

Name: Pavan Kumar Chintamaneni

Department: Department of Pharmacology

Contact Address: Research Scholar, Department of Pharmacology, JSS College of Pharmacy, Ooty.

Email ID: pavanchintamaneni@gmail.com



Educational Qualification: **M. Pharm**

Year of Registration: 2016

Project Supervisor: Dr. Praveen T.K
Professor & Head
Department of Pharmacology
JSS College of Pharmacy, ooty
praveentk@jssuni.edu.in

Research Abstract:

The muscarinic acetylcholine receptors play critical roles in the regulation of higher cognitive function. There are five receptor subtypes in the muscarinic family (classified M1 to M5), of which the M1 receptor is most highly expressed in areas that are critically involved in memory formation such as the cortex and hippocampus, and are affected prominently in AD. The use of selective muscarinic agonists and AchE inhibitors has enhanced the cognitive performance in AD patients. However, adverse events such as gastrointestinal distress, salivation, sweating, and emesis have prevented their clinical utility. It has been thought that these events are mediated by the activation of other peripheral muscarinic receptors (M2-M5) along with M1 and that an M1 selective compound would have improved tolerability. Positive allosteric modulators (PAM) of M1 receptors help in this aspect. Hence the use of PAMs along with AchE inhibitors was suggested to be a better treatment strategy in AD. However, the problem comes for these drugs to reach brain by crossing the blood brain barrier. Hence my research is focused in developing nano lipid drug conjugates for efficient delivery of these drugs to brain.

Fellowships: Govt/~~Non Govt~~: DBT-SRF

Awards & Scholarships:

- Qualified in GATE-2014 [XL] with an all India Rank of 324.
- Qualified in GATE-2009 [PY] with an all India Rank of 3215 (conducted by IIT-Rorkee) & received stipend granted by AICTE of rupees 96000/- per year during two years of my Post graduation (2009-2011).
- Qualified NIPER-JEE 2009 with an all India rank of 634, conducted by NIPER, Mohali.
- Published 04 National & 09 international papers with total Impact factor of 15.6

Way Forward:

Over the next five years, I would like to make enough progress at a personal and professional level so that I can be seen myself as an able Professor, while continuing my research on drug delivery systems and molecular pharmacology.