## 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