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THE PSYCHOLOGY OF BIOINFORMATICS

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The modern science includes psychology as science categorized under behavioral science, a discipline which was once ignored by the scientists all over the globe. The question now, is psychology a really a discipline of science? Science believes in labs, established methods, proofs and verified results. Does psychology has any of this? Present research says yes, psychology has all characteristics of science.

Established facts: the psychological disorders like Alzheimer's, Parkinsonism, schizophrenia, migraine, dementia etc., are said to have a genetic basis. Mutated genes are established in most of the psychological disorders. Well, this justifies the fact that the cognition of our brain gets altered with the mutation of genes. Bioinformatics study, i.e., sequence alignment study between nucleotide or amino acid sequence of the mutated gene with the nucleotide or amino acid sequence of the same but normal gene can actually pinpoint the differences between the two genes, i.e., the mutated and the normal.

Phylogeny thus established among such genes states the relationship among the normal & mutated genes within the same family. Also, genome-wide association studies is being done using cell lines and the gene expression, annotation & analysis studies are noted by different bioinformatics softwares.

We all know the therapies applied to the psychological disorders which, (to certain extent), alters the cognition of brain. Therapies like cognitive behavior therapy, medication (sometimes chanting), yoga therapy and hypnotherapy alters the cognition of brain in cases of dementia, migraine etc. (I am doubtful of all the therapies mentioned here is actually recognized by science.)

Since, I have already stated that cognition of the brain gets altered with the mutation (or alteration) of the genes, if I wish to know if the reverse this statement is also right, i.e., alteration of the genes (happens?) due to altered cognition of the brain or by altering cognition of the brain can result in the alteration of the genes?