

Glossary

Appendix 3

All terms are verified by the Medline Plus online medical dictionary. <http://www.nlm.nih.gov/medlineplus/mpldictionary.html>. They are also available on the online encyclopaedia Wikipedia.org.

Clinical depression: Clinical depression is a state of intense sadness, melancholia or despair that has advanced to the point of being disruptive to an individual's social functioning and/or activities of daily living. Clinical depression is a clinical diagnosis and is different from the everyday meaning of "being depressed". Clinical depression is generally acknowledged to be more serious than normal depressed feelings. It often leads to constant negative thinking and sometimes substance abuse. Extreme depression can culminate in its sufferers attempting or committing suicide.

Gene polymorphism: In biology, polymorphism (from Greek: *poly* "many", *morph* "form") can be defined as discontinuous genetic variation in a species that results in the occurrence of more than one form or type of individual (whether the differences are visible or only biochemical). The most obvious example of polymorphism is the separation of most higher organisms into male and female sexes. In zoology, the different forms are called morphs, which are the phenotype expression of an organism's genotype: the specific manifestation of a trait. The classical definition from science is that a polymorphism, in a large population, is DNA variation at a particular locus in which the most common allele (the major allele) has a frequency of 99% or less.

5-hydroxytryptamine: Serotonin (5-hydroxytryptamine, or 5-HT) is a monoamine neurotransmitter synthesized in serotonergic neurons in the central nervous system (CNS) and enterochromaffin cells in the gastrointestinal tract of animals including humans. Serotonin is also found in many mushrooms and plants, including fruits and vegetables

5-hydroxyindoleacetic acid: 5-Hydroxyindoleacetic acid (5-HIAA) is the main metabolite of serotonin in the human body. In chemical analysis of urine samples, 5-HIAA is used to determine the body's levels of serotonin

Imipramine: An antidepressant medication, a tricyclic antidepressant of the dibenzazepine group, mainly used in the treatment of clinical depression and enuresis

Morphological: The term morphology in biology refers to the outward appearance (shape, structure, colour, pattern) of an organism or taxon and its component parts. This is in contrast to physiology, which deals primarily with function.

Also in use is the term "gross morphology", which refers to the prominent or principal aspects of an organism or taxon's morphology. A description of an organism's gross morphology would include, for example, its overall shape, overall colour, main markings etc. but not finer details.

Neuromodulator: A substance other than a neurotransmitter, released by a neuron at a synapse and conveying information to adjacent or distant neurons, either enhancing or dampening their activities.

A neuromodulator is a relatively new concept in the field and it can also be considered as a neurotransmitter that is not reabsorbed by the pre-synaptic neuron or broken down into a metabolite. Such neuromodulators end up spending a significant amount of time in the CSF (cerebrospinal fluid) and influencing (or modulating) the overall activity level of the brain. For this reason, some neurotransmitters are also considered as neuromodulators. Examples of neuromodulators in this category: serotonin and acetylcholine

Pharmacodynamic effects: The study of the biochemical and physiological effects of drugs and the mechanisms of drug action and the relationship between drug concentration and effect. It is often summarily stated that pharmacodynamics is the study of what a drug does to the body.

Tranylcypromine: is a monoamine oxidase inhibitor (MAOI) used as an antidepressant drug

Tryptophan hydroxylase Polymorphism: The rate-limiting enzyme in the biosynthesis of serotonin

Selective serotonin reuptake inhibitors (SSRI): A class of antidepressants used in the treatment of depression, anxiety disorders and some personality disorders. SSRIs increase the extracellular level of the neurotransmitter serotonin by inhibiting its reuptake into the presynaptic cell, increasing the level of serotonin available to bind to the postsynaptic receptor. They have varying degrees of selectivity for the other monoamine transporters, having little binding affinity for the noradrenaline and dopamine transporters.

Suicidal Ideation: A common medical term for thoughts about suicide, which may be as detailed as a formulated plan, without the suicidal act itself. Although most people who undergo suicidal ideation do not commit suicide, some go on to make suicide attempts or take their own lives. The range of suicidal ideation varies greatly from fleeting to detailed planning, role playing and unsuccessful attempts, which may be deliberately constructed to fail or be discovered or may be fully intended to succeed but not actually do so.