

## METABOLISM

Aerobia → Anaerobia

## PROTEIN SYNTHESIS

- Ribosome synthesis
- Spermidine transport
- Translation elongation and termination
- Modification and processing of tRNAs

## DNA REPLICATION

- Nucleotide synthesis and recycling
- RNase HI & HII

## CELL DIVISION

- Division septum site selection
- Regulation of division septum assembly
- Regulation of cell division

## MAINTENANCE OF OUTER MEMBRANE

- Lipid II transport
- Peptidoglycan biosynthesis
- Degradation and turnover of Peptidoglycan components

## UP REGULATION

## DOWN REGULATION

Ag43  
SPECIFIC

## STRESS RESISTANCE SYSTEMS

- Acid resistance system
- Response to heat
- Oxidative stress system
- General stress response
- DNA and RNA damage

## ANTIBIOTIC RECALCITRANCE

- tRNAs modification and processing
- Activation of multiple TA systems
- Induction of SUF system

- Increase in number of genes involve in anaerobia
- Induction of TA systems
- More tRNAs are downregulated
- Decrease in motility and cell surface fimbriae