Bioplatforms Australia Antibiotic Resistant Sepsis Pathogens experimental workflow



- Multi-drug resistant bacterial strains isolated from patients were sequenced (genomics) to determine their genetic code and resistance to antibiotics.
- In a second experiment, the same strains were grown in RPMI (non-infectious conditions) and pooled sera (mimic infection conditions) to allow researchers to compare how the bacterial RNA (transcriptomics), metabolite (metabolomics) and protein expression (proteomics) changes during infection and how these changes may help the bacteria to survive during blood infection (sepsis).
- The outcomes of these studies will assist in the identification of common pathogenic pathways of infection resistance which may be exploited for the early diagnosis, treatment and prevention of life-threatening bacterial infections.