Project Overview

• Engineer behavior into living systems
  – Applications in medicine, agriculture, environment, materials, nanofabrication

• Create components and interfaces
  – Learn ideas of pattern formation, robustness, abstraction

• Create a new engineering discipline
  – Students, texts, experimental guides
Progress Through December 1999

• Set up of laboratory, students, staff
• Improved ties with biology faculty
• Cloned & sequenced natural systems
  – Vibrio and Photobacterium luminescence
  – Quorum sensing
• Created artificial digital intercellular communication system
Research Plan for the Next Six Months

• Additional genetic components
• New experimental capability
  – Gene arrays
  – Plasmid automated construction
• Course development
• Laboratory documentation
  – Enable others to duplicate our work