

Biotechnology/Life Science/Pharmacy Summer Camp (March – August, 2020)
Comprehensive Hands on Training Course (Certificate course)

B.V. Patel Pharmaceutical Education and Research Development (PERD) Centre, Thaltej, Ahmedabad

Modules	CM-1	CM-2	CM-3	CM-4	CM-5	CM-6
	<u>Molecular Biology Techniques (rDNA techniques)</u> <ul style="list-style-type: none"> • Plasmid Map designing • Plasmid isolation • Purification • Quantitative analysis of plasmid • Plasmid analysis by NEB cutter • Restriction digestion • Ligation • Gel Electrophoresis • Transformation (blue –white screening) • Colony PCR 	<u>Basics of Laboratory Animal Handling</u> <ul style="list-style-type: none"> • Introduction to laboratory animals • Animal house • Introduction to different Guidelines • Animal handling • Dose administration • Blood withdrawal techniques • Blood collection • Incineration techniques • Anaesthetic techniques 	<u>Plant Tissue Culture</u> <ul style="list-style-type: none"> • Plant Tissue culture Basics • Media /stock Preparation • Selection of explant • Sterile practices with different explants • inoculation • Types of culture-root, shoot, callus, suspension culture • Histological analysis of calli/organ formation • Phytochemical analysis of in vitro grown plants/callus • Effect of drought/salinity/heavy metal on plant growth and phytochemicals 	<u>Animal Cell culture</u> <ul style="list-style-type: none"> • Animal cell culture Basics • Cell observation • Types of culture • Subculture • Cell counting • Culture maintenance • MTT assay • Cell cycle analysis by FACS • Scratch wound assay • Fluorescent microscopy • ROS detection assay • Introduction to animal experiment and experimental animals 	<u>Advances in Laboratory Animal Handling</u> <ul style="list-style-type: none"> • Introduction to laboratory animals • Animal house • Introduction about guidelines • Animal handling • Dose administration • Blood collection • Experimental design • Anaesthetic techniques • Preclinical toxicity studies • Acute toxicity • Documentation • Subacute toxicity- • Animal labelling • food weight • Body weight • Drug preparation & Dosing • Hematology • Biochemical analysis • Necropsy 	<u>Microbiology</u> <ul style="list-style-type: none"> • Isolation of bacteria • Pure culture techniques • Gram staining • ATCC/MTCC culture and their Maintenance • Antibacterial activity of Herbal extract / compound <ul style="list-style-type: none"> - Well diffusion method - MIC determination • Finger printing and Bio-autography • Antioxidant activity
Duration	2 weeks	2 weeks	4 weeks	3 weeks	4 weeks	2 weeks
Individual	Rs. 10,000/-	-	Rs.12000/-	Rs. 20,000/-	Rs. 30,000/-each (2 seat only)	Rs. 7000/-
Group of 10	Rs. 5000/- each	-	Rs. 7000/-each	Rs. 10000/-each		Rs 4500/- each
Group of 5	Rs 7000/-each	15000/-	Rs. 8000/-each	Rs. 13000/-each	-	Rs. 5000/-each

Contact: neetas@perdcentre.com, perd@perdcentre.com, director@perdcentre.com , Phone: 079/27439375 Phone: 079/27439375. Less than 4 students will be charged as individual, less than 8 will be as group of 5. Training will start from every 1st and 15th of the month. For a group of 10 training can be started with mutual convenience.