

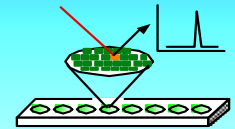
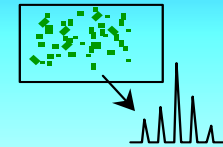
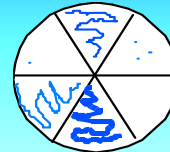
Whole Cell Project of *Thermus thermophilus* HB8

Structural Genomics

- (1) genome analysis
- (2) overproduction of protein
- (3) 3D structural analysis

Functional Genomics

- (1) 3D structure
- (2) gene disruptants
- (3) mRNA expression: DNA chip
- (4) protein expression: proteome analysis, protein chip
- (5) protein-protein interaction: protein chip, two-hybrid analysis
- (6) identifying all molecules in the cell: time dependence of location and amount



Molecular Functional Analyses on Each Protein

- (1) development of new methods for functional analyses
- (2) detailed functional analyses on each protein

Simulation of All Biological Phenomena in the Cell