

SYMPOSIUM :

BRAIN MECHANISMS*

PRESIDENTIAL REMARKS

By

BALDEV SINGH

Ladies and Gentlemen you are welcome to this symposium on "Brain Mechanisms." Symposia are a legacy of the Greek methodology of promoting knowledge and seeking clarification of doubts by presentations and discussion amongst a group of workers interested in a common problem. It often is a loud thinking in an atmosphere of comparative intellectual freedom and relaxation.

"Brain Mechanisms" is a vast subject and in this symposium it is to be dealt with in its aspects of, neurophysiology, neuro-chemistry, experimental neurology and neuropharmacology. The morphology of "Brain Mechanisms" essentially involves a structural constellation called the "neuronic unit" which consists of a neurone and its connections with other neurones, neuroglial cells, blood vessels and cerebrospinal fluid the last three being necessary provisions for the function of the nerve cells. Impulse generation and propagation are the essential properties of a living neurone and for the purposeful use of this activity in the form of a goal achieving performance, the mechanisms of integration and automatic control are necessarily required. Integration involves collaboration in the hierarchical disposition and depends on the regulatory effect of facilitation and inhibition. The automatic control is explainable on basis of cybernetic principles of feed backs and servomechanisms. In many ways, therefore the brain functions like an integrator and a computer which use the same principles for their performance. No system however simple can work without utilization of energy and the modulation of this energy.

With this brief introductory description of a working model of the subject to be discussed I now have the pleasure one by one to request the speakers to present their material.

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