

CS 6824 — Computational Genomics

Fall Semester, 2012

Instructor: Lenwood S. Heath

`heath@vt.edu`

9:30–10:45 AM, Tuesdays and Thursdays

329 McBryde Hall

This course will research topics in genomics that are suited to address with algorithms and computational ideas. Such topics might include alternative splicing, genome compression, RNA-Seq analysis, genome assembly, and comparing biological networks, such as protein-protein interaction networks. Other topics will be pursued as class interest dictates. Students who take this course should have a strong background in computer science, especially algorithms, and should have a working knowledge of genomics and molecular biology. Work in the class will consist of presenting and discussing papers from the literature and a team research project. Under ideal circumstances, the research done in this course will result in one or more manuscripts suitable for submission for publication.