



## Stan Watson M.D.,Ph.D.

Professor  
Theophile Raphael Collegiate Professor of Neurosciences  
Co-Director and Senior Research Scientist  
Department of Psychiatry  
Mental Health Research Institute  
2060 Mental Health Research Institute 0720  
Ann Arbor, MI 48109  
734-763-3725  
[watsons@umich.edu](mailto:watson@umich.edu)



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### Research Interests

This laboratory studies neurotransmitter systems in their anatomical context and from the point of view of regulatory biology, especially in stress depression and drug abuse. A particular focus is to describe the changes in biosynthetic capacity of neuronal circuits by quantitating the messenger RNA in situ along with the rich and complex area of 5HT, DA and opiate receptor molecular genetics. In addition the laboratory has a full range of biochemical and molecular biology tools and anatomical techniques include track tracing, thymidine autoradiography and standard lesioning methods. Finally, we are interested in the biological basis of depression and is actively involved in designing human clinical studies in depressed patients using various challenges in collaboration with Dr. Akil.

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