







Molecular Biology Laboratory

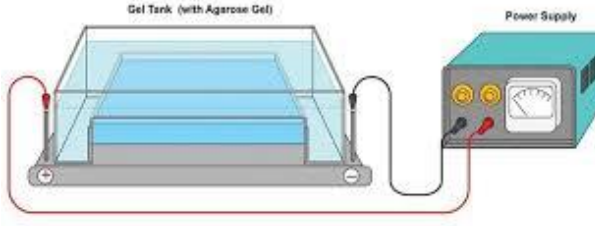



Lab 2: Instruments and equipment in molecular lab


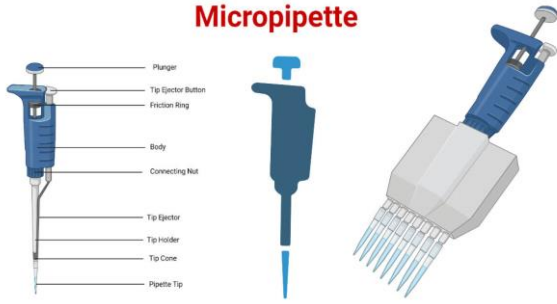


Laboratory equipment refers to the various tools and instruments used in scientific laboratories to conduct experiments, tests, and analyses. These equipment's are designed to help scientists, researchers, and laboratory technicians to accurately measure, collect, and analyze data.

Here are some common types of laboratory equipment:

Instrument	description	description
PCR workstation	enclosed, sterilized space work.	
Vortex shaker	To mix the reaction continent	

Cool centrifuge	To participate cell continent	
Conventional PCR	To amplified DNA molecules (quality identification)	
Real-time PCR	To amplified DNA molecules and measuring gene expression (quality and quantity identification)	
Nanodrop	To measuring nucleic acid concentration and purity	

Gel electrophoresis	To separate nucleic acid and protein with molecular weigh less than 10000 bp	<p style="text-align: center;">Agarose Gel Electrophoresis</p> 
Pulse gel electrophoresis	To separate nucleic and Protein with molecular weigh more than 10000 bp	
UV-Transilluminat	To detect nucleic acid and Protein was separated in gel electrophoresis run	
DNA sequencer	To determine sequence of nucleotide in DNA strand	

<p>Deep freeze</p>	<p>To keep biological material in low temperature</p>	
<p>Micropipettes in different size</p>	<p>To transfer the appropriate Amount of volumes</p>	<p style="text-align: center;">Micropipette</p> 
<p>Different size of Eppendorf tubes</p>	<p>To keep and holder samples In experiment</p>	
<p>Water bath</p>	<p>It is used to incubate samples in water at a constant temperature over a long time</p>	

Biological
Safety Cabinets

Provide a sterile environment
For protecting both the
samples and the researcher

