

Guest lecture Report

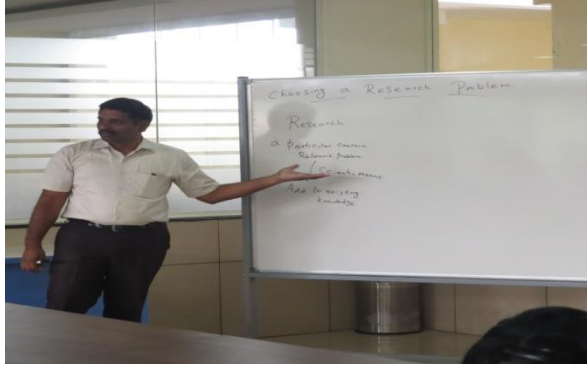
Topic- How to choose a research problem.

Delivered by: Dr. Nandakumar. K
Professor,
Dept of Pharamacology,
Manipal College of Pharmacy, Manipal

Venue: Simulation lab, Dept. of Pharmacology

Date and Time: 24th August 2019
10.00 AM

Dr. Nandakumar. K presented before the students a very insightful talk. The session was on “How to choose a research problem” caught the attention of both the students and faculties as it discussed about the various parameters that should be taken into account while choosing a research problem. A handout with schematic flow chart of the steps to be followed for the same was provided. The very first question of what is research followed by its types namely, descriptive, associative, interventional/ experimental and Quassi experimental was widely discussed. The 4 approaches of carrying out a research included exploring new ideas, the approach by the supervisor, guideship and mentorship. With a very witty remark of “necessity is the mother of invention and curiosity is the father of invention” he further went on to discuss the need for framing a good hypothesis based on new ideas, on peer discussion and criticism. Identification of research gaps and the various inputs that should be made to solve the **PROBLEM** i.e., **P**ress and media, **R**esearch expert discussion, **O**wn observation, **B**rain storming sessions, **L**imitations of the study to be analyzed, **E**vents that follow, **M**obility parameters and collaborative research and **D**ata organising/discussions was also discussed. Finally, fine tuning of the entire process keeping in mind **F**easibility, **I**nterest and enthusiasm, **N**ovelty in research, **E**thics and **R**esearchable outcome was emphasized. Sir insisted any research with systemic approach will yield productive research outcome that will help both the researcher as well as the society as a whole.



Pic 1. Dr. Nandha Kumar explaining about how to choose a research



Pic 2. Dr. Nandha Kumar interacting with students

Guest lecture Report

Topic- Statins induced Diabetes.

Delivered by: Dr. Nandakumar. K

Professor,

Dept of Pharamacology,

Manipal College of Pharmacy, Manipal

Venue: Simulation lab, Dept. of Pharmacology

Date and Time: 24th August 2019

11.00 AM

The session started with Dr. Nandhakumar discussing on the use of Statins to induce diabetes. Statins have been prescribed for a long time as HMGCoA reductases, as lipid-lowering medications that reduce illness and mortality in those who are at high risk of cardiovascular disease. Dr. Nandakumar began by throwing light on the origin of Statins from the fungus *Penicilium citrinium* and its first isolation and use in cardiovascular disorders. However, gradually its side effects like myalgia, muscle pain, weakness and major adverse effects like elevation in creatinine kinase and liver enzymes were observed and eventually it was reported by the FDA that Statins have more risk factors than benefits. The main focus of one of his study was related to the concept that Statins cause insulin resistance. The primary target of statins for Diabetes mellitus included pancreatic β cells, adipocytes and muscle cells. Therefore, their prime focus is

on targeting either of these pathways by replacing Statin with Phyto molecules. Invitro studies on differentiated L6 myotubules and MIN6 pancreatic β cells and invivo studies using high fat diet and statin treatment with 8-10 Phyto molecules are in pipeline in research carried out by Dr. Nandakumar and his team at Dept of Pharmacology, Manipal. Sir concluded his talk by insisting the students to attempt research in the area of drug repurposing.



Pic 1: Dr. Nandakumar explaining about statins



Pic 2: Dr. Nandakumar interacting with students and faculty.