Pharmacy Student Summer Research Fellowship Proposal for 2022

FACULTY INFORMATION:

NAME: Rupak Pathak
DEPARTMENT: ☐Pharmacy Practice
☒Pharmaceutical Sciences

LOCATION: BioMed II, Room# 413-2

PROJECT INFORMATION:

TITLE: Role of mevalonate pathway inhibitors in limiting breast cancer cell proliferation

LOCATION OF THE PROJECT: 413-2

BRIEF DESCRIPTION OF THE PROJECT:
Mevalonate pathway regulates cholesterol biosynthesis and protein prenylation-a post-translation modification of various proteins. A number of cancer cells exhibit dysregulated cholesterol biosynthesis. Current project will evaluate the efficacy of 3 different mevalonate pathway inhibitors such as lipid-lowering drug atorvastatin, vitamin E family member gamma tocotrienol, and geranylgeranyl transferase inhibitors in limiting breast cancer cell proliferation.

STUDENT'S RESPONSIBILITIES-DUTIES IN THE PROPOSED PROJECT
Performing experiments, collecting and analysis data, and prepare reports.

ESTIMATED TIME FOR PROJECT COMPLETION: __10____ weeks

DOES THE WORK INVOLVE ANIMAL RESEARCH? ☐**YES**
☒**NO**

ORAL/POSTER PRESENTATION OPPORTUNITY:
Yes

MANUSCRIPT SUBMISSION:
Potentially