Index of ME/CFS Published Research

An A-Z index of the most important published research

30th April 2019

The ME Association
Forward

Welcome to this ME Association Index of Published ME/CFS Research. This is an A-Z list of the most important published research studies and selected key documents and articles, listed by subject matter, on myalgic encephalomyelitis or chronic fatigue syndrome (ME/CFS). It is correct to 30th April 2019.

The Index will be updated at the end of each month and made available in the research section of the ME Association website. Each update will be accompanied by a website blog of that month’s published research abstracts to help keep you informed of the latest research developments.

The Index adopts the subject headings used in the ME Association’s authoritative clinical and research guide which provides a thorough and fully updated review of current clinical knowledge and research evidence.

The guide is written by Dr Charles Shepherd, Hon. Medical Adviser to the ME Association and Dr Abhijit Chaudhuri, consultant neurologist at Queen’s Hospital in Romford.

The 2019 edition can be ordered from our website shop and is priced at £9.00 for UK residents. We are also pleased to be able to offer free copies of this booklet to health professionals.

The ME Association are very grateful to Dr Barbara de Barros, Charlotte Stephens and Russell Fleming, for producing this Index which is proving a very popular and helpful resource.

Please Support Our Vital Work

We are a national charity working hard to make the UK a better place for people whose lives have been devastated by an often-misunderstood neurological disease. We are also the only charity supporting the ME Biobank.

If you would like to support our efforts and ensure we are able to inform, support, advocate and invest in biomedical research, then please donate today.

Just click the image opposite to visit our JustGiving page for one-off donations or to establish a regular payment.

Or why not join the ME Association as a member and be part of our growing community? For a monthly (or annual) subscription you will also receive our exclusive ME Essential magazine.

Please note: Research published after January 2019 (the date of the latest update to our clinical and research guide) is highlighted in purple in the listing below.
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4.2 Biomarker Landscape Project


4.3 Cardiac Function


4.4 Exercise physiology/testing


4.5 Gastrointestinal and microbiome


4.6 Gene expression


4.7 General reviews


**Maxmen A.** (2018) A reboot for chronic fatigue syndrome research. *Nature* 553 (7686): 14-17. Link: [https://www.nature.com/articles/d41586-017-08965-0](https://www.nature.com/articles/d41586-017-08965-0)


4.8 Genetic predisposition


4.9 Immunology


4.10 Infection


**Asprusten T et al.** (2019) EBV-requisitioning physicians’ guess on fatigue state 6 months after acute EBV infection. *BMJ Paediatrics Open* 3 (1). Link: [https://bmjpaedsopen.bmj.com/content/3/1/e000390?fbclid=IwAR0XQZ81h5gpAk4RKAeugn3rGjeuOgRnOoqq_DLxvUMlbnjGx4f9Pwm5LTU](https://bmjpaedsopen.bmj.com/content/3/1/e000390?fbclid=IwAR0XQZ81h5gpAk4RKAeugn3rGjeuOgRnOoqq_DLxvUMlbnjGx4f9Pwm5LTU)


Coffin JM and Stoye JP. (2009) A New Virus for Old Diseases? *Science* 326(5952): 530. Link: [http://science.sciencemag.org/content/326/5952/530](http://science.sciencemag.org/content/326/5952/530)


4.11 Ion channels


4.12 Metabolomics


Tomas C et al. (2017) Cellular Bioenergetics is Impaired in patients with Chronic Fatigue Syndrome. *PLoS ONE* 12(10). Link: [https://doi.org/10.1371/journal.pone.0186802](https://doi.org/10.1371/journal.pone.0186802)


Yamano E, et al. (2016) Index markers of chronic fatigue syndrome with dysfunction of TCA and urea cycles. *Science Reports* doi: 10.1038/srep34990. Link: [https://www.nature.com/articles/srep34990](https://www.nature.com/articles/srep34990)

4.13 Miscellaneous

Almenar-Perez, et al. (2019) miRNA profiling of circulating EVs in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS). *Journal of Extracellular Vesicles*, 7: 139. Link: [https://search.proquest.com/openview/3ecbf2853f437616f4506cf68f104f30/1?pq-origsite=gscholar&cbl=2030046](https://search.proquest.com/openview/3ecbf2853f437616f4506cf68f104f30/1?pq-origsite=gscholar&cbl=2030046)

Khoo T, Proudman S and Limaye V (2019) Silicone breast implants and depression, fibromyalgia and chronic fatigue syndrome in a rheumatology clinic population. Clinical Rheumatology [Epub ahead of print]. Link: https://www.ncbi.nlm.nih.gov/pubmed/30706290?fbclid=IwAR1TXif2_UA4Eow3oKxry0hs4sPcvSYsGqXTJa4-Q3x2zhbmDV7tWokShk


Thompson et al. (2019) Cognitive factors are associated with disability and pain, but not fatigue among physiotherapy attendees with persistent pain and fatigue. Physiotherapy [Epub ahead of print]. Link: https://www.ncbi.nlm.nih.gov/pubmed/31000365?fbclid=IwAR0kCyPNrOynhApT_1adzw8y1a0eCNe1-MmoR56ksNRX3eCe_T_UjGN01DU


### 4.14 Mitochondria and energy production


### 4.15 Muscle


4.16 Neurology: Autonomic nervous system (ANS) dysfunction


Registered charity number 801279


4.17 Neurology: Central nervous system and neuroimaging


4.18 Neurology: Hypothalamic and neuroendocrine function


Mackay A and Tate WP (2018) A compromised paraventricular nucleus within a dysfunctional hypothalamus: A novel neuroinflammaroty paradigm for ME/CFS. *International Journal of Immunopathology and Pharmacology*. Link: [https://journals.sagepub.com/doi/10.1177/2058738418812342#articleCitationDownloadContainer](https://journals.sagepub.com/doi/10.1177/2058738418812342#articleCitationDownloadContainer)


4.19 Neurology: Neuropsychology and cognitive function


### 4.20 Neurology: Neurotransmitter function


4.21 Pain


4.22 Phenotypes and sub-groups


4.23 Post-Exertional Malaise (PEM)


**McManimen SL, Sunquist ML and Jason LA** (2019) Deconstructing post-exertional malaise: an exploratory analysis. *Journal of Health Psychology* [Epub ahead of print]. Link: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5325824/?fbclid=IwAR0VZQEp0hKhDHRns6ANaR3JbrZ5Asylp8v2W6h3YZFmZtZ_PfgahPuQ](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5325824/?fbclid=IwAR0VZQEp0hKhDHRns6ANaR3JbrZ5Asylp8v2W6h3YZFmZtZ_PfgahPuQ)

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Registered charity number 801279

4.24 Post-mortem research


4.25 Sleep disturbance


4.26 Vision


5. Psychiatry and psychology


6. Sociology


7. Recommendations, challenges and ideas for future research into ME/CFS


8. Clinical assessment, symptoms and diagnosis

8.1 General


8.2 Investigations


8.3 Physical examination


8.4 Symptoms

Pain – see Biomedical Research, 4.21 above.
Post-Exertional Malaise – see Biomedical Research, 4.23 above.
Sleep disturbance – see Biomedical Research, 4.26 above.
Vision – see Biomedical Research, 4.28 above.

9. Management

9.1 Cognitive Behavioural Therapy (CBT)


9.2 Complementary and alternative therapies


9.3 Diet and nutrition


9.4 Exercise, Pacing and activity management


9.5 General management


9.6 PACE Trial, The


9.7 Pharmacological treatment


Shepherd C. (1997) *Long-term treatment is being used*. Letter to the editor in response to ‘Giving thyroid hormones to clinically hypothyroid but biochemically euthyroid patients’. *BMJ* 315(7111): 814. Link: [http://www.bmj.com/content/315/7111/813](http://www.bmj.com/content/315/7111/813)


9.8 Pregnancy


10. **Prognosis and quality of life**

10.1 Age


10.2 Mortality


10.3 Prognosis and recovery


10.4 Quality of life


10.5 Severe ME


11. Vaccinations


12. Children and adolescents


Collin SM, et al. (2015) Chronic fatigue syndrome (CFS) or myalgic encephalomyelitis (ME) is different in children compared to in adults: a study of UK and Dutch clinical cohorts. BMJ Open 5(10): e008830. Link: http://bmjopen.bmj.com/content/5/10/e008830

Crawley E and Sterne JAC. (2009) Association between school absence and physical function in paediatric chronic fatigue syndrome/myalgic encephalopathy. *Archives of Disease in Childhood* 94(10): 752-756. Link: http://adc.bmj.com/content/94/10/752.info


Haig-Ferguson A, et al. (2009) Memory and attention problems in children with chronic fatigue syndrome or myalgic encephalopathy. *Archives of Disease in Childhood* 94(10): 757-762. Link: http://adc.bmj.com/content/94/10/757.info


Norris T et al. (2017) Natural course of chronic fatigue syndrome/myalgic encephalomyelitis in adolescents. *Archive of Diseases in Childhood* doi: 10.1136/archdischild-2016-311198. Link: http://adc.bmj.com/content/early/2017/01/19/archdischild-2016-311198


13. Government Documents

13.1 Disability support


13.2 Economic cost to the UK


13.3 General reports, debates and statements


**House of Commons.** (2013) Debate. 11 February col. 517W. Secretary of State re: ME/CFS WHO classification. Link: [https://publications.parliament.uk/pa/cm201213/cmhansrd/cm130211/text/130211w0003.htm#130211150000045](https://publications.parliament.uk/pa/cm201213/cmhansrd/cm130211/text/130211w0003.htm#130211150000045)


14. Healthcare


**The ME Association**

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