

## **Science of Drug Discovery**

### **Course Description**

The course will be a lecture/discussion format. Included will be explanations of the methods of scientific research, how drug targets are found, the types and classes of drugs, how medicines are personalized for individual treatment, the stages of clinical research and how drugs are approved for use. It is hoped that the participants will engage in active discussion and Q&A. The course level of instruction would allow for individuals who have little science background to understand how basic biological science is done. There will be a chance at the end of the course for participants to pick a drug on their own and tell the class what they know about it and how it relates to the topics that were discussed.

### **Weekly Layout:**

Evolution & Mutation/How Science Happens

What is a Drug Target?/Engineering and Screening for New Drugs

Small Molecule Drugs/Biotechnology Drugs & New Therapies

Personalized or Precision Medicine/Stages of Clinical Research

How Drugs are Approved/Pick Your Drug & Tell Us About It