NOTES FOR GEORGIA TECH PRESIDENT G. WAYNE CLOUGH
Dedication, Center for the Study of Systems Biology, 02.08.06

• Welcome to the dedication for the Center for the Study of Systems Biology. Pleased you could join us for this exciting event.

• The goal of systems biology is to put to use the vast quantities of information that are growing out of the sequencing of the human genome. Foundation for the next wave of advances in medicine and health care – predictive/personalized medical care and medications.

• As is typical of today’s hottest fields of discovery in science and technology, systems biology is multi-disciplinary:
  o Integration of biology, chemistry, physics, and mathematics with engineering and high performance computing.
  o The mix of disciplines required to do this work gives Georgia Tech a leadership advantage: We not only have all these disciplines, but we are interdisciplinary – not just in concept, not just in our verbiage, but in the very fabric of everyday life on this campus. Culture of the Institute is interdisciplinary, entrepreneurial.
  o Center requires 3 of our 6 colleges – Sciences, Computing, and Engineering – to collaborate, which would sound impossible on many campuses. But here they are actually old hands at working together.

• Tech’s genuinely interdisciplinary climate allows us to align our research initiatives around broad thrusts:
  o Rather than a lot of little disjointed research projects, we are able to focus on becoming the 700 pound gorilla in particular significant leading edge areas of research.
  o Enables us to be a major driver of Atlanta’s and Georgia’s high-tech economy.

• Center for the Study of Systems Biology is perfect fit with larger body of interdisciplinary work Georgia Tech already has underway – work in which we are recognized as a leader in innovation.
  o GT works broadly in nanotechnology and is a recognized national leader and member of the National Nanotechnology Infrastructure Network (NNIN).
  o GT and Emory together are pioneers in the application of nanotechnology to medicine and in bioengineering and biomedical engineering. Joint biomedical engineering program with Emory is recognized as one of nation’s best.
  o GT also a leader in bioinformatics; have worked deliberately to build up expertise in this field. One of first universities in nation to develop degree programs in bioinformatics.
  o Can see this broader commitment to biotechnology expressed in physical form in new Biotechnology Complex; 4th building – Molecular Science and Engineering – now under construction; scheduled for completion later this year.
• Center for the Study of Systems Biology fits beautifully into this broader picture and will carry our endeavors to the next level.
  o Will be headed by Jeffrey Skolnick, who has brought 19 research scientists and technicians with him, and whose expertise and talents lie at the heart of this center.
  o Dr. Skolnick has the mix of outstanding scholarly acumen and entrepreneurism that Georgia Tech values:
    ▪ Recognized around the world as super-star in the field of bioinformatics.
    ▪ Has strong relationships with pharmaceutical and technology companies.
    ▪ Understands the value of commercializing his work: Has 3 patents; has licensed software that he developed to biotech companies; has founded an early-stage structural proteomics company.
  o He enriches Tech’s work in personalized medicine by bring a different scientific approach that applies systems biology and bioinformatics to the creation new drugs, significantly reducing the number of compounds that drug developers must screen.

• Bioinformatics and systems biology require high levels of computing power. As our faculty and research capabilities grow, also expanding our high-performance computing capabilities.
  o The computing facility at the BellSouth building that you will be able to tour at the close of this ceremony ranks among the top 50 most powerful computers in the world.
  o Impressive as that is, we will continue to make improvements to it and expect that that standing will advance before all is said and done.
  o Extremely fortunate to be able to lease appropriate space with the required utility infrastructure adjacent to our campus in the BellSouth building.

• Very pleased to welcome Jeff Skolnick and his research group to Georgia Tech and to launch the Center for the Study of Systems Biology.
  o Georgia Tech deliberately assembling the pieces and positioning ourselves to become a leader and driving force in bioinformatics and systems biology.
  o Dr. Skolnick is world renowned leader in this field, and he and his team are a key part of our leadership effort. Very fortunate to have them join the School of Biology.