Research Citation for Prof. Aravind Penmatsa

Sun Pharma Research Awards 2024: Pharmaceutical Sciences

The research carried out in the laboratory of Prof. Aravind Penmatsa has made fundamental contributions to the area of neuropharmacology through the studies of antidepressants and pain relief inhibitors on catechol amine uptake systems. His work has highlighted the structural basis of differences of drug specificities between catecholamine and GABA transporters and has allowed clarifying the mechanisms of drugs used for treatment of neurological disorders like depression, chronic pain, fibromyalgia and epilepsies. His work on large-pore ion-channels also highlighted the role of the pore-lining residues in pannexins for their ability to interact with carbenoxolone, a medication for gout. His research group has employed cutting edge methodologies to answer fundamental questions in the pharmacology of neurotransmitter transporters and his contributions are at the forefront of studying synaptic neurotransmission and the role of neurotransmitter transport and multi-drug efflux systems.

Signature of Nominator

Signature of Nominator
Prof. Govindasamy Mugesh
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