

## **Research topics on Cell Biology for 1<sup>st</sup> level pharm D student 2019-2020:**

1. Replication in bacteria
2. Transcription in bacteria
3. Translation in bacteria
4. Comparison between prokaryotic cell and eukaryotic cell regarding cell structure, reproduction, and DNA replication.
5. Different types of proteins that present in the bacterial cell wall and their functions.
6. Disorders and diseases associated with meiosis (explain what is meiosis and then discuss diseases that arise as a result of a mistake during meiosis)
7. Medications available in market that interfere with cell cycle (explain cell cycle, give examples of medication in market that interfere with cell cycle and their applications)
8. Therapeutic applications of stem cells (define stem cells, how to isolate and store them, and discuss current medical applications of stem cells)
9. Theories explaining cancer (define cancer then discuss different theories that explain how cancer occurs.)
10. Cell death (discuss different types of cell death and possible medical applications)
11. Enumerate Cellular components and its functions.
12. What are the functions of membrane proteins ?
13. Discuss the types and functions of Cellular macromolecules.
14. Classify Biological fluids and their functions.