

The Human Genome was just the Beginning.

BIOE/CSE 308-408 Bioinformatics: Issues & Algorithms

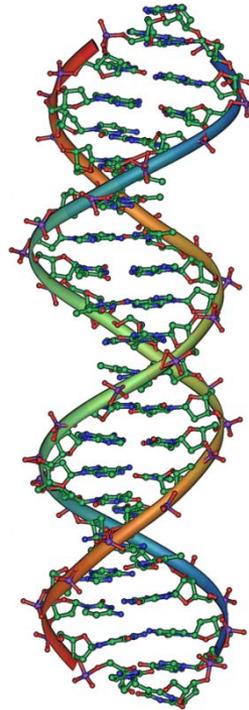
Professor Brian Chen

Spring 2013

MWF 1:10-2:00pm

New technologies have opened powerful new strategies for understanding life and how it works at a molecular scale. These technologies are the core of pharmaceutical drug development and the “biotech revolution.” They are also dependent on a computational field called bioinformatics.

- Cross Cutting Interdisciplinary Projects with partners in Bioengineering, Biological Sciences, and Computer Science and Engineering.
- **The course can be completed without programming.**
- Usage of UNIX systems, software automation “scripting” and file handling is required, and will be taught.



- An Introduction to Modern Biology for Computer Scientists
- An Introduction to Modern Computing for Biologists
- High Throughput Sequencing
- Genome Assembly
- Sequence Alignment
- Phylogenetic Reconstruction
- DNA Microarray Analysis

“Great teacher, very nice & helpful”
“excellent professor” – 2011 students



LEHIGH
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Prereq: CSE17/18 **OR** permission of
instructor (chen@lehigh.edu)

Computer Science and Engineering
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