

## SUPPLEMENTARY.

### Appendix S1. Publications citing Lapin's article "Intensification of the central serotonergic processes as a possible determinant of the thymoleptic effect"

#### Studies on the etiology and pathogenesis of mental disorders

1. Carroll BJ. Monoamine precursors in the treatment of depression. *Clin Pharmacol Ther.* 1971 Sep-Oct;12(5):743-61. doi: 10.1002/cpt1971125743
2. López-Arnau R, Camarasa J, Carbó ML, Nadal-Gratacós N, Puigseslloses P, Espinosa-Velasco M, Urquiza E, Escubedo E, Pubill D. 3,4-Methylenedioxy methamphetamine, synthetic cathinones and psychedelics: From recreational to novel psychotherapeutic drugs. *Front Psychiatry.* 2022 Oct 3;13:990405. doi: 10.3389/fpsyg.2022.990405
3. Yeung CS, Beck T, Posma JM. MetaboLiSTM and TABoLiSTM: Two Deep Learning Algorithms for Metabolite Named Entity Recognition. *Metabolites.* 2022 Mar 22;12(4):276. doi: 10.3390/metabolite12040276
4. Zhao YF, Verkhratsky A, Tang Y, Illes P. Astrocytes and major depression: The purinergic avenue. *Neuropharmacology.* 2022 Dec 1;220:109252. doi: 10.1016/j.neuropharm.2022.109252
5. Svensson JE, Tiger M, Plavén-Sigray P, Halldin C, Schain M, Lundberg J. In vivo correlation of serotonin transporter and 1B receptor availability in the human brain: a PET study. *Neuropsychopharmacology.* 2022 Sep;47(10):1863-1868. doi: 10.1038/s41386-022-01369-3
6. Liu ZF, Sylivris A, Gordon M, Sundram S. The association between tryptophan levels and postpartum mood disorders: a systematic review and meta-analysis. *BMC Psychiatry.* 2022 Aug 8;22(1):539. doi: 10.1186/s12888-022-04178-6 7.
7. Chen LM, Bao CH, Wu Y, Liang SH, Wang D, Wu LY, Huang Y, Liu HR, Wu HG. Tryptophan-kynurenine metabolism: a link between the gut and brain for depression in inflammatory bowel disease. *J Neuroinflammation.* 2021 Jun 14;18(1):135. doi: 10.1186/s12974-021-02175-2
8. Clinton SM, Shupe EA, Glover ME, Unroe KA, McCoy CR, Cohen JL, Kerman IA. Modeling heritability of temperamental differences, stress reactivity, and risk for anxiety and depression: Relevance to research domain criteria (RDoC). *Eur J Neurosci.* 2022 May;55(9-10):2076-2107. doi: 10.1111/ejn.15158
9. Kovalzon MV. Serotonin, Sleep and Depression: A Hypothesis. *Serotonin and the CNS - New Developments in Pharmacology and Therapeutics.* 2021 April 19. doi: 10.5772/intechopen.96525
10. Zádor F, Nagy-Grócz G, Kekesi G, Dvorácskó S, Szűcs E, Tömböly C, Horvath G, Benyei S, Vécsei L. Kynurenes and the Endocannabinoid System in Schizophrenia: Common Points and Potential Interactions. *Molecules.* 2019 Oct 15;24(20):3709. doi: 10.3390/molecules24203709
11. Pawłowski T, Pawłak D, Inglot M, Zalewska M, Marciniak D, Bugajska J, Janocha-Litwin J, Malyszczak K. The role of anthranilic acid in the increase of depressive symptoms and major depressive disorder during treatment for hepatitis C with pegylated interferon- $\alpha$ 2a and oral ribavirin. *J Psychiatry Neurosci.* 2021 Jan 18;46(1):E166-E175. doi: 10.1503/jpn.190139
12. Arteaga-Henriquez G, Burger B, Weidinger E, Grosse L, Moll N, Schuetze G, Schwarz M, Wijkhuijs A, Op de Beeck G, Berghmans R, Versnel MA, Arolt V, Müller N, Drexhage HA. Activation and deactivation steps in the tryptophan breakdown pathway in major depressive disorder: A link to the monocyte inflammatory state of patients. *Prog Neuropsychopharmacol Biol Psychiatry.* 2021 Apr 20;107:110226. doi: 10.1016/j.pnpbp.2020.110226
13. Oxenkrag G, Summergrad P. Peripheral kynurenes as biomarkers and targets for prevention and treatment of psychiatric conditions associated with SARS-CoV-2 infection. *Personalized Medicine in Psychiatry.* 2021 November-December;29:100088. doi: 10.1016/j.pmp.2021.100088
14. Skorobogatov K, De Picker L, Verkerk R, Coppens V, Leboyer M, Müller N and Morrens M. Brain Versus Blood: A Systematic Review on the Concordance Between Peripheral and Central Kynurene Pathway Measures in Psychiatric Disorders. *Front. Immunol.* 2021;12:716980. doi: 10.3389/fimmu.2021.716980
15. Hennion V, Etain B, Bellivier F. Blood-brain barrier's interplay with peripheral and central inflammation as a pathophysiological mechanism of bipolar disorders. Editor(s): Quevedo J and Carvalho AF, Eduard Vieta E. *Neurobiology of Bipolar Disorder,* Academic Press, 2021:143-153 doi:10.1016/B978-0-12-819182-8.00013-2.
16. Steiner J, Dobrowolny H, Guest PC, Bernstein HG, Fuchs D, Roeser J, Summergrad P, Oxenkrag GF. Plasma Anthranilic Acid and Leptin Levels Predict HAM-D Scores in Depressed Women. *Int J Tryptophan Res.* 2021 May 19;14:11786469211016474. doi: 10.1177/11786469211016474
17. Selvaraj S, Brambilla P, Soares JC. Brain Imaging Methods in Mood Disorders. In: Selvaraj S, Brambilla P, Soares JC, editors. *Mood Disorders: Brain Imaging and Therapeutic Implications.* Cambridge: Cambridge University Press; 2021:1-6. doi: 10.1017/9781108623018.002.
18. Jahn K, Kurz B, Sinke C, Kneer J, Riemer O, Ponseti J, Walter M, Beier KM, Walter H, Frieling H, Schiffer B, Kruger THC. Serotonin system-associated genetic and epigenetic changes in pedophilia and child sexual offending. *J Psychiatr Res.* 2021 Nov 27;145:60-69. doi: 10.1016/j.jpsychires.2021.11.042
19. Małgorzata P, Paweł K, Iwona ML, Brzostek T, Andrzej P. Glutamatergic dysregulation in mood disorders: opportunities for the discovery of novel drug targets. *Expert Opin Ther Targets.* 2020 Dec;24(12):1187-1209. doi: 10.1080/14728222.2020.1836160
20. Amirdelfan K, Pope JE, Gunn J, Hill MM, Cotten BM, Beresh JE, Dobecki D, Miller N, Mehta P, Girardi G, Deer TR. Clinical Validation of a Multi-Biomarker Assay for the Evaluation of Chronic Pain Patients in a Cross-Sectional, Observational Study. *Pain Ther.* 2020 Dec;9(2):511-529. doi: 10.1007/s40122-020-00175-3
21. Cocchi M, Traina G. Tryptophan and Membrane Mobility as Conditioners and Brokers of Gut-Brain Axis in Depression. *Appl Sci.* 2020;10(14):4933. doi:10.3390/app10144933.
22. Baharikhoob P, Kolla NJ. Microglial Dysregulation and Suicidality: A Stress-Diathesis Perspective. *Front Psychiatry.* 2020 Aug 11; 11:781. doi: 10.3389/fpsyg.2020.00781

23. Kovalzon VM. A modern view on the serotonin theory of depression. *Russian Neurological Journal*. 2020;25(3):40-44. doi: 10.30629/2658-7947-2020-25-3-40-44
24. Rybakowski JK. The psychopathological potential of early life stress. *World J Biol Psychiatry*. 2020 Sep;21(7):491-492. doi: 10.1080/15622975.2020.1816702
25. Rose M, Filiatreault A, Guénette J, Williams A, Thomson EM. Ozone increases plasma kynurenone-tryptophan ratio and impacts hippocampal serotonin receptor and neurotrophic factor expression: Role of stress hormones. *Environ Res*. 2020 Jun;185:109483. doi: 10.1016/j.envres.2020.109483
26. Bechtel W. Rethinking psychiatric disorders in terms of heterarchical networks of control mechanisms. *Philosophical Issues in Psychiatry V*, 2018; An earlier draft of this chapter was presented at the aforementioned conference. Cambridge University Press, 2020.
27. Demin KA, Sysoev M, Chernysh MV, Savva AK, Koshiba M, Wappler-Guzzetta EA, Song C, De Abreu MS, Leonard B, Parker MO, Harvey BH, Tian L, Vasar E, Strelakova T, Amstislavskaya TG, Volgin AD, Alpyshov ET, Wang D, Kalueff AV. Animal models of major depressive disorder and the implications for drug discovery and development. *Expert Opin Drug Discov*. 2019 Apr;14(4):365-378. doi: 10.1080/17460441.2019.1575360
28. Reshetnikov MM. Methodological Background and Foundations of the Non-Material Theory of the Psyche. *Modern Psychology* 2.1 (3) (2019): 62-75.
29. Messaoud A, Mensi R, Douki W, Neffati F, Najjar MF, Gobbi G, Comai S. Reduced peripheral availability of tryptophan and increased activation of the kynurenine pathway and cortisol correlate with major depression and suicide. *The World Journal of Biological Psychiatry*. 2018;20(9): 703-711. doi: 10.1080/15622975.2018.1468031
30. Ghasemi M, Claunch J, Niu K. Pathologic role of nitrergic neurotransmission in mood disorders. *Prog Neurobiol*. 2019 Feb;173:54-87. doi: 10.1016/j.pnurobio.2018.06.002
31. Ghasemi M. Nitric oxide: Antidepressant mechanisms and inflammation. *Adv Pharmacol*. 2019;86:121-152. doi: 10.1016/bs.apha.2019.04.004
32. Caspani G, Kennedy S, Foster JA, Swann J. Gut microbial metabolites in depression: understanding the biochemical mechanisms. *Microb Cell*. 2019 Sep 27;6(10):454-481. doi: 10.15698/mic2019.10.693
33. Wang B, Lian YJ, Su WJ, Liu LL, Li JM, Jiang CL, Wang YX. Fr-HMGB1 and ds-HMGB1 activate the kynurenine pathway via different mechanisms in association with depressive-like behavior. *Molecular Medicine Reports* 20.1 (2019): 359-367.
34. Pereira VS, Hiroaki-Sato VA. A brief history of antidepressant drug development: from tricyclics to beyond ketamine. *Acta Neuropsychiatr*. 2018 Dec;30(6):307-322. doi:10.1017/neu.2017.39
35. Reshetnikov M. Non-Material Theory of the Psyche: Historical Prerequisites, Argumentation and Practical Implications. *Psychol Psychology Res Int* 2018 Jan, 3(5): 000169. doi: 10.23880/PPRIJ-16000169
36. Liu D, Ray B, Neavin DR, Zhang J, Athreya AP, Biernacka JM, Bobo WV, Hall-Flavin DK, Skime MK, Zhu H, Jenkins GD, Batzler A, Kalari KR, Boakye-Agyeman F, Matson WR, Bhasin SS, Mushiroda T, Nakamura Y, Kubo M, Iyer RK, Wang L, Frye MA, Kaddurah-Daouk R, Weinshilboum RM. Beta-defensin 1, aryl hydrocarbon receptor and plasma kynurenone in major depressive disorder: metabolomics-informed genomics. *Transl Psychiatry*. 2018 Jan 10;8(1):10. doi: 10.1038/s41398-017-0056-8
37. Leonard BE. Chronic inflammation and resulting neuroprogression in major depression. *Understanding Depression: Volume 1. Biomedical and Neurobiological Background*. 2017: 191-196.
38. Neiens P, De Simone A, Höfner G, Wanner KT. Simultaneous Multiple MS Binding Assays for the Dopamine, Norepinephrine, and Serotonin Transporters. *ChemMedChem*. 2018 Mar 6;13(5):453-463. doi: 10.1002/cmdc.201700737
39. Neiens P, De Simone A, Ramershoven A, Höfner G, Allmendinger L, Wanner KT. Development and validation of an LC-ESI-MS/MS method for the quantification of D-84, reboxetine and citalopram for their use in MS Binding Assays addressing the monoamine transporters hDAT, hSERT and hNET. *Biomedical Chromatography*. 2018;32:e4231. doi: 10.1002/bmc.423
40. Halaris A. Neuroinflammation and neurotoxicity contribute to neuroprogression in neurological and psychiatric disorders. *Future Neurology*. 2018;13;2: 59-69.
41. Erokhov PA, Lyupina YV, Radchenko AS, Kolacheva AA, Nikishina YO, Sharova NP. Detection of active proteasome structures in brain extracts: proteasome features of August rat brain with violations in monoamine metabolism." *Oncotarget*. 2017;8;41:70941.
42. Stavrakakis N, Oldenhinkel AJ, Nederhof E, Oude Voshaar RC, Verhulst FC, Ormel J, de Jonge P. Plasticity genes do not modify associations between physical activity and depressive symptoms. *Health Psychology*. 2017;32(7):785-792. doi: 10.1037/a0030111
43. Neiens P. Simultaneous multiple MS binding assays targeting the monoamine transporters hDAT, hNET, and hSERT. *Diss. Imu*. 2017.
44. Savitz J. Role of Kynurene Metabolism Pathway Activation in Major Depressive Disorders. *Curr Top Behav Neurosci*. 2017;31:249-267. doi: 10.1007/7854\_2016\_12
45. Liu B, Liu J, Wang M, Zhang Y, Li L. From Serotonin to Neuroplasticity: Evolvement of Theories for Major Depressive Disorder. *Front Cell Neurosci*. 2017 Sep 28;11:305. doi: 10.3389/fncel.2017.00305
46. Leonard BE. Inflammation and depression: a causal or coincidental link to the pathophysiology? *Acta Neuropsychiatr*. 2018 Feb;30(1):1-16. doi: 10.1017/neu.2016.69
47. Wurfel BE, Drevets WC, Bliss SA, McMillin JR, Suzuki H, Ford BN, Morris HM, Teague TK, Dantzer R, Savitz JB. Serum kynurenic acid is reduced in affective psychosis. *Transl Psychiatry*. 2017 May 2;7(5):e1115. doi: 10.1038/tp.2017.88
48. da Silva Araújo T, Chaves Filho AJM, Monte AS, de Góis Queiroz AI, Cordeiro RC, Machado MDJS, Lima RDF, de Lucena DF, Maes M, Macêdo D. Reversal of schizophrenia-like symptoms and immune alterations in mice by immunomodulatory drugs. *Journal of Psychiatric Research*. 2017;84:49-58.
49. Jeon SW, Kim YK. Inflammation-induced depression: Its pathophysiology and therapeutic implications. *J Neuroimmunol*. 2017 Dec 15;313:92-98. doi: 10.1016/j.jneuroim.2017.10.016
50. Wigner P, Czarny P, Galecki P, Sliwinski T. Oxidative and Nitrosative Stress as Well as the Tryptophan Catabolites Pathway in Depressive Disorders. 2017;29(4):394-400.
51. Macedo D, Filho AJMC, Soares de Sousa CN, Quevedo J, Barichello T, Júnior HVN, Freitas de Lucena D. Antidepressants, antimicrobials or both? Gut microbiota dysbiosis in depression and possible implications of the antimicrobial effects of antidepressant drugs for antidepressant effectiveness. *J Affect Disord*. 2017 Jan 15;208:22-32. doi: 10.1016/j.jad.2016.09.012
52. Tang SW, Helmeite DM, Leonard BE. Neurodegeneration, Neuroregeneration, and Neuroprotection in Psychiatric Disorders. *Mod Trends Pharmacopsychiatry*. 2017;31:107-123. doi: 10.1159/000470811

53. Veldman ER, Svedberg MM, Svenningsson P, Lundberg J. Distribution and levels of 5-HT1B receptors in anterior cingulate cortex of patients with bipolar disorder, major depressive disorder and schizophrenia - An autoradiography study. *Eur Neuropsychopharmacol.* 2017 May;27(5):504-514. doi: 10.1016/j.euroneuro.2017.02.011
54. Sotelo JL, Nemeroff CB. Depression as a systemic disease. Personalized medicine in psychiatry. 2017;1:11-25.
55. Goltz A, Janowitz D, Hannemann A, Nauck M, Hoffmann J, Seyfart T, Völzke H, Terock J, Grabe HJ. Association of Brain-Derived Neurotrophic Factor and Vitamin D with Depression and Obesity: A Population-Based Study. *Neuropsychobiology*; 2018 August 16; 76 (4): 171–181. doi: 10.1159/000489864
56. Oxenkrug G. Low Nitric Oxide and High C-Reactive Protein in Depression: Not a Paradox! *The Journal of Clinical Psychiatry*. 2017;78(6):10889.
57. Gross C, Valentão P, Andrade PB. Depressive Disorders: Prevalence, Costs, and Theories. In: Gross C, (eds) *Herbal Medicine in Depression*. Springer, Cham. 2016 May 31; 1-41. [https://doi.org/10.1007/978-3-319-14021-6\\_1](https://doi.org/10.1007/978-3-319-14021-6_1)
58. Eskelund A, Budac DP, Sanchez C, Elfving B, Wegener G. Female Flinders Sensitive Line rats show estrous cycle-independent depression-like behavior and altered tryptophan metabolism. *Neuroscience*. 2016 Aug 4;329:337-48. doi: 10.1016/j.neuroscience.2016.05.024
59. Won E, Kim YK. Stress, the Autonomic Nervous System, and the Immune-kynurene Pathway in the Etiology of Depression. *Curr Neuropharmacol.* 2016;14(7):665-73. doi: 10.2174/1570159x14666151208113006
60. López-Muñoz F, Álamo C, Álamo. History of the Discovery of Antidepressant Drugs. 2016;365-383
61. Näslund J. On the anxiogenic influence of serotonin. *Diss.* 2015
62. Réus GZ, Jansen K, Titus S, Carvalho AF, Gabbay V, Quevedo J. Kynurene pathway dysfunction in the pathophysiology and treatment of depression: Evidences from animal and human studies. *J Psychiatr Res.* 2015 Sep;68:316-28. doi: 10.1016/j.jpsychires.2015.05.007
63. Benson C, Mifflin K, Kerr B, Jesudasan SJ, Dursun S, Baker G. Biogenic Amines and the Amino Acids GABA and Glutamate: Relationships with Pain and Depression. *Mod Trends Pharmacopsychiatry*. 2015;30:67-79. doi: 10.1159/000435933
64. Lemieux GA, Cunningham KA, Lin L, Mayer F, Werb Z, Ashrafi K. Kynurenic acid is a nutritional cue that enables behavioral plasticity. *Cell*. 2015 Jan 15;160(1-2):119-31. doi: 10.1016/j.cell.2014.12.028
65. Davis I, Liu A. What is the tryptophan kynurene pathway and why is it important to neurotherapeutics? *Expert Rev Neurother.* 2015;15(7):719-21. doi: 10.1586/14737175.2015.1049999
66. Thompson SM, Kallarackal AJ, Kvarta MD, Van Dyke AM, LeGates TA, Cai X. An excitatory synapse hypothesis of depression. *Trends Neurosci.* 2015 May;38(5):279-94. doi: 10.1016/j.tins.2015.03.003
67. Nikkheslat N, Zunszain PA, Horowitz MA, Barbosa IG, Parker JA, Myint AM, Schwarz MJ, Tylee AT, Carvalho LA, Pariante CM. Insufficient glucocorticoid signaling and elevated inflammation in coronary heart disease patients with comorbid depression. *Brain Behav Immun.* 2015 Aug;48:8-18. doi: 10.1016/j.bbi.2015.02.002. Epub 2015 Feb 12. PMID: 25683698.
68. Teraishi T, Hori H, Sasayama D, Matsuo J, Ogawa S, Ota M, Hattori K, Kajiwara M, Higuchi T, Kunugi H. (13)C-tryptophan breath test detects increased catabolic turnover of tryptophan along the kynurene pathway in patients with major depressive disorder. *Sci Rep.* 2015 Nov 3;5:15994. doi: 10.1038/srep15994.
69. Myint AM, Schwarz MJ. Cytokines and Related Metabolic Markers in Adult Neuropsychiatric Disorders: Possible Roles in Clinical Application. *Immunology and Psychiatry: From Basic Research to Therapeutic Interventions*. 2015;201-227.
70. Wang X, Sundquist K, Hedelin A, Palmér K, Memon AA, Sundquist J. Circulating microRNA-144-5p is associated with depressive disorders. *Clin Epigenetics*. 2015 Jul 22;7(1):69. doi: 10.1186/s13148-015-0099-8
71. Grimm SH, Höfner G, Wanner KT. MS Binding Assays for the Three Monoamine Transporters Using the Triple Reuptake Inhibitor (1R,3S)-Indatraline as Native Marker. *ChemMedChem*. 2015 Jun;10(6):1027-39. doi: 10.1002/cmdc.201500084
72. Leonard BE. Depression, the Metabolic Syndrome and Neurodegeneration. *Immunology and psychiatry: from basic research to therapeutic interventions*. 2015;229-241.
73. Grimm SH, Höfner G, Wanner KT. Development and validation of an LC-ESI-MS/MS method for the triple reuptake inhibitor indatraline enabling its quantification in MS Binding Assays. *Anal Bioanal Chem.* 2015 Jan;407(2):471-85. doi: 10.1007/s00216-014-8312-8
74. López-Muñoz F, Álamo C. Neurobiology of Monoaminergic Neurotransmission and Antidepressants. Melatonin and melatonergic drugs in clinical practice. New Delhi: Springer India. 2013;321-341.
75. Myint AM, Kim YK. Network beyond IDO in psychiatric disorders: revisiting neurodegeneration hypothesis. *Prog Neuropsychopharmacol Biol Psychiatry*. 2014 Jan 3;48:304-13. doi: 10.1016/j.pnpbp.2013.08.008
76. Quak J, Doornbos B, Roest AM, Duivis HE, Vogelzangs N, Nolen WA, Penninx BW, Kema IP, de Jonge P. Does tryptophan degradation along the kynurene pathway mediate the association between pro-inflammatory immune activity and depressive symptoms? *Psychoneuroendocrinology*. 2014 Jul;45:202-10. doi: 10.1016/j.psyneuen.2014.03.013
77. Oxenkrug G, Turski W, Zgrajka W, Weinstock J, Ruthazer R, Summergrad P. Disturbances of Tryptophan Metabolism and Risk of Depression in HCV Patients Treated with IFN-Alpha. *J Infect Dis Ther.* 2014 Feb 25;2(2):131. doi: 10.4172/2332-0877.1000131
78. Tiger M. PET studies of the serotonin system in major depression and its treatment [Internet]. Karolinska Institutet; 2014 [cited 2025May27]. Available from: <https://hdl.handle.net/10616/42184>
79. Badawy AA. Tryptophan: the key to boosting brain serotonin synthesis in depressive illness. *J Psychopharmacol*. 2013 Oct;27(10):878-93. doi: 10.1177/0269881113499209
80. Young SN. The effect of raising and lowering tryptophan levels on human mood and social behaviour. *Philos Trans R Soc Lond B Biol Sci.* 2013 Feb 25;368(1615):20110375. doi: 10.1098/rstb.2011.0375
81. Hennings A, Schwarz MJ, Riemer S, Staaf TM, Selberdinger VB, Rief W. Exercise affects symptom severity but not biological measures in depression and somatization - results on IL-6, neopterin, tryptophan, kynurene and 5-HIAA. *Psychiatry Res.* 2013 Dec 30;210(3):925-33. doi: 10.1016/j.psychres.2013.09.018
82. Neale SA, Copeland CS, Uebel VN, Thomson FJ, Salt TE. Modulation of hippocampal synaptic transmission by the kynurene pathway member xanthurenic acid and other VGLUT inhibitors. *Neuropsychopharmacology*. 2013 May;38(6):1060-7. doi: 10.1038/npp.2013.4
83. Shen YB, Voilqué G, Kim JD, Odle J, Kim SW. Effects of increasing tryptophan intake on growth and physiological changes in nursery pigs. *J Anim Sci.* 2012 Jul;90(7):2264-75. doi: 10.2527/jas.2011-4203

84. Potter WZ. Psychotherapeutic drugs and biogenic amines. Current concepts and therapeutic implications. *Drugs*. 1984 Aug;28(2):127-43. doi: 10.2165/00003495-198428020-00003
85. Jacobsen JP, Medvedev IO, Caron MG. The 5-HT deficiency theory of depression: perspectives from a naturalistic 5-HT deficiency model, the tryptophan hydroxylase 2Arg439His knockin mouse. *Philos Trans R Soc Lond B Biol Sci.* 2012 Sep 5;367(1601):2444-59. doi: 10.1098/rstb.2012.0109
86. Getz A, Xu F, Syed N. Antidepressant Pharmacotherapy – Do the Benefits Outweigh the Risks. *Treatments and Implications*, ed. L. L'Abate (London: IntechOpen). 2012:331-354.
87. Mouillet-Richard S, Baudry A, Launay JM, Kellermann O. MicroRNAs and depression. *Neurobiol Dis.* 2012 May;46(2):272-8. doi: 10.1016/j.nbd.2011.12.035
88. Kerman IA, Bernard R, Bunney WE, Jones EG, Schatzberg AF, Myers RM, Barchas JD, Akil H, Watson SJ and Thompson RC (2012) Evidence for transcriptional factor dysregulation in the dorsal raphe nucleus of patients with major depressive disorder. *Front. Neurosci.* 6:135. doi: 10.3389/fnins.2012.00135
89. Yang J, Li W, Zhou Z, Yang C. Is Ro 61-8048 a potential fast-acting antidepressant? *J Neurol Sci.* 2012 Apr 15;315(1-2):180; author reply 181-2. doi: 10.1016/j.jns.2011.11.037
90. Shitut M. Comparison of membrane permeabilities of trace amines and corresponding neurotransmitters. Diss. University of Saskatchewan, 2012
91. Wierońska J, Palucha-Poniewiera A, Nowak G, Pilc A. Depression Viewed as a GABA/Glutamate Imbalance in the Central Nervous System. Research and Treatment Approaches to Affective Disorders. InTech. doi: 10.5772/31450
92. Oxenkrug G. Interferon-gamma - Inducible Inflammation: Contribution to Aging and Aging-Associated Psychiatric Disorders. *Aging Dis.* 2011 Dec;2(6):474-86
93. Sato VAH. Participação da serotonina no efeito tipo-antidepressivo induzido pela inibição da nNOS no hipocampo de ratos. Diss, 2011.
94. Myint AM, Schwarz MJ, Müller N. The role of the kynureneine metabolism in major depression. *J Neural Transm (Vienna)*. 2012 Feb;119(2):245-51. doi: 10.1007/s00702-011-0741-3
95. Permoda-Osip A, Rybakowski J. Koncepcja glutaminergiczna chorób afektywnych [Glutamatergic conception of mood disorders]. *Psychiatr Pol.* 2011 Nov-Dec;45(6):875-88. Polish
96. Myint AM, Schwarz MJ. Interaction Between Inflammatory State and Neurochemical Changes in Major Psychiatric Disorders. *Psychiatric Disorders - Worldwide Advances*. InTech; 2011. doi: 10.5772/25532
97. Steyn SF. The effect of early-life exposure of stress-sensitive rats to the serotonin-norepinephrine reuptake inhibitor Vanlafaxine on behaviour in adulthood. Diss. North-West University, 2011.
98. Vines A. O papel do óleo de peixe sobre receptores 5-HT1A e a expressão do BDNF no hipocampo e córtex de ratos : um possível mecanismo antidepressivo. Diss, 2011.
99. Oxenkrug GF. Interferon-gamma-inducible kynurenenes/pteridines inflammation cascade: implications for aging and aging-associated psychiatric and medical disorders. *J Neural Transm (Vienna)*. 2011 Jan;118(1):75-85. doi: 10.1007/s00702-010-0475-7
100. Oxenkrug G, Perianayagam M, Mikolich D, Requintina P, Shick L, Ruthazer R, Zucker D, Summergrad P. Interferon-gamma (+874) T/A genotypes and risk of IFN-alpha-induced depression. *J Neural Transm (Vienna)*. 2011 Feb;118(2):271-4. doi: 10.1007/s00702-010-0525-1
101. Mitchell ND, Baker GB. An update on the role of glutamate in the pathophysiology of depression. *Acta Psychiatr Scand.* 2010 Sep;122(3):192-210. doi: 10.1111/j.1600-0447.2009.01529.x
102. Nakic M, Krystal MH, Bhagwagar Z. Neurotransmitter Systems in Bipolar Disorder. In *Bipolar Disorder* (eds Yatham LN and Maj M). doi: 10.1002/9780470661277.ch16
103. Golan M, Schreiber G, Avissar S. Regulation of G Protein Receptor Coupling, Mood Disorders and Mechanism of Action of Antidepressants. In: Sitaramayya A (eds) *Signal Transduction: Pathways, Mechanisms and Diseases*. Springer, Berlin, Heidelberg. doi: 10.1007/978-3-642-02112-1\_4
104. Pandey GN, Dwivedi Y. Peripheral Biological Markers for Mood Disorders. In: Ritsner MS (eds) *The Handbook of Neuropsychiatric Biomarkers, Endophenotypes and Genes*. Springer, Dordrecht. doi: 10.1007/978-1-4020-9838-3\_9
105. Raitala A. Clinical implications and genetic regulation of indoleamine 2,3-dioxygenase serum activity. Diss, 2009
106. Williams E, Stewart-Knox B, McConville C, Bradbury I, Armstrong NC, McNulty H. Folate status and mood: is there a relationship? *Public Health Nutrition.* 2008;11(2):118-123. doi:10.1017/S1368980007000031
107. Nag S, Balaji J, Madhu PK, Maiti S. Intermolecular association provides specific optical and NMR signatures for serotonin at intravesicular concentrations. *Biophys J.* 2008 May 15;94(10):4145-53. doi: 10.1529/biophysj.107.121384
108. Tenner K. Funktionelle Charakterisierung der humanen Tryptophanhydroxylase 2. Diss, 2007.
109. Oxenkrug GF. Genetic and hormonal regulation of tryptophan kynurenine metabolism: implications for vascular cognitive impairment, major depressive disorder, and aging. *Ann N Y Acad Sci.* 2007 Dec;1122:35-49. doi: 10.1196/annals.1403.003
110. Dranovsky A and Hen R. Antidepressant Treatment and Hippocampal Neurogenesis: Monoamine and Stress Hypotheses of Depression Converge. In *Handbook of Contemporary Neuropharmacology* (eds Sibley DR, Kuhar M, Hanin I and Skolnick P). doi: 10.1002/9780470101001.hcn020
111. Wray NR, James MR, Mah SP, Nelson M, Andrews G, Sullivan PF, Montgomery GW, Birley AJ, Braun A, Martin NG. Anxiety and comorbid measures associated with PLXNA2. *Arch Gen Psychiatry.* 2007 Mar;64(3):318-26. doi: 10.1001/archpsyc.64.3.318
112. Kempisty B, Sikora J, Lianeri M, Szczepankiewicz A, Czerski P, Hauser J, Jagodzinski PP. MTHFD 1958G>A and MTR 2756A>G polymorphisms are associated with bipolar disorder and schizophrenia. *Psychiatr Genet.* 2007 Jun;17(3):177-81. doi: 10.1097/YPG.0b013e328029826f
113. Huys QJ. Reinforcers and control : towards a computational aetiology of depression. University of London, University College London (United Kingdom). 2007
114. Robichaud M, Debonnel G. Allopregnanolone and ganaxolone increase the firing activity of dorsal raphe nucleus serotonergic neurons in female rats. *Int J Neuropsychopharmacol.* 2006 Apr;9(2):191-200. doi: 10.1017/S146114570500595X
115. Kudryavtseva NN. Agonistic behavior: a model, experimental studies, and perspectives. *Neurosci Behav Physiol.* 2000 May-Jun;30(3):293-305. doi: 10.1007/BF02471782
116. Okada M, Tran TTT. Effect of chronic administration of ostruthin on depression-like behavior in chronically stressed mice. *IBRO Neurosci Rep.* 2024 May 22;16:622-628. doi: 10.1016/j.ibrneur.2024.05.009
117. Tönnisaar M. Stress and sociability: individual differences and their neurochemical substrate. artu University Press. 2006;19.
118. Burchett SA, Hicks TP. The mysterious trace amines: protean neuromodulators of synaptic transmission in mammalian brain. *Prog Neurobiol.* 2006 Aug;79(5-6):223-46. doi: 10.1016/j.pneurobio.2006.07.003

119. Avissar S, Schreiber G. The involvement of G proteins and regulators of receptor-G protein coupling in the pathophysiology, diagnosis and treatment of mood disorders. *Clin Chim Acta.* 2006 Apr;366(1-2):37-47. doi: 10.1016/j.cca.2005.11.003
120. Williams E, Stewart-Knox B, Helander A, McConville C, Bradbury I, Rowland I. Associations between whole-blood serotonin and subjective mood in healthy male volunteers. *Biol Psychol.* 2006 Feb;71(2):171-4. doi: 10.1016/j.biopsyncho.2005.03.002
121. Lopatina NG, Dolotovskaya LZ. Effect of tryptophan and its metabolites on conditioned reflex activity of the honey bee. *Neurosci Behav Physiol.* 1987 Jul-Aug;17(4):332-9. doi: 10.1007/BF01183064
122. Loder MK. Generation and analysis of transgenic mice over-expressing the 5-hydroxytryptamine (5-HT) transporter. *Annexe Thesis Digitisation Project 2018 Block 17.* 2005.
123. Wood MD, Thomas DR, Watson JM. Therapeutic potential of serotonin antagonists in depressive disorders. *Expert Opin Investig Drugs.* 2002 Apr;11(4):457-67. doi: 10.1517/13543784.11.4.457
124. Ogren SO, Fuxe K, Agnati LF, Gustafsson JA, Jonsson G, Holm AC. Reevaluation of the indoleamine hypothesis of depression. Evidence for a reduction of functional activity of central 5-HT systems by antidepressant drugs. *J Neural Transm.* 1979;46(2):85-103. doi: 10.1007/BF01250331
125. Milak MS, Ogden RT, Vinocur DN, Van Heertum RL, Cooper TB, Mann JJ, Parsey RV. Effects of tryptophan depletion on the binding of [<sup>11</sup>C]-DASB to the serotonin transporter in baboons: response to acute serotonin deficiency. *Biol Psychiatry.* 2005 Jan 1;57(1):102-6. doi: 10.1016/j.biopsych.2004.09.026
126. Nuller YL. Some pathogenetic mechanisms and a classification of manic-depressive psychosis. *Neurosci Behav Physiol.* 1979 Oct-Dec;9(4):332-7. doi: 10.1007/BF01185051
127. Oxenkrug GF. The content and uptake of 5-HT by blood platelets in depressive patients. *J Neural Transm.* 1979;45(4):285-9. doi: 10.1007/BF01247145
128. Riederer P, Birkmayer W, Neumayer E, Ambrozi L, Linauer W. The daily rhythm of HVA, VMA, (VA) and 5-HIAA in depression-syndrome. *J Neural Transm.* 1974;35(1):23-45. doi: 10.1007/BF01245333
129. Schüle JM. Depressivität bei Patienten mit chronischer Hepatitis C vor und während der Behandlung mit Alpha-Interferon und Ribavirin. *Diss.* 2005.
130. Lingjaerde O. Inhibitory effect of clomipramine and related drugs on serotonin uptake in platelets: more complicated than previously thought. *Psychopharmacology (Berl).* 1979 Mar 28;61(3):245-9. doi: 10.1007/BF00432266
131. Kitayama IT, Otani M, Murase S. Contribution of the stress-induced degeneration of the locus coeruleus noradrenergic neurons to the pathophysiology of depression: a study on an animal model. *Acta Neuropsychiatr.* 2004 Aug;16(4):190-9. doi: 10.1111/j.0924-2708.2004.00092.x
132. Abramets II, Kuznetsov YV, Samoilovich IM. Changes of Properties of Glutamatergic Synapses in the Hippocampus of Rats with Behavioral Depression and Modeling of the Changes in vitro. *Neurophysiology* 33, 294–303 (2001). doi: 10.1023/A:1014387229566
133. Roslöff BN, Davis JM. Decrease in brain NE turnover after chronic DMI treatment; no effect with iprindole. *Psychopharmacology* 56, 335–341 (1978). doi: 10.1007/BF00432858
134. Häidkind R. Monoaminergic mechanisms in mood-associated behaviours and neurochemistry in rats. *Tartu University Press.* 2004;14.
135. Häidkind R, Eller M, Kask A, Harro M, Rinken A, Oreland L, Harro J. Increased behavioural activity of rats in forced swimming test after partial denervation of serotonergic system by parachloroamphetamine treatment. *Neurochem Int.* 2004 Oct;45(5):721-32. doi: 10.1016/j.neuint.2004.02.004
136. Pawłowski L, Melzacka M. Inhibition of head twitch response to quipazine in rats by chronic amitriptyline but not fluvoxamine or citalopram. *Psychopharmacology (Berl).* 1986;88(3):279-84. doi: 10.1007/BF00180825
137. Andreeva NI, Mashkovskii MD, Golovina SM, Gorkin SM. New antidepressive tetrindol — 2,3,3a,4,5,6-hexahydro-8-cyclohexyl-1N-pyrazino [3,2,1-j, k]carbozole. I. Pharmacological study of its central nervous system action. *Pharm Chem J* 1992;26, 209–218. doi: 10.1007/BF00772932
138. Elhwuegi AS. Central monoamines and their role in major depression. *Prog Neuropsychopharmacol Biol Psychiatry.* 2004 May;28(3):435-51. doi: 10.1016/j.pnpbp.2003.11.018
139. Bertilsson L, Asberg M, Thorén P. Differential effect of chlorimipramine and nortriptyline on cerebrospinal fluid metabolites of serotonin and noradrenaline in depression. *Eur J Clin Pharmacol.* 1974 Aug 23;7(5):365-8. doi: 10.1007/BF00558208
140. Benesová O, Náhunek K. Correlation between the experimental data from animal studies and therapeutical effects of antidepressant drugs. *Psychopharmacologia.* 1971;20(4):337-47. doi: 10.1007/BF00403565
141. Mitterauer B. Imbalance of glial-neuronal interaction in synapses: a possible mechanism of the pathophysiology of bipolar disorder. *Neuroscientist.* 2004 Jun;10(3):199-206. doi: 10.1177/107385403262248
142. Zemishlany Z, Munitz H, Rotman A, Wijsenbeek H. Increased uptake of serotonin by blood platelets from patients with bipolar primary affective disorder-bipolar type. *Psychopharmacology (Berl).* 1982;77(2):175-8. doi: 10.1007/BF00431944
143. Oksenkrug GF, Samsonova ML. Rol' tsentral'nykh serotoninergicheskikh protsessov v vozniknovenii fenomena vstriakhivanií golovy u myshei i krys pod vlianiem triptofana [Role of central serotoninergic processes in the occurrence of the phenomenon of head shaking in mice and rats due to tryptophan]. *Biull Eksp Biol Med.* 1971 Jul;72(7):55-7. Russian.
144. Möller, S.E., Kirk, L. & Fremming, K.H. Plasma amino acids as an index for subgroups in manic depressive psychosis: Correlation to effect of tryptophan. *Psychopharmacology.* 1976;49, 205–213. doi: 10.1007/BF00427292
145. Sublette ME, Russ MJ, Smith GS. Evidence for a role of the arachidonic acid cascade in affective disorders: a review. *Bipolar Disord.* 2004 Apr;6(2):95-105. doi: 10.1046/j.1399-5618.2003.00094.x
146. Berman RM, Sanacora G, Anand A, Roach LM, Fasula MK, Finkelstein CO, Wachen RM, Oren DA, Heninger GR, Charney DS. Monoamine depletion in unmedicated depressed subjects. *Biol Psychiatry.* 2002 Mar 15;51(6):469-73. doi: 10.1016/s0006-3223(01)01285-9
147. Harro J, Oreland L. Depression as a spreading adjustment disorder of monoaminergic neurons: a case for primary implication of the locus coeruleus. *Brain Res Brain Res Rev.* 2001 Dec;38(1-2):79-128. doi: 10.1016/s0165-0173(01)00082-0
148. Delgado PL, Moreno FA. Role of norepinephrine in depression. *J Clin Psychiatry.* 2000;61 Suppl 1:5-12.
149. D'Souza DC, Berman RM, Krystal JH, Charney DS. Symptom provocation studies in psychiatric disorders: scientific value, risks, and future. *Biol Psychiatry.* 1999 Oct 15;46(8):1060-80. doi: 10.1016/s0006-3223(99)00209-7

150. Raffa RB. Possible role(s) of neurokinins in CNS development and neurodegenerative or other disorders. *Neurosci Biobehav Rev.* 1998 Oct;22(6):789-813. doi: 10.1016/s0149-7634(97)00070-5
151. Palego L, Giromella A, Mazzoni M, Naccarato A, Marazziti D. Adenylyl Cyclase Activity and Mood Disorders: Preliminary Data in Human Brain Postmortem. *CNS Spectrums.* 1998;3(10):70-75.
152. Kudryavtseva NN, Damira FA. Behavioral and Physiological Markers of Experimental Depression Induced by Social Conflicts (DISC). *Aggressive Behavior* 24.1998: 271-286.
153. Gastó C. Bases biológicas de los trastornos del estado de ánimo. *Psicología Conductual.* 1998;6(2):217-252.
154. Mann JJ, Malone KM, Diehl DJ, Perel J, Cooper TB, Mintun MA. Demonstration in vivo of reduced serotonin responsivity in the brain of untreated depressed patients. *Am J Psychiatry.* 1996 Feb;153(2):174-82. doi: 10.1176/ajp.153.2.174. Erratum in: *Am J Psychiatry* 1996 Apr;153(4):588.
155. Delgado PL, Price LH, Miller HL, Salomon RM, Aghajanian GK, Heninger GR, Charney DS. Serotonin and the neurobiology of depression. Effects of tryptophan depletion in drug-free depressed patients. *Arch Gen Psychiatry.* 1994 Nov;51(11):865-74. doi: 10.1001/archpsyc.1994.03950110025005
156. Malone K, Mann JJ. Serotonin and Major Depression. In: Mann, JJ., Kupfer, D.J. (eds) *Biology of Depressive Disorders. Part A. The Depressive Illness Series.* Springer, Boston, MA, 1993. doi: 10.1007/978-1-4757-9498-4\_2
157. Olivier B, Schipper J, van der Heyden JA, van Hest A, Mos J, Tulp MT. Preclinical evidence for the role of serotonin receptor subtypes in depression. *Acta Neuropsychiatr.* 1992 Jun;4(2):40-5. doi: 10.1017/S0924270800034888
158. Kapur S, Mann JJ. Role of the dopaminergic system in depression. *Biol Psychiatry.* 1992 Jul 1;32(1):1-17. doi: 10.1016/0006-3223(92)90137-o
159. Nagayama H, Tsuchiyama K, Yamada K, Akiyoshi J. Animal study on the role of serotonin in depression. *Prog Neuropsychopharmacol Biol Psychiatry.* 1991;15(6):735-44. doi: 10.1016/0278-5846(91)90002-i
160. Bandelow B, Rüther E. Serotonin und Depression. In: Beckmann, H., Osterheider, M. (eds) *Neurotransmitter und psychische Erkrankungen. Tropon-Symposium VI, vol 6.* Springer, Berlin, Heidelberg, 1991. doi: 10.1007/978-3-642-84544-4\_3
161. Willner P. Animal models of depression: An overview. *Pharmacology & Therapeutics,* 1990;45(3), 425-455 doi: 10.1016/0163-7258(90)90076-e
162. Marazziti D, Falcone MF, Castrogiovanni P, Cassano GB. Seasonal serotonin uptake changes in healthy subjects. *Mol Chem Neuropathol.* 1990 Aug-Oct;13(1-2):145-54. doi: 10.1007/BF03159915
163. Schaechter JD, Wurtman RJ. Tryptophan availability modulates serotonin release from rat hypothalamic slices. *J Neurochem.* 1989 Dec;53(6):1925-33. doi: 10.1111/j.1471-4159.1989.tb09263.x
164. Sohn UD, Kim CY, Huh IH. Effect of imipramine or ECS on central  $\beta 1$  and  $\beta 2$  receptor sensitivity in the cardiovascular response of rat. *Arch. Pharm. Res.* 1989;12, 282-288.
165. Meltzer H. Serotonergic dysfunction in depression. *Br J Psychiatry Suppl.* 1989 Dec;(8):25-31.
166. Mårtensson B, Nyberg S, Toresson G, Brodin E, Bertilsson L. Fluoxetine treatment of depression. Clinical effects, drug concentrations and monoamine metabolites and N-terminally extended substance P in cerebrospinal fluid. *Acta Psychiatr Scand.* 1989 Jun;79(6):586-96. doi: 10.1111/j.1600-0447.1989.tb10307.x
167. McKinney WT. Animal Models for Affective Disorders. In: *Models of Mental Disorders.* Springer, Boston, MA, 1989. doi: 10.1007/978-1-4684-5430-7\_4
168. Wachtel H. Defective Second-messenger Function in the Etiology of Endogenous Depression: Novel Therapeutic Approaches. In: Briley, M., Fillion, G. (eds) *New Concepts in Depression.* Palgrave, London, 1988. doi: 10.1007/978-1-349-09506-3\_26
169. Jesberger JA, Richardson JS. Brain output dysregulation induced by olfactory bulbectomy: an approximation in the rat of major depressive disorder in humans? *Int J Neurosci.* 1988 Feb;38(3-4):241-65. doi: 10.3109/00207458808990688
170. Matussek N. Biological Aspects of Course and Outcome in Depressive Illness: Needed Areas of Research. In: Helgason, T., Daly, R.J. (eds) *Depressive Illness.* Springer, Berlin, Heidelberg, 1988. [https://doi.org/10.1007/978-3-642-73546-2\\_5](https://doi.org/10.1007/978-3-642-73546-2_5)
171. Gjerris A. Baseline studies on transmitter substances in cerebrospinal fluid in depression. *Acta Psychiatr Scand Suppl.* 1988;346:1-35. doi: 10.1111/j.1600-0447.1988.tb10571.x
172. Åsberg, M., Mårtensson, B., Wågner, A. (1986). Biochemical Markers of Serotonin Functions in Depression and Suicidal Behavior. In: Hippius, H., Klerman, G.L., Matussek, N. (eds) *New Results in Depression Research.* Springer, Berlin, Heidelberg, 1986. doi: 10.1007/978-3-642-70702-5\_18
173. Lerer B, Shapira B. Neurochemical mechanisms of mood stabilization. Focus on electroconvulsive therapy. *Ann N Y Acad Sci.* 1986;462:366-75. doi: 10.1111/j.1749-6632.1986.tb51271.x
174. Meltzer HY, Arora RC. Platelet markers of suicidality. *Ann N Y Acad Sci.* 1986;487:271-80. doi: 10.1111/j.1749-6632.1986.tb27906.x
175. Hippius H, Klerman G, Matussek N, Schmauss M. New Results in Depression Research. Berlin: Springer-Verlag, 1986.
176. Waldmeier PC. Der Beitrag der Biochemie zur Psychiatrischen Forschung und Therapie. In: Heimann H, Gaertner HJ (eds). *Das Verhältnis der Psychiatrie zu ihren Nachbardisziplinen.* Springer, Berlin, Heidelberg, 1986. doi: 10.1007/978-3-642-70952-4\_6
177. Smith DF. The stereoselectivity of serotonin uptake in brain tissue and blood platelets: the topography of the serotonin uptake area. *Neurosci Biobehav Rev.* 1986 Spring;10(1):37-46. doi: 10.1016/0149-7634(86)90031-x
178. Blier P, de Montigny C. Serotonergic but not noradrenergic neurons in rat central nervous system adapt to long-term treatment with monoamine oxidase inhibitors. *Neuroscience.* 1985 Dec;16(4):949-55. doi: 10.1016/0306-4522(85)90107-1
179. Mueller EA, Siever LJ, Murphy DL. Neuroendocrine Responses to Serotonin Agonists as Possible Markers of the Functional State of Serotonergic Neurotransmission in Psychiatric Disorders. In: Beckmann H, Riederer P (eds). *Pathochemical Markers in Major Psychoses.* Springer, Berlin, Heidelberg, 1985. doi: 10.1007/978-3-642-69743-2\_12
180. Suranyi-Cadotte BE, Gauthier S, Lafaille F, DeFlores S, Dam TV, Nair NP, Quirion R. Platelet 3H-imipramine binding distinguishes depression from Alzheimer dementia. *Life Sci.* 1985 Dec 16;37(24):2305-11. doi: 10.1016/0024-3205(85)90022-0
181. Fawcett J, Kravitz HM, Sabelli HC. CNS Amine Metabolites. In: *Handbook of Psychiatric Diagnostic Procedures Vol. I.* Springer, Dordrecht, 1984. doi: 10.1007/978-94-011-6725-3\_3
182. Whybrow PC, Akiskal HS, McKinney WT. The Emerging Neurobiology of Mood Disorder. In: *Mood Disorders. Critical Issues in Psychiatry.* Springer, Boston, MA, 1984. doi: 10.1007/978-1-4613-2729-5\_7
183. McIntyre IM, Oxenkrug GF, Stanley M, Gershon S. The effect of 5,7-dihydroxytryptamine on the serum corticosterone resistance

- to suppression by dexamethasone. *Brain Res.* 1984 Aug 20; 309(1):156-8. doi: 10.1016/0006-8993(84)91021-7
184. Blier P, De Montigny C. Electrophysiological investigations on the effect of repeated zimelidine administration on serotonergic neurotransmission in the rat. *J Neurosci.* 1983 Jun;3(6):1270-8. doi: 10.1523/JNEUROSCI.03-06-01270.1983
185. Goodwin FK, Post RM. 5-hydroxytryptamine and depression: a model for the interaction of normal variance with pathology. *Br J Clin Pharmacol.* 1983;15 Suppl 3(Suppl 3):393S-405S. doi: 10.1111/j.1365-2125.1983.tb02130.x
186. Rodríguez Echandía EL, Broitman ST, Fóscolo MR. Effect of the chronic ingestion of chlorimipramine and desipramine on the hole board response to acute stresses in male rats. *Pharmacol Biochem Behav.* 1987 Feb;26(2):207-10. doi: 10.1016/0091-3057(87)90106-7
187. Bender DA. Biochemistry of tryptophan in health and disease. *Mol Aspects Med.* 1983;6(2):101-97. doi: 10.1016/0098-2997(83)90005-5
188. De Montigny C. From animal experiments to clinical trials: aspects of the transposition in psychopharmacology. *Prog Neuropsychopharmacol Biol Psychiatry.* 1982;6(4-6):585-93. doi: 10.1016/s0278-5846(82)80153-x
189. Brown L, Rosellini RA, Samuels OB, Riley EP. Evidence for a serotonergic mechanism of the learned helplessness phenomenon. *Pharmacol Biochem Behav.* 1982 Nov;17(5):877-83. doi: 10.1016/0091-3057(82)90465-8
190. Steinbusch HW. Serotonergic neurons in the central nervous system of the rat. *Neuroscience.* 1982;6:557-618.
191. Heninger G. Monoamine receptor sensitivity and the mechanism of action of antidepressant treatment. *Psychopharmacol Bull.* 1982 Jul;18(3):130-55.
192. Hopkinson G, Baker GB, Douglass AB, McKim HR, Dewhurst WG. Analysis of urinary excretion patterns of bioactive amines and their metabolites in normal control subjects. *Prog Neuropsychopharmacol Biol Psychiatry.* 1982;6(4-6):495-8. doi: 10.1016/s0278-5846(82)80137-1.
193. Hall H, Ogren SO. Effects of antidepressant drugs on different receptors in the brain. *Eur J Pharmacol.* 1981 Mar 26;70(3):393-407. doi: 10.1016/0014-2999(81)90172-2
194. Badawy AA, Evans M. Inhibition of rat liver tryptophan pyrrolase activity and elevation of brain tryptophan concentration by acute administration of small doses of antidepressants. *Br J Pharmacol.* 1982 Sep;77(1):59-67. doi: 10.1111/j.1476-5381.1982.tb09269.x
195. Meltzer HY, Arora RC, Baber R, Tricou BJ. Serotonin uptake in blood platelets of psychiatric patients. *Arch Gen Psychiatry.* 1981 Dec;38(12):1322-6. doi: 10.1001/archpsyc.1981.01780370024002
196. Coutts RT, Baker GB, LeGatt DF, McIntosh GJ, Hopkinson G, Dewhurst WG. Screening for amines of psychiatric interest in urine using gas chromatography with electron-capture detection. *Prog Neuropsychopharmacol.* 1981;5(5-6):565-8. doi: 10.1016/0364-7722(81)90047-3
197. Yehuda S, Mostofsky DI, Bracha T. Increased serotonin level via augmented tryptophan diet and its effect on escape learning. *Int J Neurosci.* 1981;15(4):193-6. doi: 10.3109/00207458108985856
198. Noller JL, Ostroumova MN. Resistance to inhibiting effect of dexamethasone in patients with endogenous depression. *Acta Psychiatr Scand.* 1980 Feb;61(2):169-77. doi: 10.1111/j.1600-0447.1980.tb00576.x
199. Johnstone EC, Ferrier IN. Neuroendocrine markers of CNS drug effects. *Br J Clin Pharmacol.* 1980 Jul;10(1):5-21. doi: 10.1111/j.1365-2125.1980.tb00497.x
200. Matussek N. Stoffwechselpathologie der Zyklothymie und Schizophrenie. In: Angst J., et al. Grundlagen und Methoden der Psychiatrie. Psychiatrie der Gegenwart, vol 1 / 2. Springer, Berlin, Heidelberg, 1980. doi: 10.1007/978-3-642-67416-7\_2
201. Träskman L, Asberg M, Bertilsson L, Cronholm B, Mellström B, Neckers LM, Sjöqvist F, Thorén P, Tybring G. Plasma levels of chlorimipramine and its demethyl metabolite during treatment of depression. *Clin Pharmacol Ther.* 1979 Nov;26(5):600-10. doi: 10.1002/cpt.1979265600
202. Murphy DL, Campbell IC, Costa JL. The brain serotonergic system in the affective disorders. *Prog Neuropsychopharmacol.* 1978;2(1):5-31. doi: 10.1016/0364-7722(78)90019-x
203. Goodwin FK, Potter WZ. The Biology of Affective Illness: Amine Neurotransmitters and Drug Response. In: Cole JO, Schatzberg AF, Frazier SH. (eds) Depression. Springer, Boston, MA, 1978. doi: 10.1007/978-1-4684-2397-6\_3
204. van Praag HM. Amine Hypotheses of Affective Disorders. In: Iversen LL, Iversen SD, Snyder SH (eds). *Handbook of Psychopharmacology.* Springer, Boston, MA, 1978. doi: 10.1007/978-1-4684-3189-6\_4
205. Sourkes TL. Biochemistry of mental depression. *Can Psychiatr Assoc J.* 1977 Dec;22(8):467-81. doi: 10.1177/070674377702200810
206. Young SN, Sourkes TL. Tryptophan in the central nervous system: Regulation and Significance. In: Agranoff BW, Aprison MH (eds). *Advances in Neurochemistry. Advances in Neurochemistry,* vol 2. Springer, Boston, MA, 1877. doi: 10.1007/978-1-4615-8237-3\_2
207. Badawy AA. The functions and regulation of tryptophan pyrrolase. *Life Sci.* 1977 Sep 15;21(6):755-68. doi: 10.1016/0024-3205(77)90402-7
208. Goldman J, Thibert R. Serotonin in blood platelets: Studies on a simple assay. *Microchemical Journal.* 1977;22(1):85-91.
209. Norton WT, Aprison MH. *Advances in Neurochemistry.* Agranoff BW, Aprison MH. Springer New York, NY, 1977.
210. Patkina NA, Lapin IP. Effects of catecholaminergic drugs on systems of reward and punishment in experiments on cats. *Pharmacol Biochem Behav.* 1976 Sep;5(3):247-52. doi: 10.1016/0091-3057(76)90074-5
211. Hingtgen JN, Smith JE, Shea PA, Aprison MH, Gaff TM. Cholinergic changes during conditioned suppression in rats. *Science.* 1976 Jul 23;193(4250):332-4. doi: 10.1126/science.7016
212. Blum K, Eubanks JD, Wallace JE, Schwertner HA, Futterman S. Possible Rationale for Differential Chemotherapy of Depression In Humans: A Review of the Biogenic Amine Hypothesis Part I. *Journal of Psychedelic Drugs.* 1976;8(3), 223-234. doi: 10.1080/02791072.1976.10472017
213. Pugsley T, Lippmann W. Effect of clofibrate on biogenic amine level and turnover. *Pharmacol Res Commun.* 1976 Dec;8(6):565-74. doi: 10.1016/0031-6989(76)90048
214. Gershon S, Shopsin B, Wilk S. Exploration of affective illness. *Neuropsychobiology.* 1976;2(2-3):145-60. doi: 10.1159/000117543
215. Plotnikoff NP. Prolyl-leucyl-glycine amide (PLG) and thyrotropin-releasing hormone (TRH): DOPA potentiation and biogenic amine studies. *Prog Brain Res.* 1975;42:11-23. doi: 10.1016/S0079-6123(08)63637-. PMID: 730.
216. Huidobro-Toro JP, Scotti de Carolis A, Longo VG. Intensification of central catecholaminergic and serotonergic processes by the hypothalamic factors MIF and TRF and by angiotensin II. *Pharmacol Biochem Behav.* 1975 Mar-Apr;3(2):235-42. doi: 10.1016/0091-3057(75)90153-7
217. Hillier J, Hillier JG, Redfern PH. Liver tryptophan pyrrolase activity and metabolism of brain 5-HT in rat. *Nature.* 1975 Feb 13;253(5492):566-7. doi: 10.1038/253566a0

218. Green AR, Grahame-Smith DG. 5-Hydroxytryptamine and Other Indoles in the Central Nervous System. In: Iversen LL, Iversen SD, Snyder SH (eds). *Biochemistry of Biogenic Amines. Handbook of Psychopharmacology*, vol 3. Springer, Boston, MA, 1975. doi: 10.1007/978-1-4684-3171-1\_4
219. Curzon G. The control of tryptophan metabolism. *Basic Life Sci.* 1975;6:169-84. doi: 10.1007/978-1-4615-8954-9\_6
220. Coppen A, Brooksbank BW, Eccleston E, Peet M, White SG. Tryptophan metabolism in depressive illness. *Psychol Med.* 1974 May;4(2):164-73. doi: 10.1017/s0033291700041994
221. Hillier JG, Redfern PH. Twenty-four hour variation in 5-hydroxytryptophan decarboxylase activity in the rat brain. *J Neurochem.* 1976 Jul;27(1):311-2. doi: 10.1111/j.1471-4159.1976.tb01586.x
222. Mendels J, Frazer A. Brain biogenic amine depletion and mood. *Arch Gen Psychiatry.* 1974 Apr;30(4):447-51. doi: 10.1001/archpsyc.1974.01760100019004
223. Domino EF, Krause RR. Plasma tryptophan tolerance curves in drug free normal controls, schizophrenic patients and prisoner volunteers. *J Psychiatr Res.* 1974 Oct;10(3-4):247-61. doi: 10.1016/0022-3956(74)90008-9
224. Leeton J. Depression induced by oral contraception and the role of vitamin B6 in its management. *Aust N Z J Psychiatry.* 1974 Jun;8(2):85-8. doi: 10.3109/00048677409159781
225. Schacht U, Heptner W. Effect of nomifensine (HOE 984), a new antidepressant, on uptake of noradrenaline and serotonin and on release of noradrenaline in rat brain synaptosomes. *Biochem Pharmacol.* 1974 Dec 15;23(24):3413-22. doi: 10.1016/0006-2952(74)90344-x
226. Dickerson JW. Symposium: Nutrition and Mental Illness. *International Journal of Food Sciences and Nutrition.* 1974;28:181-193.
227. Korduba CA, Veals J, Symchowicz S. The effect of pheniramine and its structural analogues on 5-hydroxytryptamine in rat and mouse brain. *Life Sci.* 1973 Dec 1;13(11):1557-64. doi: 10.1016/0024-3205(73)90144-6
228. Samsonova ML, Lapin IP. Antidepressants and liver tryptophan pyrolase activity. *Biochem Pharmacol.* 1973 Jun 15;22(12):1499-507. doi: 10.1016/0006-2952(73)90327-4
229. Frazer A, Pandey GN, Mendels J. Metabolism of tryptophan in depressive disease. *Arch Gen Psychiatry.* 1973 Oct;29(4):528-35. doi: 10.1001/archpsyc.1973.04200040070012
230. Campbell M. Biological Interventions in Psychoses of Childhood. In: Schopler E, Reichler RJ(eds). *Psychopathology and Child Development*. Springer, Boston, MA, 1976. doi: 10.1007/978-1-4684-2187-3\_15
231. Parlatore AA. Neuroendocrine aspects of psychiatric disorders. *N Engl J Med.* 1973 Oct 11;289(15):808. doi: 10.1056/NEJM197310112891522
232. Perlman M. Golden liquor amnii. *Lancet.* 1973 Mar 10;1(7802):556. doi: 10.1016/s0140-6736(73)90377-2
233. Braithwaite RA, Goulding R, Theano G, Bailey J, Coppen A, Burrows G, Davies Scoggins B. Clinical significance of plasma levels of tricyclic antidepressant drugs in the treatment of depression. *The Lancet.* 1973;301(7802):556-558.
234. Schelkunov EL. Hypotheses of affective disorders. *Lancet.* 1973 Apr 7;1(7806):784-5. doi: 10.1016/s0140-6736(73)92189-2
235. Genefke IK. The active uptake of 5-hydroxytryptamine in rat and human blood platelets under the influence of lithium in vivo and in vitro. *Acta Psychiatr Scand.* 1972;48(5):394-9. doi: 10.1111/j.1600-0447.1972.tb04383.x
236. Coppen A, Prange AJ Jr, Whybrow PC, Noguera R. Abnormalities of indoleamines in affective disorders. *Arch Gen Psychiatry.* 1972 May;26(5):474-8. doi: 10.1001/archpsyc.1972.01750230084016
237. Matussek N. Biochemie der Depression [Biochemistry of depression]. *J Neural Transm.* 1972;33(3):223-34. German. doi: 10.1007/BF01245319
238. Dunner DL, Goodwin FK. Effect of L-tryptophan on brain serotonin metabolism in depressed patients. *Arch Gen Psychiatry.* 1972 Apr; 26(4):364-6. doi: 10.1001/archpsyc.1972.01750220074014
239. Handley SL, Miskin RC. Effect of cortisol on a central response to 5-hydroxytryptophan. *Br J Pharmacol.* 1972 May;45(1):179P-180P
240. Weissman A, Harbert C. Recent Developments Relating Serotonin and Behavior. Chapter 5. In *Annual Reports in Medicinal Chemistry*. Academic Press. 1972; 7:47-58.
241. Coppen A, Eccleston EG, Peet M. Total and free tryptophan concentration in the plasma of depressive patients. *Lancet.* 1972 Dec 30;2(7792):1415-6. doi: 10.1016/s0140-6736(72)92980-7
242. Mendels J, Frazer A, Fitzgerald RG, Ramsey TA, Stokes JW. Biogenic amine metabolites in cerebrospinal fluid of depressed and manic patients. *Science.* 1972 Mar 24;175(4028):1380-2. doi: 10.1126/science.175.4028.1380
243. Kulkarni SK, Dandia PC. On the mechanism of potentiation of amphetamine induced stereotype behaviour by imipramine. *Psychopharmacologia.* 1972;27(4):367-72. doi: 10.1007/BF00429390
244. Curzon G. Brain Amine Metabolism in Some Neurological and Psychiatric Disorders. *Biochemical aspects of nervous diseases.* Boston, MA: Springer US. 1972:151-212.
245. McClure DJ. Biochemistry of depression. *Can Psychiatr Assoc J.* 1971 Jun;16(3):247-52. doi: 10.1177/070674377101600310
246. Harrison-Read PE, Steinberg H. Lithium-induced hypersensitivity to foot shock in rats and the role of 5-hydroxytryptophan. *Nat New Biol.* 1971 Jul 28;232(30):120-1. doi: 10.1038/newbio232120a0
247. Coppen A, Brooksbank BW, Noguera R, Wilson DA. Cortisol in the cerebrospinal fluid of patients suffering from affective disorders. *J Neurol Neurosurg Psychiatry.* 1971 Aug;34(4):432-5. doi: 10.1136/jnnp.34.4.432
248. Lingjærde O. Klassifisering av depressive tilstander: Noen generelle og spesielle problemer. *Nordisk Psykiatrisk Tidsskrift.* 1971;25(3):148-164.
249. Aillon GA. Biochemistry of affective disorders. (A review of the literature). *Psychosomatics.* 1971 Jul-Aug;12(4):260-72. doi: 10.1016/s0033-3182(71)71517-5
250. Mendels J. Relationship between depression and mania. *Lancet.* 1971 Feb 13;1(7694):342. doi: 10.1016/s0140-6736(71)91061-0
251. Herxheimer A. Drugs and the fetal eye. *Lancet.* 1971 Jan 16;1(7690):122.
252. Papeschi R, Sourkes TL, Youdim MB. The effect of yohimbine on brain serotonin metabolism, motor behavior and body temperature of the rat. *Eur J Pharmacol.* 1971;15(3):318-26. doi: 10.1016/0014-2999(71)90098-7
253. Benkert O., Matussek N. Influence of Hydrocortisone and Glucagon on Liver Tyrosine Transaminase and on Brain Tyrosine, Norepinephrine and Serotonin. *Nature* 1970; 228, 73-75. doi: 10.1038/228073a0
254. Korf J, van Praag HM. The intravenous probenecid test: a possible aid in evaluation of the serotonin hypothesis on the pathogenesis of depressions. *Psychopharmacologia.* 1970 Aug 19;18(1):129-32. doi: 10.1007/BF00402393
255. Sourkes TL, Missala K, Oravec M. Decrease of cerebral serotonin and 5-hydroxyindolylacetic acid caused by (-)-alpha-methyltryptophan. *J Neurochem.* 1970 Jan;17(1):111-5. doi: 10.1111/j.1471-4159.1970.tb00507.x

256. Damásio AR, Antunes JL, Macedo C. L-dopa, parkinsonism, and depression. *Lancet*. 1970 Sep 19;2(7673):611-2.  
doi: 10.1016/s0140-6736(70)90199-6
257. van Praag HM, Korf J. L-tryptophan in depression. *Lancet*. 1970 Sep 19;2(7673):612. doi: 10.1016/s0140-6736(70)90200-x
258. Nisticó G, Preziosi P. Brain and liver tryptophan pathways and

- adrenocortical activation during restraint stress. *Pharmacological Research Communications*. 1969;1(4):363-368.
259. Rubin TR, Clark BR, Mandell AJ. Tryptophan pyrolase induction in patients with manic depression. *Science*. 1969 Sep 12;165(3898):1146-8.  
doi: 10.1126/science.165.3898.114

## Clinical publications in psychiatry, neurology, and narcology

1. Leonard BE. Major Depression as a Neuroprogressive Prelude to Dementia: What Is the Evidence? *Mod Trends Pharmacopsychiatry*. 2017;31:56-66.  
doi: 10.1159/000470807
2. Mann JJ. Role of the serotonergic system in the pathogenesis of major depression and suicidal behavior. *Neuropsychopharmacology*. 1999 Aug;21(2 Suppl):99S-105S.  
doi: 10.1016/S0893-133X(99)00040-8
3. Asberg M, Träskman L. Studies of CSF 5-HIAA in depression and suicidal behaviour. *Adv Exp Med Biol*. 1981;133:739-52.  
doi: 10.1007/978-1-4684-3860-4\_41
4. Asberg M, Träskman L. Studies of CSF 5-HIAA in depression and suicidal behaviour. *Adv Exp Med Biol*. 1981;133:739-52.  
doi: 10.1007/978-1-4684-3860-4\_41
5. Åsberg M, Schalling D, Rydin E, Träskman-bendz L. Suicide and Serotonin. *Depression and suicide*. Pergamon.1983:367-404.
6. Wu W, Nicolazzo JA, Wen L, Chung R, Stankovic R, Bao SS, Lim CK, Brew BJ, Cullen KM, Guillemin GJ. Expression of tryptophan 2,3-dioxygenase and production of kynurenone pathway metabolites in triple transgenic mice and human Alzheimer's disease brain. *PLoS One*. 2013 Apr 22;8(4):e59749.  
doi: 10.1371/journal.pone.0059749
7. Garcia-Gil M, Ceccarini MR, Stopponi F, Cataldi S, Mazzeschi C, Delvecchio E, Albi E, Gizzi G. Brain and gut microbiota disorders in the psychopathology of anorexia nervosa. *Transl Neurosci*. 2022 Dec 31;13(1):516-526. doi: 10.1515/tnci-2022-0267
8. Majumdar SK, Shaw GK, Bridges PK. Relationship between plasma cortisol concentrations and depression in chronic alcoholic patients. *Drug Alcohol Depend*. 1984 Sep;14(1):45-9.  
doi: 10.1016/0376-8716(84)90018-8
9. Stanley M, Mann JJ. Increased serotonin-2 binding sites in frontal cortex of suicide victims. *Lancet*. 1983 Jan 29;1(8318):214-6.  
doi: 10.1016/s0140-6736(83)92590-4
10. Nässberger L, Träskman-Bendz L. Increased soluble interleukin-2 receptor concentrations in suicide attempters. *Acta Psychiatr Scand*. 1993 Jul;88(1):48-52.  
doi: 10.1111/j.1600-0447.1993.tb03412.x
11. Träskman-Bendz L, Alling C, Alsén M, Regnelli G, Simonsson P, Ohman R. The role of monoamines in suicidal behavior. *Acta Psychiatr Scand Suppl*. 1993;371:45-7.  
doi: 10.1111/j.1600-0447.1993.tb05373.x
12. Asberg M, Träskman L, Thorén P. 5-HIAA in the cerebrospinal fluid. A biochemical suicide predictor? *Arch Gen Psychiatry*. 1976 Oct;33(10):1193-7. doi: 10.1001/archpsyc.1976.01770100055005
13. Pawlak J, Dmitrzak-Weglarcz M, Szczepankiewicz A, Wilkosc M, Skibinska M, et al. Association between Suicidal Behavior and TPH1 and TPH2 Genes of Serotonergic System in Polish Affective Group. *Ann Depress Anxiety*. 2014;1(3): 1014.
14. Prange AJ. The Use of Antidepressant Drugs in the Elderly Patient. In: Eisdorfer C, Fann WE (eds). *Psychopharmacology and Aging*. Advances in Behavioral Biology, vol 6. Springer, Boston, MA, 1973.  
doi: 10.1007/978-1-4684-7770-2\_22
15. Gadow KD, Smith RM, Pinsonneault JK. Serotonin 2A receptor gene (HTR2A) regulatory variants: possible association with severity of depression symptoms in children with autism spectrum disorder. *Cogn Behav Neurol*. 2014 Jun;27(2):107-16.  
doi: 10.1097/WNN.0000000000000028
16. Hećimović H, Popović Z, Gilliam F. Suicidality in Epilepsy: Does It Share Common Pathogenic Mechanisms with Epilepsy? *Curr Top Behav Neurosci*. 2022;55:209-250.  
doi: 10.1007/7854\_2021\_220
17. Coleman M. Serotonin concentrations in whole blood of hyperactive children. *J Pediatr*. 1971 Jun;78(6):985-90.  
doi: 10.1016/s0022-3476(71)80428-6
18. van Praag HM. Biological suicide research: outcome and limitations. *Biol Psychiatry*. 1986 Nov;21(13):1305-23.  
doi: 10.1016/0006-3223(86)90314-8
19. Turner-Stokes L, Hassan N. Depression after stroke: a review of the evidence base to inform the development of an integrated care pathway. Part 2: Treatment alternatives. *Clin Rehabil*. 2002 May;16(3):248-60. doi: 10.1191/0269215502cr488oa
20. Rujescu D, Giegling I, Dahmen N, Szegedi A, Anhelescu I, Gietl A, Schäfer M, Müller-Siecheneder F, Bondy B, Möller HJ. Association study of suicidal behavior and affective disorders with a genetic polymorphism in ABCG1, a positional candidate on chromosome 21q22.3. *Neuropsychobiology*. 2000;42 Suppl 1:22-5.  
doi: 10.1159/000054847
21. Mao W, Ghia JN, Scott DS, Duncan GH, Gregg JM. High versus low intensity acupuncture analgesia for treatment of chronic pain: effects on platelet serotonin. *Pain*. 1980 Jun;8(3):331-342.  
doi: 10.1016/0304-3959(80)90078-0
22. Gunning FM, Smith GS. Functional neuroimaging in geriatric depression. *Psychiatr Clin North Am*. 2011 Jun;34(2):403-22, viii.  
doi: 10.1016/j.psc.2011.02.010
23. Rao AV, Devi SP. Psychobiology of suicide behaviour. *Indian J Psychiatry*. 1987 Oct;29(4):299-305. Erratum in: *Indian J Psychiatry*. 1988 Jan;30(1):108.
24. Malone KM, Szanto K, Corbitt EM, Mann JJ. Clinical assessment versus research methods in the assessment of suicidal behavior. *Am J Psychiatry*. 1995 Nov;152(11):1601-7.  
doi: 10.1176/ajp.152.11.1601
25. Hirao K, Smith GS. Positron emission tomography molecular imaging in late-life depression. *J Geriatr Psychiatry Neurol*. 2014 Mar;27(1):13-23. doi: 10.1177/0891988713516540
26. Hagedorn JM, Gunn J, Budwany R, D'Souza RS, Chakravarthy K, Deer TR. How Well Do Current Laboratory Biomarkers Inform Clinical Decision-Making in Chronic Pain Management? *J Pain Res*. 2021 Dec 3;14:3695-3710. doi: 10.2147/JPR.S311974
27. Kitahara M. Dietary Tryptophan Ratio and Suicide in the United Kingdom, Ireland, the United States, Canada, Australia, and New Zealand. *OMEGA-Journal of Death and Dying*. 1988;18(1):71-76.
28. Fernandes F. Is depression a risk factor for dementia? A translational research. Diss, 2016.
29. Manta S. Effets neurophysiologiques de la stimulation du nerf

- vague: implication dans le traitement de la dépression résistante et optimisation des paramètres de stimulation.
30. Universite de Montreal (Canada), 2012.
31. Conwell Y, Raby WN, Caine ED. Suicide and aging. II: The psychobiological interface. *Int Psychogeriatr*. 1995 Summer;7(2):165-81.  
doi: 10.1017/s1041610295001955
32. Träskman L, Tybring G, Asberg M, Bertilsson L, Lantto O, Schalling D. Cortisol in the CSF of depressed and suicidal patients. *Arch Gen Psychiatry*. 1980 Jul;37(7):761-7.  
doi: 10.1001/archpsyc.1980.01780200039004
33. Praag HM, Korf J, Puite J. 5-Hydroxyindoleacetic Acid Levels in the Cerebrospinal Fluid of Depressive Patients treated with Probenecid. *Nature*. 1970;225(5239):1259-1260.

## Studies on pharmacodynamics and therapeutic effects of medicine

1. Kozlovsky VL, Popov MYu, Kosterin DN, Lepik OV. Heterogeneity of the mechanism of action of antidepressants. Review of Psychiatry and Medical Psychology named after V.M. Bekhterev. 2021;55(1):11-17. doi: 10.31363/2313-7053-2021-1-11-17
2. Andrews P, Amsterdam J. A hormetic approach to understanding antidepressant effectiveness and the development of antidepressant tolerance - A conceptual view. *Psychiatr Pol*. 2020 Dec 31;54(6):1067-1090. English, Polish. doi: 10.12740/PP/120084
3. Doggett NS, Reno H, Spencer SJ. Possible involvement of 5-hydroxytryptamine in the antidepressant activity of narcotic analgesics. *Neuropharmacology*. 1975 Feb;14(2):81-4.  
doi: 10.1016/0028-3908(75)90029-5
4. Nagayama H, Akiyoshi J, Tobo M. Action of chronically administered antidepressants on the serotonergic postsynapse in a model of depression. *Pharmacology Biochemistry and Behavior*. 1986;25(4):805-811.
5. Wendt G. Levopropiline: Levopropiline: clinical therapeutic efficacy and tolerability." *Neuropsychopharmacology: 1 and 2 Proceedings of the XVIth CINP Congress, Munich, August, 15-19, 1988.* – Berlin, Heidelberg : Springer Berlin Heidelberg, 1990:294-305.
6. Møller SE. Tryptophan to competing amino acids ratio in depressive disorder: relation to efficacy of antidepressive treatments. *Acta Psychiatr Scand Suppl*. 1985;325:3-31
7. van Praag HM, de Haan S. Chemoprophylaxis of depressions. An attempt to compare lithium with 5-hydroxytryptophan. *Acta Psychiatr Scand Suppl*. 1981;290:191-201.  
doi: 10.1111/j.1600-0447.1981.tb00720.x
8. Aberg-Wistedt A. The antidepressant effects of 5-HT uptake inhibitors. *Br J Psychiatry Suppl*. 1989 Dec;(8):32-40.
9. Palucha A, Pilc A. On the role of metabotropic glutamate receptors in the mechanisms of action of antidepressants. *Pol J Pharmacol*. 2002 Nov-Dec;54(6):581-6.
10. van Praag H, de Hann S. Depression vulnerability and 5-hydroxytryptophan prophylaxis. *Psychiatry Res*. 1980 Sep;3(1):75-83. doi: 10.1016/0165-1781(80)90049-9
11. Maxwell RA, White HL. Tricyclic and Monoamine Oxidase Inhibitor Antidepressants: Structure-Activity Relationships. In: Iversen LL, Iversen SD, Snyder SH(eds). *Handbook of Psychopharmacology*. Springer, Boston, MA, 1987. [https://doi.org/10.1007/978-1-4613-4045-4\\_3](https://doi.org/10.1007/978-1-4613-4045-4_3)
12. Humble M. Noradrenaline and serotonin reuptake inhibition as clinical principles: a review of antidepressant efficacy. *Acta Psychiatr Scand Suppl*. 2000;402:28-36.  
doi: 10.1034/j.1600-0447.2000.02605.x
13. Post RM, Goodwin FK. Effects of amitriptyline and imipramine on amine metabolites in the cerebrospinal fluid of depressed patients. *Arch Gen Psychiatry*. 1974 Feb;30(2):234-9.  
doi: 10.1001/archpsyc.1974.01760080082014
14. Keshavan HJH, Gurbani NK, Dandiya PC. Effect of citalopram (Lu 10-171) on tranylcypromine and tryptophan-induced wet-dog shakes in rats. *Psychopharmacology* 1980;70, 209-212.  
doi: 10.1007/BF00435316
15. Kannengiesser MH, Hunt P, Raynaud JP. An in vitro model for the study of psychotropic drugs and as a criterion of antidepressant activity. *Biochem Pharmacol*. 1973 Jan 1;22(1):73-84.  
doi: 10.1016/0006-2952(73)90256-6
16. Hyttel J. Citalopram--pharmacological profile of a specific serotonin uptake inhibitor with antidepressant activity. *Prog Neuropsychopharmacol Biol Psychiatry*. 1982;6(3):277-95.  
doi: 10.1016/s0278-5846(82)80179-6
17. Cooper TB, Simpson GM, Lee JH. Thymoleptic and neuroleptic drug plasma levels in psychiatry: current status. *Int Rev Neurobiol*. 1976;19:269-309.  
doi: 10.1016/s0074-7742(08)60706-0
18. Tiger M, Varnäs K, Okubo Y, Lundberg J. The 5-HT1B receptor - a potential target for antidepressant treatment. *Psychopharmacology (Berl)*. 2018 May;235(5):1317-1334.  
doi: 10.1007/s00213-018-4872-1
19. Baker GB, Greenshaw AJ. Effects of long-term administration of antidepressants and neuroleptics on receptors in the central nervous system. *Cell Mol Neurobiol*. 1989 Mar;9(1):1-44.  
doi: 10.1007/BF00711441
20. Lapin IP, Oxenkrug GF, Osipova SV, Uskova NV. The frog as a subject for screening thymoleptic drugs. *J Pharm Pharmacol*. 1970 Oct;22(10):781-2. doi: 10.1111/j.2042-7158.1970.tb08429.x
21. Cheetham SC, Heal DJ. Antidepressant and anxiolytic drugs. Chapter 23. *Principles of Medical Biology*. 2000;14:511-567.
22. Wong DT, Bymaster FP. Development of antidepressant drugs. Fluoxetine (Prozac) and other selective serotonin uptake inhibitors. *Adv Exp Med Biol*. 1995;363:77-95
23. Mongeau R, Blier P, de Montigny C. The serotonergic and noradrenergic systems of the hippocampus: their interactions and the effects of antidepressant treatments. *Brain Res Brain Res Rev*. 1997 Apr;23(3):145-95. doi: 10.1016/s0165-0173(96)00017-3
24. Björkenstedt L, Edman G, Flyckt L, Hagenfeldt L, Sedvall G, Wiesel FA. Clinical and biochemical effects of citalopram, a selective 5-HT reuptake inhibitor--a dose-response study in depressed patients. *Psychopharmacology (Berl)*. 1985;87(3):253-9.  
doi: 10.1007/BF00432703
25. Wierońska JM, Pilc A. Depression and schizophrenia viewed from the perspective of amino acidergic neurotransmission: Antipodes of psychiatric disorders. *Pharmacol Ther*. 2019 Jan;193:75-82.  
doi: 10.1016/j.pharmthera.2018.08.010
26. Mashkovskii MD. Neurochemical aspects of the search for modern psychotropic drugs and the mechanism of their action. *Pharmaceutical Chemistry Journal*. 1976;10(7):849-856.
27. Leonard BE. Biological markers of serotonin receptors in depression and animal models of depression. *International Review of Psychiatry*. 1995;7(1):69-83.
28. Wong DT, Bymaster FP. Development of antidepressant drugs. Fluoxetine (Prozac) and other selective serotonin uptake inhibitors. *Adv Exp Med Biol*. 1995;363:77-95
29. Lippmann W, Pugsley TA. The effects of tandamine, a new

- potential antidepressant agent, on biogenic amine uptake mechanisms and related activities. *Biochem Pharmacol.* 1976 May 15;25(10):1179-86. doi: 10.1016/0006-2952(76)90366-x
30. Camargo A, Rodrigues ALS. Novel Targets for Fast Antidepressant Responses: Possible Role of Endogenous Neuromodulators. *Chronic Stress* (Thousand Oaks). 2019 Jun 26;3:2470547019858083. doi: 10.1177/2470547019858083
31. Scheinin M, Koulu M, Karhuvaara S, Zimmer RH. Evidence that the reversible MAO-A inhibitor moclobemide increases prolactin secretion by a serotonergic mechanism in healthy male volunteers. *Life Sci.* 1990;47(16):1491-9. doi: 10.1016/0024-3205(90)90529-z
32. Aberg-Wistedt A, Jostell KG, Ross SB, Westerlund D. Effects of zimelidine and desipramine on serotonin and noradrenaline uptake mechanisms in relation to plasma concentrations and to therapeutic effects during treatment of depression. *Psychopharmacology (Berl).* 1981;74(4):297-305. doi: 10.1007/BF00432735
33. McLean A, Rubinsztein JS, Robbins TW, Sahakian BJ. The effects of tyrosine depletion in normal healthy volunteers: implications for unipolar depression. *Psychopharmacology (Berl).* 2004 Jan;171(3):286-97. doi: 10.1007/s00213-003-1586-8
34. Lapin IP. Adrenergic nonspecific potentiation of yohimbine toxicity in mice by antidepressants and related drugs and antiyohimbine action of antiadrenergic and serotonergic drugs. *Psychopharmacology* 1980;70: 179-185. <https://doi.org/10.1007/BF00435311>
35. Ghasemi M, Phillips C, Fahimi A, McNerney MW, Salehi A. Mechanisms of action and clinical efficacy of NMDA receptor modulators in mood disorders. *Neurosci Biobehav Rev.* 2017 Sep;80:555-572. doi: 10.1016/j.neubiorev.2017.07.002
36. Prange AJ Jr, Wilson IC, Knox AE, McClane TK, Breese GR, Martin BR, Alltop LB, Lipton MA. Thyroid-imipramine clinical and chemical interaction: evidence for a receptor deficit in depression. *J Psychiatr Res.* 1972 Sep;9(3):187-205. doi: 10.1016/0022-3956(72)90020-9
37. Nagayama H, Hingtgen JN, Aprison MH. Postsynaptic action by four antidepressive drugs in an animal model of depression. *Pharmacol Biochem Behav.* 1981 Jul;15(1):125-30. doi: 10.1016/0091-3057(81)90350-6
38. Møller SE, Reisby N, Ortmann J, Elley J, Krautwald O. Relevance of tryptophan and tyrosine availability in endogenous and 'non-endogenous' depressives treated with imipramine or clomipramine. *J Affect Disord.* 1981 Sep;3(3):231-44. doi: 10.1016/0165-0327(81)90025-2
39. Goodwin FK, Dunner DL, Gershon ES. Effect of L-dopa treatment on brain serotonin metabolism in depressed patients. *Life Sciences.* 1971;10(13):751-759.
40. Saletu B, Schjerve M, Grünberger J, Schanda H, Arnold OH. Fluvoxamine-a new serotonin re-uptake inhibitor: first clinical and psychometric experiences in depressed patients. *J Neural Transm.* 1977;41(1):17-36. doi: 10.1007/BF01252962
41. Smith MJ, Garrett RH. A heretofore undisclosed crux of eosinophilia-myalgia syndrome: compromised histamine degradation. *Inflamm Res.* 2005 Nov;54(11):435-50. doi: 10.1007/s00011-005-1380-7
42. Georgotas A, Bush D, Hapworth WE, Kim M, Gershon S. Progress in pharmacotherapy of depression: research implications. In: Usdin E, Goldstein M, Friedhoff A, Georgotas A (eds). *Frontiers in Neuropsychiatric Research.* Palgrave Macmillan, London, 1983. doi: 10.1007/978-1-349-06689-6\_18
43. van Praag HM, Korf J, van Woudenberg, F. Investigation into the possible influence of chlorinated amphetamine derivatives on 5-hydroxytryptamine synthesis in man. *Psychopharmacologia*, 1970; 18: 412-420 (1970). <https://doi.org/10.1007/BF00402767>
44. Cherpillo C, Omer LM. A controlled trial with diclofensine, a new psychoactive drug, in the treatment of depression. *J Int Med Res.* 1981;9(5):324-9. doi: 10.1177/030006058100900505
45. Ortolano GA. Tricyclic antidepressants as uptake blockers. *Diss.* 1978
46. Leonard BE. Acute and chronic effects of 4-chloroamphetamine on monoamine metabolism in the rat brain. *Psychopharmacologia.* 1976;46(1):11-8. doi: 10.1007/BF00421543
47. Delgado PL, Miller HL, Salomon RM, Licinio J, Krystal JH, Moreno FA, Heninger GR, Charney DS. Tryptophan-depletion challenge in depressed patients treated with desipramine or fluoxetine: implications for the role of serotonin in the mechanism of antidepressant action. *Biol Psychiatry.* 1999 Jul 15;46(2):212-20. doi: 10.1016/s0006-3223(99)00014-1
48. Pugsley T, Lippmann W. Effects of tandamine and pirandamine, new potential antidepressants, on the brain uptake of norepinephrine and 5-hydroxytryptamine and related activities. *Psychopharmacology (Berl).* 1976 May 5;47(1):33-41. doi: 10.1007/BF00428698
49. van Praag HM, Schut T, Bosma E, van den Bergh R. A comparative study of the therapeutic effects of some 4-chlorinated amphetamine derivatives in depressive patients. *Psychopharmacologia.* 1971;20(1):66-76. doi: 10.1007/BF00404060
50. Kochi T, Wnuk S, Kloc R, Kochi J, Owe-Larsson B, Urbanska EM. New insight into the antidepressants action: modulation of kynurenine pathway by increasing the kynurenic acid/3-hydroxykynurene ratio. *J Neural Transm (Vienna).* 2012 Feb;119(2):235-43. doi: 10.1007/s00702-011-0668-8
51. Baldessarini RJ. Antidepressant-Antianxiety Agents. In: *Cancer Chemotherapy in Psychiatry.* Springer, New York, NY, 2013. doi: 10.1007/978-1-4614-3710-9\_4
52. Lingjaerde O Jr. Effects of ergotamine and dihydroergotamine on uptake of 5-hydroxytryptamine in blood platelets. *Eur J Pharmacol.* 1970;13(1):76-82. doi: 10.1016/0014-2999(70)90185-8
53. Hamberger B, Tuck JR. Effect of tricyclic antidepressants on the uptake of noradrenaline and 5-hydroxytryptamine by rat brain slices incubated in buffer or human plasma. *Eur J Clin Pharmacol.* 1973; 5: 229-235. doi: 10.1007/BF00567009
54. Holck A, Wolkowitz OM, Mellon SH, Reus VI, Nelson JC, Westrin Å, Lindqvist D. Plasma serotonin levels are associated with antidepressant response to SSRIs. *J Affect Disord.* 2019 May 1;250:65-70. doi: 10.1016/j.jad.2019.02.063
55. Burton PA, Broadhurst AM, Cross JA, Ennis C, Wood MD, Wyllie MG. Panuramine, a selective inhibitor of uptake of 5-hydroxytryptamine in the brain of the rat. *Neuropharmacology.* 1984 Sep;23(9):1049-52. doi: 10.1016/0028-3908(84)90127-8
56. McIsaac WM, Taylor D, Walker KE, Ho BT. 6-Methoxy-1,2,3,4-tetrahydro-*β*-carboline—a serotonin elevator. *J Neurochem.* 1972 Apr;19(4):1203-6. doi: 10.1111/j.1471-4159.1972.tb01441.x
57. Clark JA, Clark MSG, Palfreyman ES, Palfreyman MG. The effect of tryptophan and a tryptophan/5-hydroxytryptophan combination on indoles in the brains of rats fed a tryptophan deficient diet. *Psychopharmacologia.* 1975; 45: 183-188. doi: 10.1007/BF00429059
58. Sjöström R. 5-Hydroxyindole acetic acid and homovanillic acid in cerebrospinal fluid in manic-depressive psychosis and the effect of probenecid treatment. *Eur J Clin Pharmacol.* 1973 Aug;6(2):75-80. doi: 10.1007/BF00562430

59. Smith GS, Kramer E, Hermann C, Ma Y, Dhawan V, Chaly T, Eidelberg D. Serotonin modulation of cerebral glucose metabolism in depressed older adults. *Biol Psychiatry*. 2009 Aug 1;66(3):259-66. doi: 10.1016/j.biopsych.2009.02.012
60. Pilc A, Branski P, Palucha A, Aronowski J. The effect of prolonged imipramine and electroconvulsive shock treatment on calcium/calmodulin-dependent protein kinase II in the hippocampus of rat brain. *Neuropharmacology*. 1999 Apr;38(4):597-603. doi: 10.1016/s0028-3908(98)00211-1
61. Domino EF. History of modern psychopharmacology: a personal view with an emphasis on antidepressants. *Psychosom Med*. 1999 Sep-Oct;61(5):591-8. doi: 10.1097/00006842-199909000-00002
62. Halaris A, Myint AM, Savant V, Meresh E, Lim E, Guillemin G, Hoppensteadt D, Fareed J, Sinacore J. Does escitalopram reduce neurotoxicity in major depression? *J Psychiatr Res*. 2015 Jul-Aug;66-67:118-26. doi: 10.1016/j.jpsychires.2015.04.026
63. Palucha A, Pilc A. Metabotropic glutamate receptor ligands as possible anxiolytic and antidepressant drugs. *Pharmacol Ther*. 2007 Jul;115(1):116-47. doi: 10.1016/j.pharmthera.2007.04.007
64. Bouthillier A, Blier P, de Montigny C. Flerobuterol, a beta-adrenoceptor agonist, enhances serotonergic neurotransmission: an electrophysiological study in the rat brain. *Psychopharmacology (Berl)*. 1991;103(3):357-65. doi: 10.1007/BF02244290
65. Williams E, Stewart-Knox B, Bradbury I, Rowland I, Pentieva K, Helander A, McNulty H. Effect of folic acid supplementation on mood and serotonin response in healthy males. *Br J Nutr*. 2005 Oct;94(4):602-8. doi: 10.1079/bjn20051501
66. Young SN, Smith SE, Pihl RO, Ervin FR. Tryptophan depletion causes a rapid lowering of mood in normal males. *Psychopharmacology (Berl)*. 1985;87(2):173-7. doi: 10.1007/BF00431803
67. Lingjaerde O. Effect of doxepin on uptake and efflux of serotonin in human blood platelets in vitro. *Psychopharmacologia*. 1976 May 28;47(2):183-6. doi: 10.1007/BF00735819
68. Elsworth JD, Glover V, Reynolds GP, Sandler M, Lees AJ, Phuapradit P, Shaw KM, Stern GM, Kumar P. Deprenyl administration in man: a selective monoamine oxidase B inhibitor without the 'cheese effect'. *Psychopharmacology (Berl)*. 1978 Apr 14;57(1):33-8. doi: 10.1007/BF00426954
69. Aberg-Wistedt A, Ross SB, Jostell KG, Sjöquist B. A double-blind study of zimelidine, a serotonin uptake inhibitor, and desipramine, a noradrenaline uptake inhibitor, in endogenous depression. II. Biochemical findings. *Acta Psychiatr Scand*. 1982 Jul;66(1):66-82. doi: 10.1111/j.1600-0447.1982.tb00915.x
70. Lassen JB, Petersen E, Kjellberg B, Olsson SO. Comparative studies of a new 5HT-uptake inhibitor and some tricyclic thymoleptics. *Eur J Pharmacol*. 1975 May;32(1):108-15. doi: 10.1016/0014-2999(75)90329-5
71. Neto JP, Nunes JF, Carvalho FV. The effects of chronic cannabis treatment upon brain 5-hydroxytryptamine, plasma corticosterone and aggressive behavior in female rats with different hormonal status. *Psychopharmacologia*. 1975 May 28;42(2):195-200. doi: 10.1007/BF00429552
72. Tönnisaar M, Mällo T, Eller M, Häidkind R, Köiv K, Harro J. Rat behavior after chronic variable stress and partial lesioning of 5-HTergic neurotransmission: effects of citalopram. *Prog Neuropsychopharmacol Biol Psychiatry*. 2008 Jan 1;32(1):164-77. doi: 10.1016/j.pnpbp.2007.08.001
73. Herman ZS. Studies on adrenergic mechanisms in the action of desmethyl imipramine (DMI). *Psychopharmacologia*. 1970;17(3):234-41. doi: 10.1007/BF00402083
74. Shelkunov EL. Effect of imipramine-like antidepressants on head twitching in mice induced by 5-hydroxytryptophan. *Bull Exp Biol Med*. 1978; 86: 1171-1173 (1978). <https://doi.org/10.1007/BF00845019>
75. Nordin C, Siwers B, Bertilsson L. Bromocriptine treatment of depressive disorders. Clinical and biochemical effects. *Acta Psychiatr Scand*. 1981 Jul;64(1):25-33. doi: 10.1111/j.1600-0447.1981.tb00758.x
76. Hyttel J. Neurochemical characterization of a new potent and selective serotonin uptake inhibitor: Lu 10-171. *Psychopharmacology (Berl)*. 1977 Mar 16;51(3):225-33. doi: 10.1007/BF00431629
77. Ögren SO, Ross SB, Hall H, Holm AC, Renyi AL. The pharmacology of zimelidine: a 5-HT selective reuptake inhibitor. *Acta Psychiatr Scand Suppl*. 1981;290:127-51. doi: 10.1111/j.1600-0447.1981.tb00715.x
78. Lingjaerde O. Inhibition of platelet uptake of serotonin in plasma from patients treated with clomipramine and amitriptyline. *Eur J Clin Pharmacol*. 1979 Jun 12;15(5):335-40. doi: 10.1007/BF00558437
79. Andersson A, Eriksson A, Marcusson J. Unaltered number of brain serotonin uptake sites in suicide victims. *J Psychopharmacol*. 1992 Jan;6(4):509-13. doi: 10.1177/026988119200600406
80. Coppen A, Whybrow PC, Noguera R, Maggs R, Prange AJ Jr. The comparative antidepressant value of L-tryptophan and imipramine with and without attempted potentiation by liothyronine. *Arch Gen Psychiatry*. 1972 Mar;26(3):234-41. doi: 10.1001/archpsyc.1972.01750210042009
81. P. Blier; C. de Montigny. Effects of quipazine on pre- and postsynaptic serotonin receptors: Single cell studies in the rat CNS. 1983;22(4): 495-499. doi:10.1016/0028-3908(83)90169-7
82. Fyrö B, Petterson U, Sedvall G. The effect of lithium treatment on manic symptoms and levels of monoamine metabolites in cerebrospinal fluid of manic depressive patients. *Psychopharmacologia*. 1975 Oct 14;44(1):99-103. doi: 10.1007/BF00421192
83. Siwers B, Ringberger VA, Tuck JR, Sjöqvist F. Initial clinical trial based on biochemical methodology of zimelidine (a serotonin uptake inhibitor) in depressed patients. *Clin Pharmacol Ther*. 1977 Feb;21(2):194-200. doi: 10.1002/cpt.1977212194. PMID: 837638.
84. Corrêa H, Duval F, Claude MM, Bailey P, Tremeau F, Diep TS, Crocq MA, Castro JO, Macher JP. Noradrenergic dysfunction and antidepressant treatment response. *Eur Neuropsychopharmacol*. 2001 Apr;11(2):163-8. doi: 10.1016/s0924-977x(01)00079-7
85. Segawa T, Mizuta T, Nomura Y. Modifications of central 5-hydroxytryptamine binding sites in synaptic membranes from rat brain after long-term administration of tricyclic antidepressants. *Eur J Pharmacol*. 1979 Sep 1;58(1):75-83. doi: 10.1016/0014-2999(79)90342-x
86. Meyerson LR, Ong HH, Martin LL, Ellis DB. Effect of antidepressant agents on beta-adrenergic receptor and neurotransmitter regulatory systems. *Pharmacol Biochem Behav*. 1980 Jun;12(6):943-8. doi: 10.1016/0091-3057(80)90457-8
87. Lingjaerde O Jr. Inhibitory effect of two newer antidepressants, Lu 5-003 and Lu 3-010, on serotonin uptake in human blood platelets in vitro. *Psychopharmacologia*. 1970;17(1):94-9. doi: 10.1007/BF00402095
88. Pilc A, Brański P, Pałucha A, Tokarski K, Bijak M. Antidepressant treatment influences group I of glutamate metabotropic receptors in slices from hippocampal CA1 region. *Eur J Pharmacol*. 1998 May 15;349(1):83-7. doi: 10.1016/s0014-2999(98)00169-1
89. Karanges E, McGregor IS. Antidepressants and adolescent brain development. *Future Neurology*. 2011;6(6):783-808.

90. Waldmeier PC, Tipton KF, Bernasconi R, Felner AE, Baumann PA, Maitre L. CGP 4718 A, a new potential antidepressant with a dual mode of action. *Eur J Pharmacol.* 1984 Dec 15;107(1):79-89. doi: 10.1016/0014-2999(84)90094-3
91. Glover ME, Clinton SM. Of rodents and humans: A comparative review of the neurobehavioral effects of early life SSRI exposure in preclinical and clinical research. *Int J Dev Neurosci.* 2016 Jun;51:50-72. doi: 10.1016/j.ijdevneu.2016.04.008
92. Oxenkrug GF, Bachurin SO, Prakhie IV, Zefirov NS. Quinone reductase 2 and antidepressant effect of melatonin derivatives. *Ann NY Acad Sci.* 2010 Jun;1199:121-4. doi: 10.1111/j.1749-6632.2009.05354.x
93. Vaatstra WJ, Deiman-Van Aalst WM, Eigeman L, Du 24565, a quipazine derivative, a potent selective serotonin uptake inhibitor. *Eur J Pharmacol.* 1981 Mar 12;70(2):195-202. doi: 10.1016/0014-2999(81)90214-4
94. Nowakowska E, Kus K, Chodera A. Comparison of behavioural effects of venlafaxine and imipramine in rats. *Arzneimittelforschung.* 2003;53(4):237-42. doi: 10.1055/s-0031-1297102
95. Daws LC. Unfaithful neurotransmitter transporters: focus on serotonin uptake and implications for antidepressant efficacy. *Pharmacol Ther.* 2009 Jan;121(1):89-99. doi: 10.1016/j.pharmthera.2008.10.004
96. Wu T, Chen J, Zhu J, Yu Z. Association between the transcriptional levels of Htr-1a and tryptophan hydroxylase-1 in the hippocampus and the antifatigue effects of leucine on rats with postoperative fatigue. *Exp Ther Med.* 2014 Nov;8(5):1633-1637. doi: 10.3892/etm.2014.1973
97. Yamada N, Takahashi S, Todd KG, Baker GB, Paetsch PR. Effects of two substituted hydrazine monoamine oxidase (MAO) inhibitors on neurotransmitter amines, gamma-aminobutyric acid, and alanine in rat brain. *J Pharm Sci.* 1993 Sep;82(9):934-7. doi: 10.1002/jps.2600820912
98. Savitz J, Ford BN, Kuplicki R, Khalsa S, Teague TK, Paulus MP. Acute administration of ibuprofen increases serum concentration of the neuroprotective kynurenone pathway metabolite, kynurenic acid: a pilot randomized, placebo-controlled, crossover study. *Psychopharmacology (Berl).* 2022 Dec;239(12):3919-3927. doi: 10.1007/s00213-022-06263-w
99. Bhagya V, Sri Kumar BN, Raju TR, Rao BS. Chronic escitalopram treatment restores spatial learning, monoamine levels, and hippocampal long-term potentiation in an animal model of depression. *Psychopharmacology (Berl).* 2011 Mar;214(2):477-94. doi: 10.1007/s00213-010-2054-x
100. Marcusson JO, Ross SB. Binding of some antidepressants to the 5-hydroxytryptamine transporter in brain and platelets. *Psychopharmacology (Berl).* 1990;102(2):145-55. doi: 10.1007/BF02245915
101. Porto JA, Mello AF, Kerr-Corrêa F, dos Santos AF, Moreno R, dos Santos CHR, Chaves AV, Versiani M, Nardi A, de Oliveira IR, Ribeiro MG, Kapczinski F, Gazalle FK, Frey BN, Tamai S. Fluvoxamina no transtorno depressivo maior: um estudo multicêntrico aberto. *Jornal Brasileiro De Psiquiatria.* 2007;56:17-22.
102. de Montigny C, Blier P, Caillé G, Kouassi E. Pre- and postsynaptic effects of zimelidine and norzimelidine on the serotonergic system: single cell studies in the rat. *Acta Psychiatr Scand Suppl.* 1981;290:79-90. doi: 10.1111/j.1600-0447.1981.tb00711.x
103. Møller SE, Kirk L, Honoré P. Relationship between plasma ratio of tryptophan to competing amino acids and the response to L-tryptophan treatment in endogenously depressed patients. *J Affect Disord.* 1980 Mar;2(1):47-59. doi: 10.1016/0165-0327(80)90021-x
104. Koide T, Matsushita H. Influence of a chronic new potential antidepressant, 1-[3-(dimethylamino)propyl]-5-methyl-3-phenyl-1H-indazole(FS32) and its N-desmethylated compound(FS97): treatment on monoaminergic receptor sensitivity in the rat brain. *Neuropharmacology.* 1981 Mar;20(3):285-92. doi: 10.1016/0028-3908(81)90135-0
105. Snider BL, Dieteman DF. Letter: Pyridoxine therapy for premenstrual acne flare. *Arch Dermatol.* 1974 Jul;110(1):130-1. doi: 10.1001/archderm.1974.01630070088030
106. Lassen JB, Squires RF, Christensen JA, Molander L. Neurochemical and pharmacological studies on a new 5HT-uptake inhibitor, FG4963, with potential antidepressant properties. *Psychopharmacologia.* 1975 Apr 30;42(1):21-6. doi: 10.1007/BF00428820
107. Borg KO, Johnsson G, Jordö L, Lundborg P, Rönn O, Welin-Fogelberg I. Interaction studies between three antidepressant drugs (zimelidine, imipramine and chlorimipramine) and noradrenaline in healthy volunteers and some pharmacokinetics of the drugs studied. *Acta Pharmacol Toxicol (Copenh).* 1979 Sep;45(3):198-205. doi: 10.1111/j.1600-0773.1979.tb02382.x
108. Koide T, Uyemura K. A comparison of the inhibitory effects of new non-tricyclic amine uptake inhibitors on the uptake of norepinephrine and 5-hydroxytryptamine into synaptosomes of the rat brain. *Neuropharmacology.* 1980 Apr;19(4):349-54. doi: 10.1016/0028-3908(80)90186-0
109. Pawłowski L, Nowak G, Górką Z, Mazela H. Ro 11-2465 (cyan-imipramine), citalopram and their N-desmethyl metabolites: effects on the uptake of 5-hydroxytryptamine and noradrenaline in vivo and related pharmacological activities. *Psychopharmacology (Berl).* 1985;86(1-2):156-63. doi: 10.1007/BF00431702
110. Sanghvi I, Gershon S. Similarities between behavioral and pharmacological actions of yohimbine and 5-hydroxytryptophan in the conscious dog. *Eur J Pharmacol.* 1970 Jul 15;11(2):125-9. doi: 10.1016/0014-2999(70)90041-5
111. Hall H, Sällemark M, Wedel I. Acute effects of atypical antidepressants on various receptors in the rat brain. *Acta Pharmacol Toxicol (Copenh).* 1984 May;54(5):379-84. doi: 10.1111/j.1600-0773.1984.tb01945.x
112. Sayehmiri K, Asadi-Samani M, Bahmani M. Effects of vitamin B6 on premenstrual syndrome: A systematic review and meta-analysis. *Journal of Chemical and Pharmaceutical Science.* 2016;9(3):1346-53.
113. Haffmans PM, Timmerman L, Hoogduin CA. Efficacy and tolerability of citalopram in comparison with fluvoxamine in depressed outpatients: a double-blind, multicentre study. The LUCIFER Group. *Int Clin Psychopharmacol.* 1996 Sep;11(3):157-64. doi: 10.1097/00004850-199609000-00002
114. Saratikov AS, Spiridonova ZI, Alekseeva LP. Vliianie litia na EEG i soderzhanie serotoninina v mozge [Effect of lithium on the EEG and the serotonin content of the brain]. *Biull Eksp Biol Med.* 1974 Aug;78(8):61-4. Russian.
115. Lemberger L, Rowe H, Bosomworth JC, Tenbarge JB, Bergstrom RF. The effect of fluoxetine on the pharmacokinetics and psychomotor responses of diazepam. *Clin Pharmacol Ther.* 1988 Apr;43(4):412-9. doi: 10.1038/clpt.1988.52
116. Pawłowski L, Mazela H. Norzimelidine, a metabolite of a highly selective 5-hydroxytryptamine uptake inhibitor, can inhibit the uptake of noradrenaline in-vivo. *J Pharm Pharmacol.* 1984 Dec;36(12):855-8. doi: 10.1111/j.2042-7158.1984.tb04896.x
117. Todd KG, McManus DJ, Baker GB. Chronic administration of the antidepressants phenelzine, desipramine, clomipramine, or maprotiline decreases binding to 5-hydroxytryptamine2A

- receptors without affecting benzodiazepine binding sites in rat brain. *Cell Mol Neurobiol.* 1995 Jun;15(3):361-70.  
doi: 10.1007/BF02089946
118. Tremblay LK, Naranjo CA, Cardenas L, Herrmann N, Bustos UE. Probing brain reward system function in major depressive disorder: altered response to dextroamphetamine. *Arch Gen Psychiatry.* 2002 May;59(5):409-16. doi: 10.1001/archpsyc.59.5.409
119. Pawłowski L, Nowak G. Biochemical and pharmacological tests for the prediction of ability of monoamine uptake blockers to inhibit the uptake of noradrenaline in-vivo: the effects of desipramine, maprotiline, femoxetine and citalopram. *J Pharm Pharmacol.* 1987 Dec;39(12):1003-9. doi: 10.1111/j.2042-7158.1987.tb03148.x
120. Koide T, Uyemura K. Inhibition of (3H)-dopamine uptake into rat brain synaptosomes by the new non-tricyclic antidepressants, FS32 and FS97. *Eur J Pharmacol.* 1980 Mar 21;62(2-3):147-55. doi: 10.1016/0014-2999(80)90271-x
121. Campbell M, Fish B, Shapiro T, Floyd A Jr. Imipramine in preschool autistic and schizophrenic children. *J Autism Child Schizophr.* 1971 Jul-Sep;1(3):267-82. doi: 10.1007/BF01557348
122. Doll H, Brown S, Thurston A, Vessey M. Pyridoxine (vitamin B6) and the premenstrual syndrome: a randomized crossover trial. *J R Coll Gen Pract.* 1989 Sep;39(326):364-8
123. Sjoerdsma A, Lovenberg W, Engelman K, Carpenter W, Wyatt R, Gessa G. Serotonin now: clinical implications of inhibiting its synthesis with para-chlorophenylalanine. *Annals of Internal Medicine.* 1970;73(4):607-629.
124. Pawłowski L, Kwiatek H. No correlation exists between antidepressant activity and the ability of 5-HT uptake inhibitors to interact with 5-HT receptors of the rat stomach fundus strip. *J Pharm Pharmacol.* 1984 Jun;36(6):386-90. doi: 10.1111/j.2042-7158.1984.tb04404.x
125. Prange AJ Jr, Wilson IC, Lynn CW, Alltop LB, Stikeleather RA. L-tryptophan in mania. Contribution to a permissive hypothesis of affective disorders. *Arch Gen Psychiatry.* 1974 Jan;30(1):56-62. doi: 10.1001/archpsyc.1974.01760070040006
126. Martin KF, Phillips I, Cheetham SC, Heal DJ. Dopamine D<sub>2</sub> receptors: a potential pharmacological target for nomifensine and tranylcypromine but not other antidepressant treatments. *Pharmacol Biochem Behav.* 1995 Aug;51(4):565-9. doi: 10.1016/0091-3057(95)00095-e
127. De las Cuevas C, Sanz Ej. Antidepressant Use in Early Pregnancy. *Current Women's Health Reviews.* 2011;7(1):10-17.
128. Spyraiki C, Fibiger HC. Behavioural evidence for supersensitivity of postsynaptic dopamine receptors in the mesolimbic system after chronic administration of desipramine. *Eur J Pharmacol.* 1981 Sep 11;74(2-3):195-206. doi: 10.1016/0014-2999(81)90531-8
129. Smith DF. 'What do Stereoisomers of Antidepressant Drugs Indicate About the Topography of the Serotonin Uptake Area?', *Nordisk Psykiatrisk Tidsskrift.* 1986;40(2):91-94. doi: 10.3109/08039488609096448
130. Le Fur G, Mitrani N, Uzan A. Effects of 4-(3-indolyl-alkyl) piperidine derivatives on brain 5-hydroxytryptamine turnover and on cardiac and brain noradrenaline or 5-hydroxytryptamine depletion induced by 6-hydroxydopamine, H 75/12 and 4-chloroamphetamine. *Biochem Pharmacol.* 1977 Mar 15;26(6):505-9. doi: 10.1016/0006-2952(77)90325-2
131. Omenn GS, Motulsky AG. Pharmacogenetics: Clinical and Experimental Studies in Man. In: Eleftheriou BE (eds). *Psychopharmacogenetics.* Springer, Boston, MA, 1975. [https://doi.org/10.1007/978-1-4615-7697-6\\_10](https://doi.org/10.1007/978-1-4615-7697-6_10)
132. Tcheremissine OV, Lieving LM. Pharmacotherapy of postpartum depression: current practice and future directions. *Expert Opin Pharmacother.* 2005 Oct;6(12):1999-2005. doi: 10.1517/14656566.6.12.1999
133. D'Souza CD, Krystal JH. Psychopharmacological challenge studies in psychiatric research. *International Review of Psychiatry.* 2001;13(1):40-46. <https://doi.org/10.1080/09540260123077>
134. Coppen A, Turner P, Rowsell AR, Padgham C. 5-Hydroxytryptamine (5-HT) in the whole-blood of patients with depressive illness. *Postgrad Med J.* 1976 Mar;52(605):156-8. doi: 10.1136/pgmj.52.605.156
135. Baker GB, LeGatt DF, Coutts RT, Dewhurst WG. Rat brain concentrations of 5-hydroxytryptamine following acute and chronic administration of MAO-inhibiting antidepressants. *Prog Neuropsychopharmacol Biol Psychiatry.* 1984;8(4-6):653-6. doi: 10.1016/0278-5846(84)90030-7
136. Lazarus JH, Collard KJ, Collard KJ. Effects of lithium on brain metabolism. *Endocrine and Metabolic Effects of Lithium.* 1986:55-97.
137. Frazer A. Pharmacology of antidepressants. *J Clin Psychopharmacol.* 1997 Apr;17 Suppl 1:2S-18S. doi: 10.1097/00004714-199704001-00002
138. Slap GB. Oral contraceptives and depression: impact, prevalence and cause. *J Adolesc Health Care.* 1981 Sep;2(1):53-64. doi: 10.1016/s0197-0070(81)80087-3
139. Golan M, Schreiber G, Avissar S. Antidepressants, beta-arrestins and GRKs: from regulation of signal desensitization to intracellular multifunctional adaptor functions. *Curr Pharm Des.* 2009;15(14):1699-708. doi: 10.2174/138161209788168038
140. McGregor KM. Using a novel optogenetic approach to directly assess 5-HT 1a somatodendritic autoreceptor function in response to chronic selective serotonin reuptake inhibitor treatment. Wayne State University, 2015.
141. Hordern A, Wheatley D. The black cloud. The recognition and treatment of endogenous depression in general practice. *Med J Aust.* 1972 Mar 25;1(13):637-43.
142. Coppen A, Rama Rao VA, Ruthven CR, Goodwin BL, Sandler M. Urinary 4-hydroxy-3-methoxyphenylglycol is not a predictor for clinical response to amitriptyline in depressive illness. *Psychopharmacology (Berl).* 1979 Jun 28;64(1):95-7. doi: 10.1007/BF00427352
143. Ferris RM, Brieady L, Mehta N, Hollingsworth E, Rigdon G, Wang C, Soroko F, Wastila W, Cooper B. Pharmacological properties of 403U76, a new chemical class of 5-hydroxytryptamine- and noradrenaline-reuptake inhibitor. *J Pharm Pharmacol.* 1995 Sep;47(9):775-81. doi: 10.1111/j.2042-7158.1995.tb06740.x
144. Oxenkrug GF. Letter: Similarity between the effects of dimethyl and monomethyl tricyclic drugs on reserpine effects in the frog and 5-hydroxytryptamine uptake by human blood platelets. *J Pharm Pharmacol.* 1973 Dec;25(12):1013-5. doi: 10.1111/j.2042-7158.1973.tb10001.x
145. Claassen V, Davies JE, Hertting G, Placheta P. Fluvoxamine, a specific 5-hydroxytryptamine uptake inhibitor. *Br J Pharmacol.* 1977 Aug;60(4):505-16. doi: 10.1111/j.1476-5381.1977.tb07528.x
146. Coppen A, Prange AJ Jr, Whybrow PC, Noguera R, Paez JM. Methysergide in mania. A controlled trial. *Lancet.* 1969 Aug 16;2(7616):338-40. doi: 10.1016/s0140-6736(69)92697-x
147. Demirgören S, Doğan S, Doğan YH. Evaluating the antidepressant effect of Valeriana officinalis root extract with forced swim test. *Turkish Journal of Family Practice.* 2009;13(3):148-152.
148. Rao M, Fuger J, Andres A, Ruhrmann S, Kasper S, Deister A, Möller H. Einfluß von endogenen und exogenen Liganden auf serotonerge Aktivität bei psychiatrischen Patienten und gesunden

- Probanden. In: Baumann, P. (eds) Biologische Psychiatrie der Gegenwart. Springer, Vienna, 1993. doi: 10.1007/978-3-7091-9263-4\_44
149. Erfurth A. Agitation und Aggression. psychopraxis. neuropraxis. 2017;20: 1. doi: 10.1007/s00739-016-0370-6
150. López-Muñoz F, Alamo C, Juckel G, Assion HJ. Half a century of antidepressant drugs: on the clinical introduction of monoamine oxidase inhibitors, tricyclics, and tetracyclics. Part I: monoamine oxidase inhibitors. *J Clin Psychopharmacol.* 2007 Dec;27(6):555-9. doi: 10.1097/jcp.0b013e3181bb617
151. Delport A. The antidepressant properties of selected methylene blue analogues. *Dss,* 2014
152. Danilov DS. Selective serotonin reuptake inhibitors: a 40-year history. *Neurology, Neuropsychiatry, Psychosomatics.* 2015;7(1):66-74.
153. Pilc A, Machaczka A, Kawalec P, Smith JL, Witkin JM. Where do we go next in antidepressant drug discovery? A new generation of antidepressants: a pivotal role of AMPA receptor potentiation and mGlu2/3 receptor antagonism. *Expert Opin Drug Discov.* 2022 Oct;17(10):1131-1146. doi: 10.1080/17460441.2022.2111415.
154. Saayman JLB. Long-lasting bio-behavioural effects of early-life sildenafil administration in stress-sensitive versus healthy control rats. *Diss. North-West University (South-Africa). Potchefstroom Campus,* 2019.
155. Chaki S, Ago Y, Palucha-Paniewiera A, Matrisciano F, Pilc A. mGlu2/3 and mGlu5 receptors: potential targets for novel antidepressants. *Neuropharmacology.* 2013 Mar;66:40-52. doi: 10.1016/j.neuropharm.2012.05.022
156. Peters JU. Pharmacological Promiscuity and Molecular Properties. *Polypharmacology in Drug Discovery.* 2012:47-62.
157. Lifschytz T, Goltser-Dubner T, Landshut G, Lerer B. Effect of triiodothyronine on 5-HT1A and 5-HT1B receptor expression in rat forebrain and on latency to feed in the novelty suppressed feeding test. *Prog Neuropsychopharmacol Biol Psychiatry.* 2010 May 30;34(4):632-8. doi: 10.1016/j.pnpbp.2010.02.029
158. Doğan YH, Doğan S, Demircören S. Valeriana officinalis kök ekstraktının antidepresan etkisinin zorlu yüzme testi ile değerlendirilmesi. *Turkish Journal of Family Practice.* 2009;13(3):148-152.
159. Debonnel G, Robichaud M, Bermack J. Potential Role of  $\sigma$  Ligands and Neurosteroids in Major Depression. In: Su TP, Matsumoto RR, Bowen WD (eds). *Sigma Receptors.* Springer, Boston, MA, 2007. doi: 10.1007/978-0-387-36514-5\_14
160. Ogren SO, Holm AC, Hall H, Lindberg UH. Alaproclate, a new selective 5-HT uptake inhibitor with therapeutic potential in depression and senile dementia. *J Neural Transm.* 1984;59(4):265-88. doi: 10.1007/BF01255596
161. Oksenkrug GF. Effect of prothixene and allied compounds on serotonin uptake by human blood platelets. *Bull Exp Biol Med.* 1975;80:941-943. doi: 10.1007/BF00789276
162. Oksenkrug GF, Lapin IP. Differentiation between secondary and tertiary tricyclic antidepressants in frogs. *Bull Exp Biol Med.* 1972; 74:804-806. doi: 10.1007/BF00796144
163. Ryzhenkov VE, Samsonova ML. Effect of antidepressants on the 11-hydroxycorticosteroid concentration in rat blood plasma. *Bull Exp Biol Med.* 1973; 75:60-62. doi: 10.1007/BF00787309
164. Vysokovskii TM, Gilev AP. Effect of some psychotropic drugs on central effects of 5-hydroxytryptophan in rats. *Bull Exp Biol Med.* 1971;71(3):275-277. doi:10.1007/BF00783826.
165. Glushko LF, Mikhailova TV, Gureeva ZP, Gilev AP. Changes in some central effects of serotonin in cats against the background of antidepressants. *Bull Exp Biol Med.* 1971 Sep;71(3):272-274. doi: 10.1007/BF00783825.
166. Murphy DL, Baker M, Goodwin FK, Miller H, Kotin J, Bunney WE Jr. L-tryptophan in affective disorders: indoleamine changes and differential clinical effects. *Psychopharmacologia.* 1974 Jan 9;34(1):11-20. doi: 10.1007/BF00421216
167. Heal DJ, Buckett WR. Development of antidepressant drugs for the 1990s: Progress or procrastination? *Int J Geriatr Psychiatry.* 1991;6(6):431-443. doi:10.1002/gps.930060616.
168. McIntyre IM, Norman TR. Platelet serotonin response to treatment in geriatric depression. *Biol Psychiatry.* 1989 Aug;26(4):434-6. doi: 10.1016/0006-3223(89)90064-4
169. Ogren SO, Fuxe K, Agnati LF, Celani MF. Effects of antidepressant drugs on cerebral serotonin receptor mechanisms. *Acta Pharmacol Toxicol (Copenh).* 1985;56 Suppl 1:105-27. doi: 10.1111/j.1600-0773.1985.tb02503.x
170. Maj J, Przegalinski E, Mogilnicka E. Hypotheses concerning the mechanism of action of antidepressant drugs. *Rev Physiol Biochem Pharmacol.* 1984;100:1-74. doi: 10.1007/3540133275\_1
171. Linnoila M, Miller TL, Bartko J, Potter WZ. Five antidepressant treatments in depressed patients. Effects on urinary serotonin and 5-hydroxyindoleacetic acid output. *Arch Gen Psychiatry.* 1984 Jul;41(7):688-92. doi: 10.1001/archpsyc.1984.01790180058007
172. Wakelin JS. A review of the properties of a new specific 5-HT reuptake inhibitor — fluvoxamine maleate. *Frontiers in Neuropsychiatric Research.* 1983:159-173.
173. Usdin E, Goldstein M, Friedhoff A, Georgotas A. *Frontiers in Neuropsychiatric Research.* Usdin, Earl et al. "Frontiers in Neuropsychiatric Research." Palgrave Macmillan UK, 1983
174. Nurnberger JI Jr, Gershon ES, Simmons S, Ebert M, Kessler LR, Dibble ED, Jimerson SS, Brown GM, Gold P, Jimerson DC, Guroff JJ, Storch Fl. Behavioral, biochemical and neuroendocrine responses to amphetamine in normal twins and 'well-state' bipolar patients. *Psychoneuroendocrinology.* 1982;7(2-3):163-76. doi: 10.1016/0306-4530(82)90009-9
175. Chouinard G, Young SN, Annable L, Sourkes TL. Tryptophan-nicotinamide, imipramine and their combination in depression. A controlled study. *Acta Psychiatr Scand.* 1979 Apr;59(4):395-414. doi: 10.1111/j.1600-0447.1979.tb04482.x
176. Lippmann W, Pugsley TA. Pirandamine, a relatively selective 5-hydroxytryptamine uptake inhibitor. *Pharmacol Res Commun.* 1976 Aug;8(4):387-405. doi: 10.1016/0031-6989(76)90039-4.
177. Lassen JB, Squires R, Petersen E. Neurochemical and pharmacological properties of a new serotonin-potentiating phenylpiperidine derivative FG 4963. *Nordisk Psykiatrisk Tidsskrift.* 1975;29(6):475-481.
178. Harri MN. The dependence of imipramine-induced sedation upon central 5-hydroxytryptamine-like activity in the frog. *J Pharm Pharmacol.* 1974 Jan;26(1):73-4. doi: 10.1111/j.2042-7158.1974.tb12827.x
179. Brown GL, Green RL Jr, Martin RM Jr. Double-blind, noncrossover study of imipramine and A-10749. *J Clin Pharmacol New Drugs.* 1972 Jan;12(1):40-5. doi: 10.1002/j.1552-4604.1972.tb00034.x
180. Ross SB, Renyi AL, Ogren SO. A comparison of the inhibitory activities of iprindole and imipramine on the uptake of 5-hydroxytryptamine and noradrenaline in brain slices. *Life Sci I.* 1971 Nov 15;10(22):1267-77. doi: 10.1016/0024-3205(71)90325-0
181. Kits TP, van Praag HM. A controlled study of the antidepressant effect of p-Chloro-N-methylamphetamine, a compound with a selective effect on the central 5-hydroxytryptamine metabolism. *Acta Psychiatr Scand.* 1970;46(4):365-73. doi: 10.1111/j.1600-0447.1970.tb02126.x

182. Critchley EMR. Naturally occurring dyskinesias. *Lancet*. 1970 Nov 21;296(7682):1082-1083. doi:10.1016/S0140-6736(70)90311-9.
183. Buus Lassen J. Introduction to the development of paroxetine, a novel antidepressant. *Acta Psychiatr Scand Suppl*. 1989;80(S350):13. doi:10.1111/j.1600-0447.1989.tb07183.x.
184. El Khoury A. Effect of pharmacological treatment of serotonergic function in depression [dissertation]. Stockholm: Karolinska Institute; 2002.

185. López-Muñoz F, Alamo C. Monoaminergic neurotransmission: the history of the discovery of antidepressants from 1950s until today. *Curr Pharm Des*. 2009;15(14):1563-86. doi: 10.2174/138161209788168001

## General questions of medicine

1. Riedlinger TJ, Riedlinger JE. Psychedelic and entactogenic drugs in the treatment of depression. *J Psychoactive Drugs*. 1994 Jan-Mar;26(1):41-55. doi: 10.1080/02791072.1994.10472600
2. López-Muñoz F, Molina JD, Rubio G, Alamo C. An historical view of the pineal gland and mental disorders. *J Clin Neurosci*. 2011 Aug;18(8):1028-37. doi: 10.1016/j.jocn.2010.11.037
3. Reshetnikov M. What Happened with the Search for the Material Basis of the Psyche. COJ Reviews and Research (COJRR).2018 August 13; 1(3):1-7. doi: 10.31031/COJRR.2018.01.000514
4. Rybakowski J. A half-century of participant observation in psychiatry. Part II: Affective disorders. *Psychiatr Pol*. 2020 Aug 31;54(4):641-659. English, Polish. doi: 10.12740/PP/123167
5. Mashkovskii MD, Andreeva NI. Evolution of the concepts of the molecular mechanism of the action of antidepressants (survey). *Pharm Chem J*. 1985;19(11):733-741. doi:10.1007/BF00766627.
6. Mulinari S. Monoamine theories of depression: historical impact on biomedical research. *J Hist Neurosci*. 2012;21(4):366-92. doi: 10.1080/0964704X.2011.623917
7. Whybrow PC, Akiskal HS, McKinney WT Jr. Mood Disorders: Historical Perspective and Current Models of Explanation. In: Whybrow PC, Akiskal HS, McKinney WT Jr, eds. *Mood Disorders: Toward a New Psychobiology*. New York: Plenum Press; 1984:21-42.
8. Whybrow P, Parlatore A. Melancholia, a model in madness: a discussion of recent psychobiologic research into depressive illness. *Int J Psychiatry Med*. 1973 Fall;4(4):351-78. doi: 10.2190/400n-gwxj-8p52-4m45
9. Reshetnikov M. Genius Ideas and Genius Mistakes. *Int J Psychiatr Res*. 2019;2(3):1-10. doi:10.33425/2641-4317.1020.
10. Reshetnikov MM. Brilliant ideas and brilliant mistakes (Non-material theory of the psyche — second message). *Review of Psychiatry and Medical Psychology*. 2019;(3):36-52.
11. Demin K, Meshalkina D, Lakstygal A, Kalueff AV. Developing translational biological psychiatry: Learning from history to build the future. *Biol Commun*. 2017;62(4):278-292. doi:10.21638/11701/spbu03.2017.407.
12. Oxenkrug GF. Kynurenic acid and hypotension: historic perspectives. *Crit Care Med*. 2012 Jun;40(6):2006; author reply 2006-7. doi: 10.1097/CCM.0b013e31824e1e3b
13. Dale H, Brassington L, King K. The impact of healthy lifestyle interventions on mental health and wellbeing: a systematic review. *Ment Health Rev J*. 2014;19(1):1-26. doi:10.1108/MHRJ-05-2013-0016.
14. Machul M, Pawłowski P, Kościółek A, Jakubowska K. Depression – an interdisciplinary problem of modern nursing. Case study. *J Educ Health Sport*. 2019;9(4):244-255. doi:10.5281/zenodo.2633326.
15. Gsell W, Lange KW, Pfeuffer R, Heckers S, Heinsen H, Senitz D, Jellinger K, Ransmayr G, Wichart I, Vock R, et al. How to run a brain bank. A report from the Austro-German brain bank. *J Neural Transm Suppl*. 1993;39:31-70.
16. Whybrow PC, Akiskal HS, McKinney WT Jr. *Mood Disorders: Toward a New Psychobiology*. New York: Plenum Press; 1984.
17. Lingjærde O. The biochemistry of depression. *Acta Psychiatr Scand Suppl*. 1983;67(s302):36-51. doi: 10.1111/j.1600-0447.1983.tb00357.x.
18. Iversen LL, Iversen S, Snyder SH, . *Handbook of Psychopharmacology*. Springer US.1978: 433-529.
19. Anisman H, Zacharkow RM. Depression: The predisposing influence of stress. *Behav Brain Sci*. 1982 Mar;5(1):89-99. doi: 10.1017/S0140525X00010633.
20. Oxenkrug GF. Tryptophan kynurenic acid metabolism as a common mediator of genetic and environmental impacts in major depressive disorder: the serotonin hypothesis revisited 40 years later. *Isr J Psychiatry Relat Sci*. 2010;47(1):56-63.
21. Wynn V, Adams PW, Folkard J, Seed M. Tryptophan, depression and steroidcontraception. *J Steroid Biochem*. 1975 Jun;6(6):965-970. doi: 10.1016/0022-4731(75)90336-2.
22. Kocki T, Urbańska EM, Kocki J, Kloc R, Kocka K, Olajossy M, Owe-Larsson B. Prolonged therapy with antidepressants increases hippocampal level of kynurenic acid and expression of Kat1 and Kat2 genes. *Pharmacol Rep*. 2018 Aug;70(4):737-745. doi: 10.1016/j.pharep.2018.01.004.
23. Gyermek L. Pharmacology of serotonin as related to anesthesia. *J Clin Anesth*. 1996 Aug;8(5):402-25. doi: 10.1016/0952-8180(96)00093-1. PMID: 8832453.
24. Cassano G, Marazziti D. Is depression a disorder of a receptor superfamily? A critical review of the receptor theory of depression and the appraisal of a new heuristic model. *Eur Psychiatry*. 1992;7(6):259-270. doi: 10.1017/S0924933800002133.
25. Oxenkrug G, Ratner R. N-acetylsertotonin and aging-associated cognitive impairment and depression. *Aging Dis*. 2012 Aug;3(4):330-8.
26. Janowsky DS, Risch SC, Huey LY, Judd LL, Rausch JL. Hypothalamic-pituitary-adrenal regulation, neurotransmitters and affective disorders. *Peptides*. 1983 Sep-Oct;4(5):775-84. doi: 10.1016/0196-9781(83)90035-9
27. Myint AM, Bondy B, Baghai TC, Eser D, Nothdurfter C, Schüle C, Zill P, Müller N, Rupprecht R, Schwarz MJ. Tryptophan metabolism and immunogenetics in major depression: a role for interferon-γ gene. *Brain Behav Immun*. 2013 Jul;31:128-33. doi: 10.1016/j.bbi.2013.04.003
28. Bermack JE, Debonnel G. The role of sigma receptors in depression. *J Pharmacol Sci*. 2005 Mar;97(3):317-36. doi: 10.1254/jphs.crj04005x
29. Lu X, Wang Y, Liu C, Wang Y. Depressive disorder and gastrointestinal dysfunction after myocardial infarct are associated with abnormal tryptophan-5-hydroxytryptamine metabolism in rats. *PLoS One*. 2017 Feb 17;12(2):e0172339. doi: 10.1371/journal.pone.0172339
30. Kovalzon VM. Serotonin theory of depression: modern view. *Russ Neurol J*. 2020;25(3):40-44. Russian. doi: 10.30629/2658-7947-2020-25-3-40-44.

31. Ashby CR Jr, Carr LA, Cook CL, Steptoe MM, Franks DD. Alteration of platelet serotonergic mechanisms and monoamine oxidase activity in premenstrual syndrome. *Biol Psychiatry*. 1988 Jun;24(2):225-33. doi: 10.1016/0006-3223(88)90277-6
32. Plotnikoff NP, Breese GR, Prange AJ. Thyrotropin releasing hormone (TRH): DOPA potentiation and biogenic amine studies. *Pharmacol Biochem Behav*. 1975 Jul-Aug;3(4):665-70. doi: 10.1016/0091-3057(75)90189-6
33. Dornbierer DA, Boxler M, Voegel CD, Stucky B, Steuer AE, Binz TM, Baumgartner MR, Baur DM, Quednow BB, Kraemer T, Seifritz E, Landolt HP, Bosch OG. Nocturnal Gamma-Hydroxybutyrate Reduces Cortisol-Awakening Response and Morning Kynurene Pathway Metabolites in Healthy Volunteers. *Int J Neuropsychopharmacol*. 2019 Oct 1;22(10):631-639. doi: 10.1093/ijnp/pyz047
34. Robertson MM. The organic contribution to depressive illness in patients with epilepsy. *J Epilepsy*. 1989;2(4):189-230. doi: 10.1016/0896-6974(89)90002-9.
35. Lerer B, Gillon D, Lichtenberg P, Gorfine M, Gelfin Y, Shapira B. Interrelationship of age, depression, and central serotonergic function: evidence from fenfluramine challenge studies. *Int Psychogeriatr*. 1996 Spring;8(1):83-102. doi: 10.1017/s1041610296002499
36. Winokur A, Lindberg ND, Lucki I, Phillips J, Amsterdam JD. Hormonal and behavioral effects associated with intravenous L-tryptophan administration. *Psychopharmacology (Berl)*. 1986;88(2):213-9. doi: 10.1007/BF00652243
37. Whalley LJ, Eagles JM, Bowler GM, Bennie JG, Dick HR, McGuire RJ, Fink G. Selective effects of ECT on hypothalamic-pituitary activity. *Psychol Med*. 1987 May;17(2):319-28. doi: 10.1017/s0033291700024855
38. Wilson IC, Prange AJ Jr, McClane TK, Rabon AM, Lipton MA. Thyroid-hormone enhancement of imipramine in nonretarded depressions. *N Engl J Med*. 1970 May 7;282(19):1063-7. doi: 10.1056/NEJM197005072821903
39. Oxenkrug GF. Metabolic syndrome, age-associated neuroendocrine disorders, and dysregulation of tryptophan-kynurenine metabolism. *Ann N Y Acad Sci*. 2010 Jun;1199:1-14. doi: 10.1111/j.1749-6632.2009.05356.x
40. Marshall PS. Allergy and depression: a neurochemical threshold model of the relation between the illnesses. *Psychol Bull*. 1993 Jan;113(1):23-43. doi: 10.1037/0033-2909.113.1.23
41. Adams PW, Rose DP, Folkard J, Wynn V, Seed M, Strong R. Effect of pyridoxine hydrochloride (vitamin B 6 ) upon depression associated with oral contraception. *Lancet*. 1973 Apr 28;1(7809):899-904.
42. Barnes AF, Yeo TP, Leiby B, Kay A, Winter JM. Pancreatic Cancer-Associated Depression: A Case Report and Review of the Literature. *Pancreas*. 2018 Oct;47(9):1065-1077. doi: 10.1097/MPA.0000000000001148
43. Bosnyák E, Kamson DO, Behen ME, Barger GR, Mittal S, Juhász C. Imaging cerebral tryptophan metabolism in brain tumor-associated depression. *EJNMMI Res*. 2015 Dec;5(1):56. doi: 10.1186/s13550-015-0136-9
44. Laakmann G, Wittmann M, Schoen HW, Zygan K, Weiss A, Meissner R, Mueller OA, Stalla GK. Effects of receptor blockers (methysergide, propranolol, phentolamine, yohimbine and prazosin) on desimipramine-induced pituitary hormone stimulation in humans—III. Hypothalamo-pituitary-adrenocortical axis. *Psychoneuroendocrinology*. 1986;11(4):475-489. doi: 10.1016/0306-4530(86)90008-9.
45. Calkin C, McClelland C, Cairns K, Kamintsky L, Friedman A. Insulin Resistance and Blood-Brain Barrier Dysfunction Underlie Neuroprogression in Bipolar Disorder. *Front Psychiatry*. 2021 May 25;12:636174. doi: 10.3389/fpsyg.2021.636174
46. Green LF, Winckler I. A brief review of the rôle of carbohydrate in relation to coronary heart disease, stress, neurotransmitters and brain function. *Food Chem*. 1981 Nov;7(3):203-217. doi: 10.1016/0308-8146(81)90046-7.
47. Oxenkrug G. 3-Hydroxykynurenic acid and type 2 diabetes: implications for aging, obesity, depression, Parkinson's disease, and schizophrenia. In: Engin A, Engin AB, editors. *Tryptophan Metabolism: Implications for Biological Processes, Health and Disease. Molecular and Integrative Toxicology*. Cham (Switzerland): Springer International Publishing; 2015. p. 173-195. doi: 10.1007/978-3-319-15630-9\_8
48. Backman L, Johansson C, Thor'en P, Allgén LG, Hallberg D. S-tryptophan concentrations after intestinal bypass in extreme obesity. *Acta Med Scand*. 1977;201(4):285-9. doi: 10.1111/j.0954-6820.1977.tb15701.x. PMID: 322448
49. Juhász C, Chugani DC, Barger GR, Kupsky WJ, Chakraborty PK, Muzik O, Mittal S. Quantitative PET imaging of tryptophan accumulation in gliomas and remote cortex: correlation with tumor proliferative activity. *Clin Nucl Med*. 2012 Sep;37(9):838-42. doi: 10.1097/RLU.0b013e318251e458
50. Tran SM, Mohajeri MH. The Role of Gut Bacterial Metabolites in Brain Development, Aging and Disease. *Nutrients*. 2021 Feb 25;13(3):732. doi: 10.3390/nu13030732
51. Regestein QR, Rose LI, Williams GH. Psychopathology in Cushing's syndrome. *Arch Intern Med*. 1972 Jul;130(1):114-7
52. Bush IE. Determination of estrogens, androgens, progesterone, and related steroids in human plasma and urine. *Adv Clin Chem*. 1969;12:57-139. doi: 10.1016/s0065-2423(08)60258-9
53. Träskman-Bendz L, Haskett RF, Zis AP. Neuroendocrine effects of L-tryptophan and dexamethasone. *Psychopharmacology (Berl)*. 1986;89(1):85-8. doi: 10.1007/BF00175195
54. McIntyre IM, Norman TR, Marriott PF, Burrows GD. The pineal hormone melatonin in panic disorder. *J Affect Disord*. 1987 May-Jun;12(3):203-6. doi: 10.1016/0165-0327(87)90028-0
55. Coppen A, Brooksbank BW, Noguera R, Wilson DA. Cortisol in the cerebrospinal fluid of patients suffering from affective disorders. *J Neurol Neurosurg Psychiatry*. 1971 Aug;34(4):432-5. doi: 10.1136/jnnp.34.4.432
56. Hauschmidt S. Stoffwechseluntersuchungen unter Einnahme oraler Kontrazeptiva. *Z Ernährungswiss*. 1978 Mar;17(1):1-18. doi: 10.1007/BF02020687.
57. Nikkheslat N. Understanding the role of inflammation in coronary heart disease patients with and without depression [dissertation]. London (UK): University of Roehampton; 2014. Available from: [https://pure.roehampton.ac.uk/portal/files/428487/PhD\\_Thesis\\_Naghmeh\\_Nikkheslat\\_Finalv2.pdf](https://pure.roehampton.ac.uk/portal/files/428487/PhD_Thesis_Naghmeh_Nikkheslat_Finalv2.pdf)
58. Lewis JW. Premenstrual syndrome as a criminal defense. *Arch Sex Behav*. 1990 Oct;19(5):425-41. doi: 10.1007/BF02442346
59. Aftergood L, Alfin-Slater RB. Oral contraceptives and nutrient requirements. In: Alfin-Slater RB, Kritchevsky D, editors. *Nutrition and the adult. Human Nutrition*. Vol. 3B. Boston (MA): Springer; 1980. p. 367-395. doi: 10.1007/978-1-4615-7216-9\_10
60. Mudry JM. Diabetes, obesity and exercise in skeletal muscle: effects on gene expression and DNA methylation [dissertation]. Stockholm (Sweden): Karolinska Institutet; 2016. Available from: [https://openarchive.ki.se/articles/thesis/Diabetes\\_obesity\\_and\\_exercise\\_in\\_skeletal\\_muscle\\_effects\\_on\\_gene\\_expression\\_and\\_DNA\\_methylation/26895487](https://openarchive.ki.se/articles/thesis/Diabetes_obesity_and_exercise_in_skeletal_muscle_effects_on_gene_expression_and_DNA_methylation/26895487)

61. Galyamina AG, Kovalenko IL, Smagin DA, Kudryavtseva NN. Changes in the expression of neurotransmitter system genes in the ventral tegmental area in depressed mice: RNA-SEQ data. *Neurosci Behav Physiol.* 2018 May;48(5):591–602. doi: 10.1007/s11055-018-0605-5.
62. Veniaminova EA, Strekalova TV. Increased intake of fat and cholesterol as a pathogenetic factor of depression: A possible molecular mechanism. *Neurochem J.* 2016;10(1):26–33. doi: 10.1134/S1819712416010153.
63. Oxenkrug G. Insulin resistance and dysregulation of tryptophan-kynurenine and kynurene-nicotinamide adenine dinucleotide metabolic pathways. *Mol Neurobiol.* 2013 Oct;48(2):294–301. doi: 10.1007/s12035-013-8497-4. Epub 2013 Jun 28
64. Stavrakakis N, Oldehinkel AJ, Nederhof E, Oude Voshaar RC, Verhulst FC, Ormel J, de Jonge P. Plasticity genes do not modify associations between physical activity and depressive symptoms. *Health Psychol.* 2013 Jul;32(7):785–92. doi: 10.1037/a0030111
65. Oxenkrug G, Tucker KL, Requintina P, Summergrad P. Neopterin, a Marker of Interferon-Gamma-Inducible Inflammation, Correlates with Pyridoxal-5'-Phosphate, Waist Circumference, HDL-Cholesterol, Insulin Resistance and Mortality Risk in Adult Boston Community Dwellers of Puerto Rican Origin. *Am J Neuropot Neuropatol.* 2011 Jun;3(1):48–52. doi: 10.1166/ajnn.2011.1024
66. Dawson N. Affective-related endophenotypes in serotonin transporter over-expressing mice [dissertation]. Edinburgh (UK): University of Edinburgh; 2008. Available from: <http://hdl.handle.net/1842/4843>
67. Stoupel E, Abramson E, Gabay U, Kalediene R, Petrauskienė J, Sulkes J. Heart-mood-death: the clinical expression of the cholesterol-serotonin controversy by the temporal distribution of deaths from coronary heart disease and suicide. *J Clin Basic Cardiol.* 2000;3(3):173–176.
68. Rujescu D, Giegling I, Dahmen N, Szegedi A, Anhelescu I, Gietl A, Schäfer M, Müller-Siecheneder F, Bondy B, Möller HJ. Association study of suicidal behavior and affective disorders with a genetic polymorphism in ABCG1, a positional candidate on chromosome 21q22.3. *Neuropsychobiology.* 2000;42 Suppl 1:22–5. doi: 10.1159/000054847
69. Warnes H, Fitzpatrick C. Oral contraceptives and depression. *Psychosomatics.* 1979 Mar;20(3):187–9, 193–4. doi: 10.1016/S0033-3182(79)70860-7
70. Benoy CJ, Elson LA, Schneider R. Multiple emulsions, a suitable vehicle to provide sustained release of cancer chemotherapeutic agents. *Br J Pharmacol.* 1972 May;45(1):135P–136P. doi: 10.1111/j.1476-5381.1972.tb09587.x