

**Psychiatrische und psychosomatisch auffällige Patienten, Borrelien, andere Infektionserreger; Gene, Umwelt, Immunsystem**  
**Psychiatric and psychosomatic conspicuous patients, Borrelia, other infectious agents; Genes, Environment, immune system**

**Lorenz M, Redecker H** (2013) Wann ist eine Borreliose eine Neuroborreliose? Die Borreliose und ihre neuro-psychiatrischen Symptome. <http://www.borreliose-lorenz.de/neuroborreliose.html>

**Bransfield R** (2013) Lyme Disease and Cognitive Impairments. <http://www.mentalhealthandillness.com/Articles/LymeDiseaseAndCognitiveImpairments.htm>

**Bransfield R** (2016) Can Infections & Lyme and Associated Diseases Alter Free Will and Cause Impulsive Destructive Behavior? Conference: Lyme Connections Mental Health Conference, At Leir Retreat Center, Ridgefield, CT

**Zomer TP, Vermeeren YM, Landman GW et al.** (2017) Depressive Symptoms in Patients Referred to a Tertiary Lyme Center: High Prevalence in those Without Evidence of Lyme Borreliosis. Clin Infect Dis cix605. DOI:<https://doi.org/10.1093/cid/cix605>  
<https://academic.oup.com/cid/article-abstract/doi/10.1093/cid/cix605/3964385/Depressive-Symptoms-in-Patients-Referred-to-a?redirectedFrom=fulltext>

« **The prevalence of depressive symptoms was similar in patients with LB compared to patients with no evidence of infection. This suggests that depressive symptoms cannot be used to discriminate for LB in a tertiary Lyme center.** »

**Bransfield R** (2018) Lyme/Tick-borne Disease and Mental Illness Workshop NASW-MD Chapter Conference Paper [https://www.researchgate.net/publication/329681919\\_LymeTick-borne\\_Disease\\_and\\_Mental\\_Illness\\_Workshop\\_NASW-MD\\_Chapter](https://www.researchgate.net/publication/329681919_LymeTick-borne_Disease_and_Mental_Illness_Workshop_NASW-MD_Chapter)

**Abbott A** (2018) Depression: the radical theory linking it to inflammation. Nature. Books and Arts. <https://www.nature.com/articles/d41586-018-05261-3>

### **Immunosystem**

Bransfield RC (2012), Bechter K. (2013), Stich O (2014), Avramopoulos D (2015), Gacias M (2016), Alam R, (2016, 2017), Weber (2017), Abbott (2018)

### **Viruses**

Arias I (2012), Coughlin SS (2012), Bechter K (2013), Mazaheri-Tehrani E (2014)

### **Bacteria**

Kohler J. (1990), Rundell JR (1985), Fallon BA (1992, 1993, 2x1994, 2x1995, 1997, 2x1998, 2000, 2001, 2004, 2x2006), Barnett W (1991), Pfister HW (1993), van den Bergen HA (1993), Stein SL (1996), Nadelman RB (1997), Pappone PW (1998), Hess A (1999), Battaglia H (2000), Sherr VT. (2000), Tager FA (2001), Fritzsche M. (2002), Hajek T (2002, 2006), Stricker R (2003), Bar KJ (2005), Bransfield RC (2007, 2008, 2009, 2012, 2013, 2016, 2x2015, 2018), Scheffer RE (2007), Legatowicz-Koprowska M (2008), Duncan T (2008), Fellerhoff B (2011), Pasareanu AR (2012), Banerjee R (2013), Rosner B (2014), Ribeiro FM (2017)

### **Protozoa**

Varney NR (1997), Thiam MH (2002), Markovitz A (2014)

### **Neurocysticercosis, nematodes, filariae**

Huisman H. (1979) Mahajan SK (2004)

### **Mycoses, fungi**

Severance EG (2016)

- Rundell JR, Wise MG. (1985) **Neurosyphilis**: a psychiatric perspective. Psychosomatics 26, 287-295. <http://www.ncbi.nlm.nih.gov/pubmed/3887454>
- Kohler J. (1990) [Lyme borreliosis in neurology and psychiatry](#) Fortschr Med. 108(10),191-3,197.
- Barnett W, Sigmund D, Roelcke U, Mundt C. (1991) [Endogenous paranoid-hallucinatory syndrome caused by Borrelia encephalitis](#) Nervenarzt 62(7), 445-7
- Fallon BA, Nields JA, Burrascano JJ, Liegner K, DeIBene D, Liebowitz MR (1992) [The neuropsychiatric manifestations of Lyme borreliosis.](#) Psychiatr Q. 63(1) , 95-117. Review <http://www.lymenet.org>
- Fallon BA, Nields JA, Parsons B, Liebowitz MR, Klein DF (1993) [Psychiatric manifestations of Lyme borreliosis.](#) J Clin Psychiatry. 54(7), 263-8.
- Pfister HW, Preac-Mursic V, Wilske B, Rieder G, Forderreuther S, Schmidt S, Kapfhammer HP (1993) Catatonic syndrome in acute severe encephalitis due to Borrelia burgdorferi infection. Neurology. 43(2), 433-5. <http://www.ncbi.nlm.nih.gov/pubmed/8437717>
- van den Bergen HA, Smith JP, van der Zwan A. (1993) [Lyme Psychosis](#) Ned Tijdschr Geneeskd 137(41), 2098-100
- Fallon BA, Nields JA. (1994) Lyme disease: a neuropsychiatric illness. Am J Psychiatry. 151(11), 1571-83. <http://www.ncbi.nlm.nih.gov/pubmed/7943444>  
<http://www.angelfire.com/biz/romarkaraoke/lymeart.html>
- Lyme Net. The Neuropsychiatric Manifestations of Lyme Borreliosis (1992)  
<http://www2.lymenet.org/85256613000317b5/1bbeaa0c4dbd0d058525670a00093a6b/87e8dfed931381b7852567c70012001f>
- Fallon BA, Bird H, Hoven C, Cameron D, Liebowitz MR, Shaffer D. (1994) Psychiatric aspects of Lyme disease in children and adolescents: A community epidemiologic study in Westchester, New York. Journal of Tick Borne and Spirochetal Diseases, 1, 98-100
- Brown JS Jr. (1994) [Geographic correlation of schizophrenia to ticks and tick-borne encephalitis.](#) Schizophr Bull 20(4), 755-75
- Caliendo MV, Kushon DJ, Helz JW. (1995) [Delirium and Lyme disease.](#) Psychosomatics. 36(1), 69-74
- Fallon BA. (1995) Neuropsychiatric Lyme Disease. Harvard Mental Health Letter, Forum 10/95
- Fallon BA, Schwartzberg M, Bransfield R, Zimmerman B, Scotti A, Weber CA, Liebowitz MR. (1995) Late-stage neuropsychiatric Lyme borreliosis. Differential diagnosis and treatment. Psychosomatics. 36(3), 295-300.
- Stein SL, Solvason HB, Biggart E, Spiegel D. (1996) [A 25-year-old woman with hallucinations, hypersexuality, nightmares, and a rash.](#) Am J Psychiatry. 153(4), 545-51.
- Fallon BA, Das S, Plutchok J, Tager F., Liegner K, Van Heertum R (1997) Functional imaging and neuropsychological testing in Lyme disease. Clinical Infectious Diseases\_25, S57-63
- [Kobayashi K, Mizukoshi C, Aoki T, Muramori F](#) et al. (1997) Borrelia burgdorferi-seropositive chronic encephalomyelopathy: Lyme neuroborreliosis? An autopsied report. [Dement Geriatr Cogn Disord.](#) 8(6), 384-90. <https://www.ncbi.nlm.nih.gov/pubmed/9370092?dopt=Abstract>
- Nadelman RB, Herman E, Wormser GP. (1997) [Screening for Lyme disease in hospitalized psychiatric patients: prospective serosurvey in an endemic area.](#) Mt Sinai J Med. 64(6), 409-12. **"Sera from only 1 of 517 patients demonstrated antibodies to Borrelia burgdorferi, the etiologic agent of Lyme disease (0.2% [95% CI, 0.0% to 1.1%]). This patient had a nonreactive Western blot, which suggested a false-positive antibody test."**

Fallon BA, Kochevar JM, Gaito A, Niels JA. (1998) The underdiagnosis of neuropsychiatric Lyme disease in children and adults. Psychiatr Clin North Am. 21(3), 693-703, viii. <http://www.ncbi.nlm.nih.gov/pubmed/9774805>

Paparone PW (1998) [Neuropsychiatric manifestations of Lyme disease](#) J Am Osteopath Assoc 98(7), 373-8

Fallon BA, Kochevar JM, Gaito A, Niels JA. (1998) [The Underdiagnosis of Neuropsychiatric Lyme Disease in Children and Adults](#) Psychiatric Clinics of North America, 21, 693-703 <http://www.lymenet.org>

Liegner KI, Duray P, Agricola M, Fosenkilde C, Iannuzzi L, Ziska M, Tilton R, Hulinska D, Hubbard J, Fallon B (1998) Lyme disease and the clinical spectrum of antibiotic-responsive meningoencephalomyelitides. Journal of Spirochetal and Tick Borne Diseases. 4, 62-73.

Popławska R, Szulc A, Zajkowska J, Pancewicz S.(1999) Neuroborreliosis: a psychiatric problem?. Psychiatr Pol. 33(2), 241-50. <http://www.ncbi.nlm.nih.gov/pubmed/10786229>

Hess A, Buchmann J, Zettl UK, Henschel S, Schlaefke D, Grau G, Benecke R. (1999) [Borrelia burgdorferi central nervous system infection presenting as an organic schizophrenialike disorder.](#) Biol Psychiatry 45(6), 795

Battaglia H, Alvarez G, Mercau A, Fay M, Campodonico M.(2000) Psychiatric symptomatology associated with presumptive Lyme disease: Clinical evidence. Journal of Spirochetal and Tick-Borne Diseases 1-6.

Fallon BA. (2000) Neuropsychiatric Aspects of Non-HIV Infectious Diseases. In Comprehensive Textbook of Psychiatry, Seventh Edition.Ed. Kaplan and Sadock. Williams and Wilkins.

Sherr VT. (2000) [Panic Attacks May Reveal Previously Undiscovered Chronic Disseminated Lyme Disease](#) Journal of Psychiatric Practice, 6, 352-356

Tager FA, Fallon BA (2001) Psychiatric and Cognitive Features of Lyme Disease. Psychiatric Annals 31, 173-181

Tager FA, Fallon BA, Rissenberg M, Jones CR, Liebowitz MR (2001) A controlled study of cognitive deficits among children with chronic Lyme disease. J Neuropsychiatry 13, 500-507.

Fritzsche M. (2002) [Seasonal correlation of sporadic schizophrenia to Ixodes ticks and Lyme borreliosis](#) International Journal of Health Geographics 1, 2 <http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=12453316>

Hajek T, Paskova B, Janovska D, Bahbouh R, Hajek P, Libiger J, Hoschl C. (2002) [Higher prevalence of antibodies to Borrelia burgdorferi in psychiatric patients than in healthy subjects](#), Am J Psychiatry. 159(2), 297-301. **(free full text) "These findings support the hypothesis that there is an association between Borrelia burgdorferi infection and psychiatric morbidity. In countries where this infection is endemic, a proportion of psychiatric inpatients may be suffering from neuropathogenic effects of Borrelia burgdorferi"**.

Stricker R, Winger (2003) [Musical Hallucinations in Patients with Lyme Disease](#) Southern Medical Journal 96(7), 711-715

Fallon B et al. (2003) [Regional Cerebral Blood Flow and Cognitive Deficits in Chronic Lyme Disease.](#) J Neuropsychiatry Clin Neurosci 15, 326-332

Fallon B (2004) Neuropsychiatric Lyme Disease: the New 'Great Imitator' Psychiatric Times,

Bar KJ, Jochum T, Hager F, Meissner W, Sauer H. (2005) [Painful hallucinations and somatic delusions in a patient with the possible diagnosis of neuroborreliosis.](#)Clin J Pain. 21(4), 362-3.

Fallon BA. (2005) Neuropsychiatric Aspects of Non-HIV Infectious Diseases. In Comprehensive Textbook of Psychiatry, Eighth Edition. Ed. Kaplan and Sadock. Williams and Wilkins

Hajek T, Libiger J, Janovska D, Hajek P, Alda M, Hoschl C., (2006) [Clinical and demographic characteristics of psychiatric patients seropositive for \*Borrelia burgdorferi\*](#), Eur Psychiatry. 21(2),118-122 **“These findings elaborate on potential association between Bb infection and psychiatric morbidity, but fail to identify any specific clinical 'signature' of Bb infection”**.

Fallon BA, Vaccaro B, Romano M, Clemente D. (2006) Neuropsychiatric and Neuropathologic Aspects of Lyme Disease. [Psychiatric Annals](#), 36,120-128

Fallon BA (2006) Mystery Diagnosis: treatment of Neuropsychiatric Lyme Disease. In DSM-IV-TR Case Book: Experts Tell how they treated their own patients, Volume 2. Ed. Spitzer RL, First MB, Williams JBW, Gibbon M. American Psychiatric Publishing, Inc. pp 39-52.

Keilp BA, Corbera K., Slavov I., Taylor M.J., Sackeim H.A., Fallon B.A. (2006) WAIS-III and WMS-III Performance in chronic Lyme disease. J International Neuropsychological Society. 12(1), 119-129.

Bransfield RC, Wulfman JS, Harvey WT, Usman AI. (2007) [The association between tick-borne infections, Lyme borreliosis and autism spectrum disorders](#) Medical Hypotheses. 70(5), 967-974 [https://www.ncbi.nlm.nih.gov/pubmed/17980971?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pubmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](https://www.ncbi.nlm.nih.gov/pubmed/17980971?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

Scheffer RE, Linden S. (2007) [Concurrent medical conditions with pediatric bipolar disorder](#). Curr Opin Psychiatry. 20(4), 398-401. Review.

Bransfield RC. (2007) [Lyme Disease, Comorbid Tick-Borne Diseases, and Neuropsychiatric Disorders](#) Psychiatric Times. 24(14)

Hassett AL, Radvanski DC, Buyske S, Savage SV, Gara M, Escobar JI, Sigal LH. (2008) [Role of psychiatric comorbidity in chronic Lyme disease](#). Arthritis Rheum. 59(12), 1742-9. doi: 10.1002/art.24314 <http://www.ncbi.nlm.nih.gov/pubmed/19035409>

Bransfield, R. (2008). Lyme, depression, and suicide. Retrieved January 3, 2008, from [http://www.lymealliance.org/bransfield/bransfield\\_3.php](http://www.lymealliance.org/bransfield/bransfield_3.php)

Legatowicz-Koprowska M, Gziut AI, Walczak E, Gil RJ, Wagner T (2008) [\[Borreliosis--simultaneous Lyme carditis and psychiatric disorders--case report\]](#) Pol Merkur Lekarski. 24(143), 433-5.

Duncan T, Rosner B (2008) The Lyme-Autism Connection: Unveiling the Shocking Link Between Lyme Disease and Childhood Developmental Disorders. <http://www.amazon.com/gp/product/0976379759?ie=UTF8&tag=lymeinfo-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0976379759>

Grabe HJ, Spitzer C, Lüdemann J, Guertler L, Kramer A, John U, Freyberger HJ, Völzke H. (2008) No association of seropositivity for anti-Borrelia IgG antibody with mental and physical complaints. Nord J Psychiatry. 62(5), 386-91. <http://www.ncbi.nlm.nih.gov/pubmed/18752103>

Hassett AL, Radvanski DC, Buyske S, Savage SV, Sigal LH. (2009) [Psychiatric comorbidity and other psychological factors in patients with « chronic Lyme disease »](#). Am J Med. 122(9), 843-50. <http://www.ncbi.nlm.nih.gov/pubmed/19699380>

Bransfield RC (2009) **Preventable cases of autism: relationship between chronic infectious diseases and neurological outcome.** *Psychiatric Health* 3(2), 125-140, DOI 10.2217/phe.09.5 (doi:10.2217/phe.09.5) **«There is evidence that chronic infections and the immune reactions associated with them may contribute to causing autism spectrum disorders. These infections include *Babesia*, *Bartonella*, *Borrelia burgdorferi*, *Ehrlichia*, *Human herpesvirus-6*, *Chlamydia pneumoniae* and *Mycoplasma* (in particular *Mycoplasma fermentans*). «**

[Frykholm BO](#) (2009) **On the question of infectious aetiologies for multiple sclerosis, schizophrenia and the chronic fatigue syndrome and their treatment with antibiotics.** [Med Hypotheses](#). 72(6), 736-9. doi: 10.1016/j.mehy.2008.11.045. Epub 2009 Mar 6. <https://www.ncbi.nlm.nih.gov/pubmed/19269110>

Sørensen HJ, Mortensen EL, Reinisch JM et al. (2009) Association between prenatal exposure to bacterial infection and risk of schizophrenia. *Schizophr Bull.* 35, 631-637.

Clarke MC, Tanskanen A, Huttunen M et al. (2009) Evidence for an interaction between familial liability and prenatal exposure to infection in the causation of schizophrenia. *Am J Psychiatry.* 166, 1025-1030.

Brown AS, Derkits EJ (2010) Prenatal infection and schizophrenia: a review of epidemiologic and translational studies. *Am J Psychiatry.* 167, 261-280.

[Rosenfeld M](#), [Brenner-Lavie H](#), [Ari SG](#) et al. (2011) **Perturbation in mitochondrial network dynamics and in complex I dependent cellular respiration in schizophrenia.** *Biol Psychiatry.* 69(10), 980-8. doi: 10.1016/j.biopsych.2011.01.010. Epub 2011 Mar 11  
<https://www.ncbi.nlm.nih.gov/pubmed/?term=rosenfeld+m+%2C+schizophrenia>

[Kugeler KJ](#), [Griffith KS](#), [Gould LH](#) et al. (2011) A Review of **Death Certificates** Listing Lyme Disease as a Cause of Death in the United States. *Clin Infect Dis.* 52 (3), 364-367. doi: 10.1093/cid/ciq157  
<http://cid.oxfordjournals.org/content/52/3/364.full.pdf> <http://cid.oxfordjournals.org/content/52/3/364.long>

Bransfield RC (2012) The Psychoimmunology of Lyme/Tick-Borne Diseases and its Association with Neuropsychiatric Symptoms. *The Open Neurology Journal* 6 (Suppl 1-M3) 88-93  
<http://www.ncbi.nlm.nih.gov/pubmed/23091569>  
<http://beyondthebandaid.com.au/wp-content/uploads/2012/07/The-Psychoimmunology-of-Tick-Borne-Diseases-its-Association-with-Neuropsychiatric-Symptoms.pdf>

Pasareanu AR, Mygland Å, Kristensen Ø. (2012) A woman in her 50s with manic psychosis. *Tidsskr Nor Laegeforen.* 132(5), 537-9

Bransfield RC (2012) [Can infections and immune reactions to them cause violent behavior?](#)  
Abstracts of 11th Psychoimmunology Expert Meeting. *Neurology, Psychiatry and Brain Research.* 18(2), 42

Bransfield RC (2012) Relationship of Inflammation and Autoimmunity to Psychiatric Sequelae in Lyme Disease. *Psychiatric Annals* , 337-341  
[http://www.ilads.org/ilads\\_news/2012/relationship-of-inflammation-and-autoimmunity-to-psychiatric-sequelae-in-lyme-disease/](http://www.ilads.org/ilads_news/2012/relationship-of-inflammation-and-autoimmunity-to-psychiatric-sequelae-in-lyme-disease/)

[Arias I](#), [Sorlozano A](#), [Villegas E](#) et al. (2012) **Infectious agents associated with schizophrenia: A meta-analysis.** *Schizophr Res.* 136(1-3), 128-36. doi: 10.1016/j.schres.2011.10.026. Epub 2011 Nov 21. <https://www.ncbi.nlm.nih.gov/pubmed/22104141>

Bransfield R. (2013) The Neuropsychiatric Assessment of Lyme Disease.  
[www.mentalhealthandillness.com/tnaold.html](http://www.mentalhealthandillness.com/tnaold.html) <http://www.anapsid.org/lyme/bransfield-neuropsych.pdf>

Ajamian M et al. (2013) Serologic markers of Lyme disease in children with autism. *Journal of the American Medical Association*, 309, 1771-72.  
<http://www.the-scientist.com/?articles.view/articleNo/35365/title/Autism-Lyme-Correlation-Debunked/>  
Komment: **"The authors used the Euroimmun ELISA and WB. The Euroimmun ELISA has a sensitivity of 45-49% for patients with "suspected" Lyme disease. See Tables 1 and 4 in Ang CW, Notermans DW, Hommes M et al. (2010)."** Stricker R 2013-05-02 <http://www.xerlebnishaft.de/serollyme.pdf>

Dr. Shea Lectures at Harvard Medical School (2013), Dr. Shea lectured on Understanding the Neuropsychological Consequences of Lyme Disease at the Harvard Medical School Spaulding Rehabilitation Hospital in Cambridge, Massachusetts. <http://n-e-t-s.org/dr-shea/>

[Bechter K](#). (2013) **Schizophrenia - a Mild Encephalitis?** *Fortschr Neurol Psychiatr.* 2013 Apr 29. [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/23629631>  
**"With the ME model connected is a set of three contributing factors: genes, environment (especially infectious agents) and the immune system."**

(2013) Blood Test for Suicide Risk? *Medscape.* Apr 26. <http://www.medscape.com/viewarticle/803176>

Wong CCY, Meaburn EL, Ronald A et al. (2013) Methylomic analysis of monozygotic twins discordant for autism spectrum disorder and related behavioural traits. *Molecular Psychiatry* doi: 10.1038/mp.2013.41 <http://www.nature.com/mp/journal/vaop/ncurrent/full/mp201341a.html>  
<http://medicalxpress.com/news/2013-04-epigenetic-biological-mechanism-autism.html#jCp>

[Sommer IE](#), [van Westrhenen R](#), [Begemann MJ](#), [de Witte LD](#), [Leucht S](#), [Kahn RS](#). (2013) Efficacy of Anti-inflammatory Agents to Improve Symptoms in Patients with Schizophrenia: An Update. *Schizophr Bull.* [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/24106335>  
**„Conclusion: The results of aspirin addition to antipsychotic treatment seem promising, as does the addition of NAC and estrogens. These 3 agents are all very broadly active substances, and it has to be investigated if the beneficial effects on symptom severity are indeed mediated by their anti-inflammatory aspects.“**

[Iaccarino HF](#), [Suckow RF](#), [Xie S](#), [Bucci DJ](#). (2013) The effect of transient increases in kynurenic acid and quinolinic acid levels early in life on behavior in adulthood: Implications for schizophrenia. *Schizophr Res.* 2013 Sep 30. pii: S0920-9964(13)00503-3. doi: 10.1016/j.schres.2013.09.004. [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/24091034>

**“Kynurenic acid is a tryptophan metabolite that is synthesized and released in the brain by astrocytes and acts as an antagonist of nicotinic acetylcholine receptors and N-methyl-d-aspartate glutamate receptors, both of which are critically involved in cognition as well as neural plasticity and brain development. The concentration of kynurenic acid is increased in the brains of persons with schizophrenia and this increase has been implicated in the cognitive and social impairments associated with the disease. In addition, growing evidence suggests that the increase in kynurenic acid may begin early in life. For example, exposure to influenza A virus during development results in a transient increase in kynurenic acid concentration that could disrupt normal brain development and lead to cognitive deficits later in life. Changes in kynurenic acid may thus provide a link between developmental exposure to viruses and the increased risk of subsequently developing schizophrenia.”**

Banerjee R, Liu JJ, Minhas HM (2013) Lyme Borreliosis Presenting with Alexithymia and Suicide Attempts. Case Report. *J.Clin Psychiatry* 74,10  
<http://relative-risk.blogspot.de/2013/11/an-unusual-case-presentation.html>

[Stich O](#), [Andres TA](#), [Gross CM](#), [Gerber SI](#), [Rauer S](#), [Langosch JM](#). (2014) **An observational study of inflammation in the central nervous system in patients with bipolar disorder.** *Bipolar Disord.* doi: 10.1111/bdi.12244. [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/25109751>

Mufaddel A, Omer AA, Salem MO (2014) **Psychiatric Aspects of Infectious Diseases.** *Open Journal of Psychiatry*, 4, 202-217. <http://dx.doi.org/10.4236/ojpsych.2014.43027>

Rosner B (2014) **Lyme Disease and Mental Illness**  
<http://www.lymebook.com/lyme-disease-mental-illness-schizophrenia-bipolar-ocd>

Graham KL, Carson CM, Ezeoke A, Buckley PF, Miller BJ. (2014) **Urinary tract infections in acute psychosis.** *J Clin Psychiatry.* 75(4), 379-85. doi: 10.4088/JCP.13m08469.  
<https://www.ncbi.nlm.nih.gov/pubmed/24499998>

Dickerson F, Stallings C, Vaughan C et al. (2011) **Artemisinin reduces the level of antibodies to gliadin in schizophrenia.** *Schizophr Res.* 129(2-3), 196-200.

Liu F, Guo X, Wu R et al. (2014) **Minocycline supplementation for treatment of negative symptoms in early-phase schizophrenia A double blind, randomized, controlled trial** *Schizophr Res.* 153(1-3), 169-76.

Qurashi I, Collins J, Chaudhry I, Husain N (2014) **Promising use of minocycline augmentation with clozapine in treatment-resistant schizophrenia.** *J Psychopharmacol.*

Wang HL, Xiang YT, Li QY et al. (2014) **The effect of artemether on psychotic symptoms and cognitive impairment in first-episode, antipsychotic drug-naive persons with seropositive to Toxoplasma gondii.** *J Psychiatr Res.* 53, 119-24

Goldstein JM, Cherkerzian S, Seidman LJ et al. (2014) Prenatal maternal immune disruption and sex-dependent risk for psychoses. *Psychol Med.* 44, 3249-3261.

Miyata S, Hattori T, Shimizu S et al (2015) **Disturbance of Oligodendrocyte Function Plays a Key Role in the Pathogenesis of Schizophrenia and Major Depressive Disorder.** BioMed Research International Volume 2015 (2015), Article ID 492367, 26 pages <http://dx.doi.org/10.1155/2015/492367>  
<http://www.hindawi.com/journals/bmri/2015/492367/>

[Avramopoulos D](#), [Pearce BD](#), [McGrath J](#) (2015) **Infection and inflammation in schizophrenia and bipolar disorder: a genome wide study for interactions with genetic variation.** *PLoS One.* 10(3), e0116696. doi: 10.1371/journal.pone.0116696. eCollection 2015.  
<http://www.ncbi.nlm.nih.gov/pubmed/25781172>

Bransfield RC (2015) **Chronic Infections as Aetiological Factors in Psychiatric Disorders.** 21st Annual International Integrative Medicine Conference Melbourne Australia.  
[http://www.researchgate.net/publication/280386410\\_Chronic\\_Infections\\_as\\_Aetiological\\_Factors\\_in\\_Psychiatric\\_Disorders](http://www.researchgate.net/publication/280386410_Chronic_Infections_as_Aetiological_Factors_in_Psychiatric_Disorders)

Bransfield RC (2015) **Inflammation in Chronic Brain Diseases.** 21st Annual International Integrative Medicine Conference Melbourne Australia.  
[http://www.researchgate.net/publication/280386580\\_Inflammation\\_in\\_Chronic\\_Brain\\_Diseases](http://www.researchgate.net/publication/280386580_Inflammation_in_Chronic_Brain_Diseases)

Garakani A, Mitton AG (2015) **Case Report. New-Onset Panic, Depression with Suicidal Thoughts, and Somatic Symptoms in a Patient with a History of Lyme Disease.** Case Reports in Psychiatry Volume 2015, Article ID 457947, 4 pages <http://dx.doi.org/10.1155/2015/457947>  
<http://www.hindawi.com/journals/crips/2015/457947/>

Koola MM, Sullivan KM, Earl AK, Feldman SM, Richardson C, Vyas GR, Wehring HJ, Kelly DL (2015) **Undiagnosed Lyme disease in adults with schizophrenia.** Schizophr Res. 168(1-2), 579-80. doi: 10.1016/j.schres.2015.06.029. PubMed PMID: 26255567; PubMed Central PMCID: PMC5493317.

Bransfield RC (2016) **Are There Psychoimmune and Infectious Contributors to Violence?** New Jersey Psychiatric Association Central Chapter Meeting. Princeton, NJ, DOI: 10.13140/RG.2.2.33357.84968.

[Gacias M](#), [Gaspari S](#), [Mae-Santos P](#) et al. (2016) **Microbiota-driven transcriptional changes in prefrontal cortex override genetic differences in social behavior.** *Elife.* 5. pii: e13442. doi: 10.7554/eLife.13442. [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/27097105>  
**„Our results thus demonstrate that the gut microbiota modifies the synthesis of key metabolites affecting gene expression in the prefrontal cortex, thereby modulating social behavior.“**

[Ribeiro FM](#), [Signorelli F](#) (2017) **The role of infections in neuropsychiatric lupus.** *Lupus.* 26(5), 490-496. doi: 10.1177/0961203317691375. <https://www.ncbi.nlm.nih.gov/pubmed/28394236>

Alam R, Abdolmaleky HM, Zhou JR (2017) **Microbiome, inflammation, epigenetic alterations, and mental diseases.** *Am J Med Genet B Neuropsychiatr Genet.* 174(6) 651-660. doi:10.1002/ajmg.b.32567. Epub 2017 Jul 10. <https://www.ncbi.nlm.nih.gov/pubmed/28691768>  
[https://www.researchgate.net/publication/318326255\\_Microbiome\\_inflammation\\_epigenetic\\_alterations\\_and\\_mental\\_diseases](https://www.researchgate.net/publication/318326255_Microbiome_inflammation_epigenetic_alterations_and_mental_diseases)  
**“In this review we will consider the potential interactions of diet, gastrointestinal microbiome, inflammation, and epigenetic alterations in psychiatric disorders”.**

Nicolas B (2017) **Does most cases of schizophrenia could be explained by infections?** Research Gate.  
[https://www.researchgate.net/publication/321274210\\_Does\\_most\\_cases\\_of\\_schizophrenia\\_could\\_be\\_explained\\_by\\_infections](https://www.researchgate.net/publication/321274210_Does_most_cases_of_schizophrenia_could_be_explained_by_infections)

[Weber NS](#), [Gressitt KL](#), [Cowan DN](#) et al. (2017) Monocyte activation detected prior to a diagnosis of schizophrenia in the US Military New Onset Psychosis Project (MNOPP). *Schizophrenia research.*  
<http://www.schres-journal.com/article/S0920-9964%2817%2930768-5/abstract#.WIRsvC66oO8.blogger>

Zomer TP, Vermeeren YM, Landman GW, Zwerink M, van Hees BC, van Bommel T, van Kooten B (2017) **Depressive Symptoms in Patients Referred to a Tertiary Lyme Center: High Prevalence in Those Without Evidence of Lyme Borreliosis.** *Clin Infect Dis.* 2017 65(10), 1689-1694. doi: 10.1093/cid/cix605. PubMed PMID: 29020278.

ROBERTS RC, FARMER CB, WALKER CK (2018) Psychiatry and Behavioral Neurobio., Univ. of Alabama, Birmingham, Birmingham, AL. **The human brain microbiome; there are bacteria in our brains!**. Program No. 594.08. 2018 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, Online.

Peng Zheng, Benhua Zeng, Meiling Liu et al. (2019) **The gut microbiome from patients with schizophrenia modulates the glutamate-glutamine-GABA cycle and schizophrenia-relevant behaviors in mice**. Science Advances 5(2), eaau8317 DOI: 10.1126/sciadv.aau8317  
<https://advances.sciencemag.org/content/5/2/eaau8317>

Lee YH, Cherkerzian S, Seidman LJ et al. (2019) **Maternal bacterial infection during pregnancy and offspring risk of psychotic disorders: variation by severity of infection and offspring sex**. Am J Psychiatry. <https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2019.18101206>

➔ **The human brain microbiome; there are bacteria in our brains!**

[https://de.search.yahoo.com/yhs/search?hspart=ima&hsimp=yhs-batch1&p=The+human+brain+microbiome%3B+there+are+bacteria+in+our+brains%21+&type=batch1q5000008\\_shq](https://de.search.yahoo.com/yhs/search?hspart=ima&hsimp=yhs-batch1&p=The+human+brain+microbiome%3B+there+are+bacteria+in+our+brains%21+&type=batch1q5000008_shq)

- ➔ **Methylierung** <http://www.erlebnishaft.de/methylierung.pdf>
- ➔ **Der Methylzyklus** <http://www.xerlebnishaft.de/bildmethyl-arginin.pdf>
- ➔ **Mitochondrien** <http://www.xerlebnishaft.de/mitochondrien.pdf>
- ➔ **Gendynamik** [http://www.xerlebnishaft.de/gen\\_dynamik.pdf](http://www.xerlebnishaft.de/gen_dynamik.pdf)
- ➔ **Borrelien Serologie** <http://www.erlebnishaft.de/kommentserollyme.pdf>
- ➔ **Gene, Umwelt, Immunsystem** <http://www.erlebnishaft.de/kommentstressvar2.pdf>
- ➔ **Biogene Amine und Peptide**  
<http://www.kabilahsystems.de/biogeneamineundpeptide.pdf>
  
- ➔ **Neuropsychiatric Lyme Disease Online Resources:**  
<http://www.lymeinfo.net/neuropsych.html>

**Bakterien andere, bacteria others**

Fellerhoff B, Wank R. (2011) **Increased prevalence of Chlamydia DNA in post-mortem brain frontal cortex from patients with schizophrenia**. Schizophr Res. 129(2-3), 91-5. doi: 10.1016/j.schres.2011.04.015. Epub 2011 May 5. <https://www.ncbi.nlm.nih.gov/pubmed/21546214>  
**„Persistent Chlamydia-infected microglia or neuronal cells may impair neuronal circuits and thus be a mechanism for causing psychiatric illness in these patients.“**

- ➔ **Chlamydien** [http://www.kabilahsystems.de/chlamydia\\_pneumoniae.pdf](http://www.kabilahsystems.de/chlamydia_pneumoniae.pdf)

**Virusarten, virusses**

Coughlin SS (2012) **Anxiety and Depression: Linkages with Viral Diseases**. Public Health Rev. Author manuscript; available in PMC 2014 Sep 26. Published in final edited form as: Public Health Rev. 2012; 34(2), 92. PMID: 25264396  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4175921/>

Bechter K (2013) **Virus Infection as a Cause of Inflammation in Psychiatric Disorders**. Halaris A, Leonard BE (eds): Inflammation in Psychiatry. Mod Trends Pharmacopsychiatry. Basel, Karger, 2013, vol 28, pp 49–60 (DOI: 10.1159/000343967)  
[https://www.karger.com/ProdukteDB/Katalogteile/isbn3\\_318/\\_023/\\_10/343967\\_p49-52.pdf](https://www.karger.com/ProdukteDB/Katalogteile/isbn3_318/_023/_10/343967_p49-52.pdf)



[Mazaheri-Tehrani E](#), [Maghsoudi N](#), [Shams J](#) (2014) **Borna disease virus (BDV) infection in psychiatric patients and healthy controls in Iran.** *Viol J.* 11(1), 161. [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/25186971>

- **Virus triggers** <http://www.erlebnishaft.de/virus triggers.pdf>
- **Virus, Bakterium, Immunsystem** <http://www.erlebnishaft.de/virusbaktimmun.pdf>
- **Virulenzinhibitoren** [http://www.kabilahsystems.de/virulenz\\_inhibitoren.pdf](http://www.kabilahsystems.de/virulenz_inhibitoren.pdf)

## Neurocysticercosis, nematodes, filariae

Huismans H. (1979) **Tierische Parasiten des menschlichen Auges.** Bücherei des Augenarztes ENKE Heft 80 <http://katalog.ub.uni-heidelberg.de/cgi-bin/titel.cgi?katkey=66347375>

Wallin MT, Kurtzke JF. (2004) **Neurocysticercosis** in the United States: review of an important emerging infection. *Neurology.* 63(9), 1559-1564

Mahajan SK, Machhan PC, Sood BR, et al. (2004) **Neurocysticercosis** presenting with psychosis. *J Assoc Physicians India.* 52, 663-665

[García HH](#), [Evans CAW](#), [Nash TE](#) (2013) Current Consensus Guidelines for **Treatment of Neurocysticercosis.** <http://cmr.asm.org/content/15/4/747.full>

- **Mikrofilarien, Fadenwürmer, Zwergfadenwurm, [Strongyloides stercoralis](#)** <http://www.xerlebnishaft.de/mikrofilarien.pdf>

## Protozoen, protozoa

Varney NR, Roberts RJ, Springer JA, Connell SK, Wood PS. (1997) Neuropsychiatric sequelae of **cerebral malaria** in Vietnam veterans. *J Nerv Ment Dis.* 185(11), 695-703

Dugbartey AT, Dugbartey MT, Apedo MY. (1998) Delayed neuropsychiatric effects of **malaria** in Ghana. *J Nerv Ment Dis.* 186(3), 183-186

Thiam MH, Diop BM, Dieng Y, Gueye M. (2002) Mental disorders in **cerebral malaria** [French]. *Dakar Med.* 47(2), 122-127

[Markovitz A](#), [Simanek AM](#), [Yolken R](#), [Galea S](#), [Koenen KC](#), [Chen S](#), [Aiello AE](#) (2014) **Toxoplasma gondii** and anxiety disorders in a community-based sample. DOI: 10.1016/j.bbi.2014.08.001 [Brain, Behavior, and Immunity.](#) Available online 12 August 2014 <http://www.sciencedirect.com/science/article/pii/S0889159114004188>

- **Babesien** <http://www.kabilahsystems.de/babesien.pdf>

## Fungi

Johns Hopkins Medicine (2016) **Yeast infection linked to mental illness: Candida infections also more common among those with memory loss.** ScienceDaily. ScienceDaily, <https://www.sciencedaily.com/releases/2016/05/160504121327.htm>

Severance EG, Gressitt KL, Stallings CR et al. (2016) **Candida albicans exposures, sex specificity and cognitive deficits in schizophrenia and bipolar disorder**. npj Schizophrenia, 2, 16018 DOI: 10.1038/npjSchz.2016.18 <http://www.nature.com/articles/npjSchz201618>  
"In conclusion, sex-specific C. albicans immune responses were evident in psychiatric disorder subsets. Inquiry regarding C. albicans infection or symptoms may expedite amelioration of this treatable comorbid condition".

→ **Fluconazol** <http://www.kabilahsystems.de/fluconazol.pdf>

## Eiweiss, proteins

→ **Prione, prions** <http://www.erlebnishaft.de/prione.pdf>

→ **Washington HA (2015) Infectious Madness: The Surprising Science of How We "Catch" Mental Illness**. Little, Brown & Company. 292 pp.  
<https://www.amazon.de/Infectious-Madness-Surprising-Science-Illness/dp/0316277800>

→ **Bransfield R (2016) MICROBES AND MENTAL ILLNESS**  
[https://www.researchgate.net/publication/301204217\\_Microbes\\_and\\_Mental\\_Illness](https://www.researchgate.net/publication/301204217_Microbes_and_Mental_Illness)

→ **Marke J (2016) Lyme and Tick-borne Disease and Psychiatric Illness**

## Bildgebende Verfahren, imaging procedures

**Strakowski SM, DelBello MP, Sax KW et al. (1999) Brain magnetic resonance imaging of structural abnormalities in bipolar disorder**. Arch Gen Psychiatry. 56(3), 254-60.  
<https://www.ncbi.nlm.nih.gov/pubmed/10078503>

**Clark L (2008) Cognitive neuroscience and brain imaging in bipolar disorder**. Dialogues Clin Neurosci. 2008 Jun; 10(2): 153–165. PMID: PMC3181872  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3181872/>

**Amen DG, Trujillo M, Newberg A et al. (2011) Brain SPECT Imaging in Complex Psychiatric Cases: An Evidence-Based, Underutilized Tool**. Open Neuroimag J. 5, 40–48. Published online 2011 Jul 28. doi: 10.2174/1874440001105010040 PMID: PMC3149839 PMID: 21863144  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3149839/>

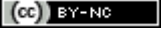
**C P Johnson CP, R L Follmer RL, I Oguz I et al. (2015) Brain abnormalities in bipolar disorder detected by quantitative T1-weighted mapping**. Molecular Psychiatry, DOI: 10.1038/mp.2014.157

→ **NEURO-COGNITIVE LYME DISEASE** <http://www.lymeinfo.net/neuropsych.html>

## Therapie, therapy

**Rosenblat JD, McIntyre RS (2017) Efficacy and tolerability of minocycline for depression: A systematic review and meta-analysis of clinical trials**. J Affect Disord. 227, 219-225. doi: 10.1016/j.jad.2017.10.042. [Epub ahead of print]  
<https://www.ncbi.nlm.nih.gov/pubmed/29102836>

→ **Minocycline in psychiatric patients**.  
[https://www.google.de/search?q=Minocycline+as+adjunct+therapy+for+a+male+patient+with+deficit+schizophrenia&hl=de&btnG=Google+Search&qws\\_rd=ssl](https://www.google.de/search?q=Minocycline+as+adjunct+therapy+for+a+male+patient+with+deficit+schizophrenia&hl=de&btnG=Google+Search&qws_rd=ssl)

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