PHYS 520/BME 599/BIOINF 520
Final Project Assignment
Due Thursday 12/11/25 at 11:59 am
60 points

Assignment:

Use code/tools/materials from class to create your own quantitative simulation or analysis that gives new insight into a biomedical problem. Write a short report (~4-5 pages with figures) to include the following sections (in this order): Background, Objective (problem statement), Results, Discussion, Detailed Methods. Teams of 1-2 students are allowed, however each student will be required to turn in their own report and the final content should be proportional to the number of students on the team (i.e. more content for two-student teams). Please be sure to attach all code to the final report.

Grading:

Background (10 pts)
What is the rationale for creating this model? Please cite the most relevant literature and describe the problem.

Objective (problem statement) (5 pts)
What is the overall goal of this work?

Results (15 pts)
Describe results and include figures to support new findings. Please make sure all figures are labeled and contain captions with appropriate descriptions.

Discussion (15 pts)
Discuss the meaning of the results and how they relate to the current literature. Highlight model limitations, assumptions, and/or challenges encountered while building the model. Include a plan for future work and directions.

Detailed Methods (15 pts)
Please include any relevant details needed to recreate results, including initial conditions, parameter sources, data, cohorts, etc.