BINF 701/BIOS 701 – Systems Biology

Final Exam

December 18, 2018

1. Describe how top-down systems biology approaches can be used to diagnose and treat a disease.
2. Describe what systems is systems biology. Be sure to discuss top-down, middle-out, and bottom-up approaches. Also describe the advantages and challenges when compared to traditional reductionist approaches.
3. There were many interesting final projects presented. Please pick one project, other than your own, and describe it and tell what you liked about it and what you would add to it. Please evaluate how well it find the goals of defining a systems biology project.
4. Comment on the following statement “Systems biology has replaced reductionist science making it no longer necessary.” Support your answer with examples.