as a direct result of that video, have GPs refused to sign the necessary medical reports

required for patients with ME/CFS to receive State benefits? Patients need to receive answers to such questions, but will the answers ever be forthcoming, or will the medical abuse of people with ME/CFS continue unabated?

Although the "training" video may have been produced by Miss Chalder some time ago, in her Trondheim lecture on 25th May 2007 ("Cognitive Behavioural Treatment for Chronic Fatigue Syndrome") she echoed exactly the same beliefs as in the video and as usual used the terms "chronic fatigue" and "chronic fatigue syndrome" and "ME" interchangeably. She made unsubstantiated assertions, for example, that the Oxford (Wessely School) 1991 criteria are "*consensus criteria*", when such is not the case: those criteria have never been adopted outside the Wessely School and have no predictive value. She suggested that severe fatigue following infection may be the effect of the doctor's "*practice style*". The following quotations are taken from her overhead slides:

- *"Fatigue in CFS results from abnormal central drive which reflects the importance of behavioural factors"*
- *"(There is a) close link between CFS and clearly defined psychiatric disorder, eg. depression, anxiety"*
- *"If some HPA axis disturbance is secondary to physical inactivity, then targeting these in CBT should reverse the HPA axis changes"*
- *"CBT does normalise the HPA axis"*
- *"GET is based on the illness model of both deconditioning and exercise avoidance"*
- *"70% improved with GET"*
- *"CBT addresses the way thoughts and behaviours affect physiological and emotional processes"*
- *"Precipitating factors (include) advice to rest in response to virus"*
- *"Perpetuating factors (include) symptom focusing and physical illness attributions"*
- *"Social and cultural factors (include) misinformation in the media"*
- *"Engagement (with patients): avoid physical versus psychological arguments"*
- *"Goal is to break association between symptoms and stopping activity"*
- *"Potential pitfalls in therapy: ongoing investigations; litigation; permanent health insurance; disability benefits"*
- *"Clinical evidence for CBT -- 3 out of 4 RCTs showed CBT to be significantly better than control conditions"*
- *"In another RCT (there was) no difference between CBT and GET but CBT was easier to sell"*
- *"Long term outcome of CBT v relaxation for CFS: a 5 year follow up. Conclusion: some waning of effects at 5 years. Booster sessions would help maintain gains"*
- *"NICE Guidelines: Draft Guidelines recommend CBT and GET because there is good evidence of benefit"*
- *"CBT is an effective rehabilitation strategy for CFS/ME"*
- *"It is cost effective".*

In relation to children and adolescents, Professor Chalder states:

- *"Epidemiology of Fatigue in Children: After puberty the prevalence rises—in a survey of secondary school children 23% reported low energy"*
- *"CFS in Children: Diagnostic criteria the same as for adults"*
- *"50% of youngsters with CFS have a co-morbid psychiatric disorder"*
- *"CFS patients have more psychological distress then medical controls, making it unlikely that the distress is secondary to the experience of having a chronic illness".*

Professor Chalder seems to pay scant heed to the international paediatric case definition and assessment tool produced by world expert Professor Leonard Jason et al from the USA published in the Journal of Chronic Fatigue Syndrome and available from the IACFS/ME website at http://www.aacfs.org/p/291.html .

It is therefore to be wondered what attention she may pay to the findings of Vegard Bruun Wyller et al in a collaborative study from Norway and South Carolina, USA, which was published in Paediatrics:2007:120:1:129-137 (Abnormal Thermoregulatory Responses in Adolescents with Chronic Fatigue Syndrome: Relation to Clinical Symptoms), which notes the accumulating evidence indicating dysfunction of the autonomic nervous system in adolescents with (ME)CFS, concluding:

"Adolescent patients with (ME)CFS have abnormal catecholaminergic-dependent thermoregulatory responses both at rest and during local skin cooling, supporting a hypothesis of sympathetic dysfunction and possibly explaining important clinical symptoms".

The Wessely School's most recent attempt to capture ME/CFS as a mental disorder

Perhaps most disturbing of all is the Wessely School's latest attempt to claim "CFS/ME" as a mental disorder: following a substantial grant, the newly established "Biomedical Research Centre" at the Institute of Psychiatry is funding a project called "Emotional Processing in Psychosomatic Disorders". The Section of General Hospital Psychiatry at the IoP is advertising for a psychology graduate to work on the project, which will "*involve working across the Section on Eating Disorders and the Chronic Fatigue Research and Treatment Unit*". The closing date for applications is 13th July 2007. The job reference is 07/R68.

Applicants are informed that "*The Chronic Fatigue Syndrome Research and Treatment Unit receives about 400 referrals per year. The multi-disciplinary team assesses and treats patients with chronic fatigue syndrome and carries out research into both causes and treatment efficacy.* ***Anorexia Nervosa (AN) and chronic fatigue syndrome (CFS) are classical psychosomatic disorders where response to social threat is expressed somatically. Aberrant emotional processing is a strong candidate as a maintaining***

factor for these disorders. *The post holder will work under the immediate supervision of Professors Ulrike Schmidt (AN) and Trudie Chalder (CFS)".*

It is noted that this advertisement refers to "CFS" and not to "CFS/ME", but it is known that the intention of the Wessely School has always been to drop the initials "ME" as soon as the time was considered provident: *"It may seem that adopting the lay label (of ME) reinforces the perceived disability. A compromise strategy is 'constructive labelling': it would mean treating chronic fatigue syndrome as a legitimate illness while gradually expanding understanding of the condition to incorporate the psychological and social dimensions. The adoption by the MRC of the term CFS/ME reflects such a compromise"* (BMJ 2003:326:595-597).

Other IoP job advertisements for "CFS" that can be found on the website as of 9th July 2007 include one for a "Cognitive Behavioural Psychotherapist" for the Chronic Fatigue Research and Treatment Unit, accountable to Professor Trudie Chalder, which requires the applicant to possess "***the ability to maintain a high degree of professionalism in the face of highly emotive problems, verbal abuse and the threat of physical abuse***" and ***"an understanding of the needs of people with mental health problems"***. A similar post was previously advertised requiring a "Cognitive Behavioural Therapist" which carried the identical requirements from the candidates (ie. before Miss Chalder changed her title from Cognitive Behavioural Therapist to Cognitive Behavioural Psychotherapist in 2006 and began referring not to "CBT" but to "CBP", ie. to cognitive behavioural *psycho*therapy).

Conclusion

On the website http://www.meactionuk.org.uk there are over 100 fully referenced articles showing why the Wessely School are simply wrong in their beliefs about ME/CFS. To see all the articles, click on the "Further Articles" link. The website includes the evidence that was sent to the Chief Medical Officer, to the Medical Research Council, to the Gibson Inquiry at the House of Commons, to various House of Commons Select Committees, to NICE and to other Government bodies. The 174 page document "Illustrations of Clinical Observations and International Research Findings from 1955 to 2005 that demonstrate the organic aetiology of Myalgic Encephalomyelitis / Chronic Fatigue Syndrome" can be accessed at http://www.meactionuk.org.uk/Organic_evidence_for_Gibson.htm

None has had any effect on Government policy that "CFS/ME" is a behavioural disorder that is best treated with behavioural therapy and "rehabilitative" exercise.

It is worth recalling the words of Mr Fergusson MSP when he opened the MERUK Conference: *"the cold grip of psychiatry is still far too deeply rooted in the world of ME".*

As Kevin Short of Anglia ME Action (AMEA) notes:

"*We have largely failed in our attempts to halt the biopsychosocial juggernaut, set to increasingly afflict patients with the addition of the August NICE guidelines to those of NHS Plus and measures at the DWP. Having laboured to secure change through official channels and parliament, it must now be clear that, whilst such efforts need to continue, justice will only come through research breakthroughs and the self-evident failures of the CBT/GET model that is to be inflicted upon patients. Litigation in the UK courts, the General Medical Council and the European Court of Human Rights may also be helpful and should be pursued".*

The findings presented at Edinburgh – as well as the international literature database of over 4,000 articles on the biomedical anomalies found in ME/CFS patients -- are unequivocal and people with ME/CFS should make use of them in their endless battles for NHS healthcare provision and for State and insurance benefits to which they may be legitimately entitled.

Many doctors and ME/CFS patients alike hold the view that the Wessely School has been responsible for over two decades of the most blatant medical abuse of ME/CFS patients. This particular "school" of psychiatry has, in the eyes of the ME/CFS community, caused untold damage, not only to patients but to the discipline of psychiatry, because the Wessely School perpetuates psychiatry's regrettable record of claiming unsustainable hypotheses as fact, to the harm of its victims, unknown numbers of whom have died.

Indeed, in his recent book outlining a disease paradigm for (ME)CFS, multiple chemical sensitivity, fibromyalgia and Gulf War Syndrome (Explaining 'Unexplained Illnesses': Martin L Pall; Haworth Press, 2007), Martin Pall, Professor of Biochemistry and Basic Medical Sciences at Washington State University, admirably sums up the problem: in chapter 13, under "The Future of Psychogenesis for Multisystem Illness", Pall says:

"*I believe there is none. Psychogenesis of these illnesses is based on the shaky foundation of somatoform disorders and somatisation. It is based on emotion-laden phrases, transparent falsehoods, logical flaws, overstated claims, and unsupported or poorly supported opinion".*

"It is based on ignoring the existence of a genetic role in these illnesses. It is based on ignoring the long history of false psychogenic attributions of other illnesses".

"It is based on ignoring hundreds of studies documenting real physiological changes in multi-system illnesses".

"It is based on a deliberate ignorance, flaws and quicksand. I do not know how long it will take for the scientific community to realise the demise of the psychogenic view of multi-system illnesses, but it will happen".

"My critique of psychogenesis of multi-system illnesses should not be considered as a critique of psychiatry. It is rather a critique of those who either lack wisdom or who have sold their integrity".

"Whilst the most severe long-term damage created by psychogenic advocates has been to the research prospect for these illnesses, the most severe short-term impact has clearly been to sufferers of these illnesses and their families".

To put it another way: *"For every complicated problem there is a solution that is simple, direct, understandable and wrong"* (HL Mencken. In: The Great Cholesterol Con by Dr Malcolm Hendrick. John Blake Publishing Ltd. 2007).

It is more than time that the Government, the MRC and the Wessely School paid due heed and faced reality by accepting the vital need for biomedical research into ME/CFS in the UK.