Socio-economic determinants

Lifestyle - environment
Risk and protective factors
Tobacco smoking, pollutants, allergens, nutrition, infections, physical exercise, others

Gender

Genes

Biological expression of chronic diseases
Transcripts, proteins, metabolites
Target organ local inflammation
Systemic inflammation
Cell and tissue remodeling

Clinical expression of chronic diseases
Co-morbidities
Severity of co-morbidities
Persistence remission
Long-term morbidity
Responsiveness - side effects to treatment

Age

Health promotion
primary prevention

Systems biology on precise phenotypes

Personalized medicine
- Primary prevention
- Secondary prevention
- Tertiary prevention
- Treatment