

## **Nexus of Expertise: Biomedical and Genetic**

### **Analysis:**

Toxicity test (in vitro and in vivo)  
Biocompatibility tests (in vitro and in vivo)  
Clinical trial - Bioequivalent study  
Metabolomics study  
Antioxidant assay  
Chemical marker study  
Sterilization Test  
Biological Evaluation Report (BER)  
Neurobehavioral Analysis  
Blood-Brain Barrier (BBB) Testing  
Gene expression using microarray  
DNA sequencing  
Genotyping services  
Primer design and synthesis  
DNA extraction & quantification  
Pre-analysis and processing  
Annotation / mapping  
Alignment of sequences, assembly and variant calling  
Predictions, data integration and statistical analysis  
Structural protein prediction  
Sequence analysis  
Phylogenetic analysis  
Genomic Shotgun Library Construction  
Gene Synthesis & Construction  
DNA sequencing (plants, animals, microbes, insects, fungi)  
Forensic DNA  
MicroSEQ sequencing & identification of fungi  
Wildlife forensic  
Alkaline Comet Assay  
Mycoplasma Detection  
Cancer induction studies  
Acute, Sub-Acute & Chronic Oral Toxicity Study  
Acute Systemic Toxicity Study  
Spontaneous Hypertensive Study  
Primary Skin Irritation Test  
Dermal Sensitization Test  
Rabbit Pyrogen Test  
Skin corrosion and irritation test  
MTS Cytotoxicity Test  
Bacterial Reverse Mutation Test / Ames Test (OECD TG 471)  
In vitro Mammalian Cell Gene Mutation Test / HPRT Test (OECD TG 476)  
In vitro Mammalian Cell Micronucleus Test (OECD 487)  
Individual ventilated cage system  
Newborn screening