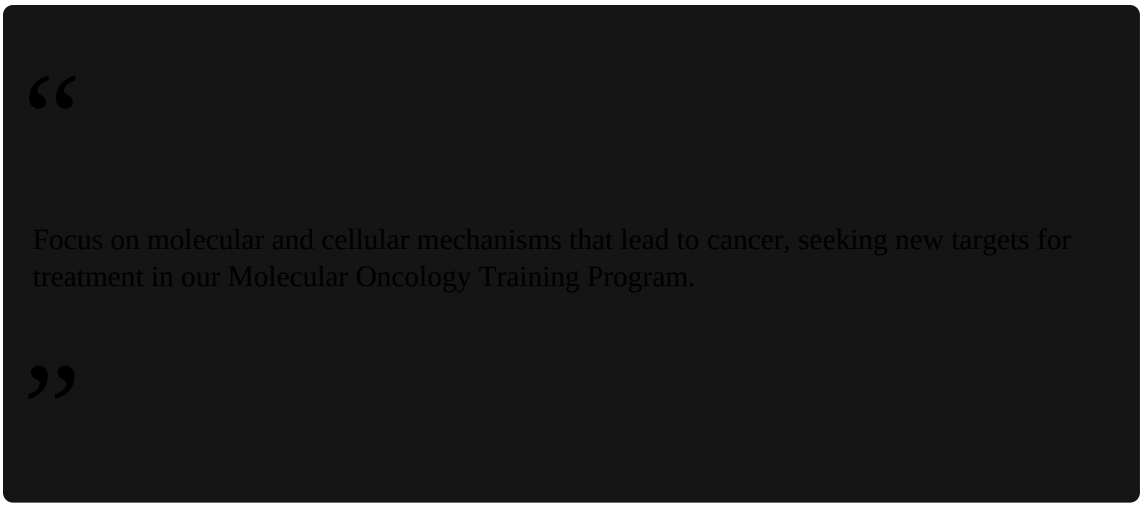
Molecular Oncology Training Program



NTHRYS provides Molecular Oncology Training Program at its Hyderabad facility, Telangana. Please refer below for more details including Fee strctures, Eligibility, Protocols and Modules etc.,. Please do call / message / whatsapp for more details on +91-7993084748.
Eligibility: BSc / BTech / MSc / MTech / MPhil / PhD in relevant field studying or completed students.

What do NTHRYS Provide in Molecular Oncology Training Program Accommodation Assistance

Fee Payment Process for individual protocols: Please click **Join** button to pay the fee for selected protocol. Fees should be paid individually for all the selected protocols separately by clicking the button. Please save the payment proofs and send them as an attachment to **trainings [a t] nthrys [d 0 t] com** to receive payment invoices and slot confirmations.

Please communicate with our Academic Services Department via whatsapp on +91-7993084748 for any queries.

Modules

More Training Modules at Molecular Oncology Research Training and Molecular Oncology

Industrial Training Programs.
Module 1: Fundamentals of Molecular Oncology
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Understanding Molecular Biology Techniques

1. Analyzing Single-Cell Genomics
    1. Isolating single cells using microfluidics.
    2. Performing whole-genome or whole-transcriptome amplification to increase the amount of DNA/RNA from single cells.
    3. Sequencing amplified products to explore cellular heterogeneity within tumor populations.
    4. Analyzing data to identify unique genetic and expression profiles that contribute to tumor progression and drug resistance.
2. Conducting Epigenetic Analysis
    1. Extracting DNA and performing bisulfite treatment to convert unmethylated cytosines to uracil.
    2. Amplifying converted DNA and sequencing to identify methylation patterns across the genome.
    3. Interpreting data to understand epigenetic changes like DNA methylation and histone modifications in cancer cells.

Cell Culture and Handling

1. Generating Organoids from Cancer Tissues
    1. Isolating stem cells or tumor cells from patient tissues.
    2. Culturing cells in a 3D matrix to form organoids that mimic the microarchitecture of original tumors.
    3. Using organoids for drug testing and personalized medicine approaches.
2. Conducting Hypoxia Studies in Cell Culture
    1. Utilizing specialized hypoxia chambers to culture cancer cells under low oxygen conditions.
    2. Examining changes in gene expression and metabolic pathways in response to hypoxia.
    3. Assessing cell survival, proliferation, and adaptation mechanisms under stress conditions that mimic the tumor microenvironment.

Protein Workflows

1. Conducting Multiplex Protein Assays
    1. Utilizing multiplex immunoassays to quantify multiple protein biomarkers simultaneously from a single sample.
    2. Applying technologies like Luminex xMAP or similar platforms to analyze protein expressions in cancer samples.
    3. Interpreting data to evaluate pathways involved in cancer progression and response to therapies.

Gene Expression Analysis

1. Performing Chromatin Immunoprecipitation followed by Sequencing (ChIP-seq)
    1. Cross-linking DNA and proteins in cancer cells to preserve protein-DNA interactions.
    2. Shearing cross-linked DNA and immunoprecipitating with antibodies against specific protein markers of interest.
    3. Sequencing the co-precipitated DNA to identify binding sites of DNA-associated proteins.
    4. Analyzing data to understand regulatory mechanisms and identify potential therapeutic targets.
2. Conducting CRISPR Screens in Cancer Cells
    1. Designing sgRNAs targeting genes suspected to be involved in cancer progression.
    2. Transfecting cancer cells with CRISPR-Cas9 and sgRNAs.
    3. Selecting successfully edited cells and assessing changes in their proliferation, survival, and metastatic potential.
    4. Analyzing outcomes to identify key genes that can be potential targets for cancer therapy.

Module 1 Benefits: Understanding the Impact

1. **Skill Development:** Hands-on practice with fundamental techniques builds a solid skill set necessary for advanced research and clinical applications in oncology.
2. **Enhanced Understanding:** Direct involvement in experiments enhances understanding of molecular mechanisms behind cancer, improving the ability to develop targeted treatments.
3. **Career Advancement:** Proficiency in these techniques can lead to better job opportunities in research, diagnostics, and therapeutic development.

Duration: 6 Months

Fee: Rs 2,60,000/-

Module 2: Advanced Genetic Analysis Techniques
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Advanced DNA Sequencing Techniques

1. Next-Generation Sequencing (NGS) (Software/Tool: Illumina Sequencing Platforms)
    1. Preparing libraries by fragmenting DNA, adding adapters, and amplifying via PCR.
    2. Loading DNA libraries into an Illumina sequencer and performing cluster generation and sequencing.
    3. Using Illuminas software for real-time data analysis, including base calling, read alignment, and quality control checks.
2. Single-cell Sequencing (Software/Tool: 10x Genomics)

    1. Isolating single cells using microfluidic devices from 10x Genomics to encapsulate cells in droplets with barcoded beads.
    2. Performing lysis, reverse transcription, and cDNA amplification while maintaining single-cell resolution.
    3. Preparing sequencing libraries from barcoded cDNA and sequencing on an NGS platform.
    4. Using 10x Genomics software to demultiplex reads and perform data analysis, identifying cell types and states.
3. Exome Sequencing for Mutation Analysis (Software/Tool: Illumina Exome Sequencing)
    1. Extracting DNA from cancer cells or tissue and enriching coding regions (exons) using capture kits.
    2. Sequencing the enriched exomes to identify mutations that may drive cancer development.
    3. Analyzing sequence data to detect novel and known mutations impacting gene function.

Genetic Manipulation

1. CRISPR-Cas9 Genome Editing (Software/Tool: Benchling for guide RNA design)
    1. Designing guide RNAs using Benchling, based on target DNA sequence specificity and off-target predictions.
    2. Delivering CRISPR-Cas9 components into cells via plasmid, viral vectors, or RNP complexes.
    3. Selecting and expanding edited cells, verifying edits through sequencing or PCR.
2. RNAi and shRNA Knockdown (Software/Tool: Thermo Fisher siRNA Design Tool)
    1. Designing siRNAs or shRNAs using the Thermo Fisher siRNA Design Tool to target specific mRNA sequences for knockdown.
    2. Transfecting siRNAs or shRNAs into cells using lipid nanoparticles or viral vectors for delivery.
    3. Assessing knockdown efficiency through qPCR or Western blotting to measure target gene expression or protein levels.
3. TAL Effector Nucleases (TALENs) Genome Editing (Software/Tool: TALE-NT)
    1. Designing TALEN pairs targeting specific genomic sequences using the TALE-NT design tool.
    2. Assembling TALEN constructs and delivering them into cancer cells via electroporation.
    3. Screening for successful genomic edits and analyzing off-target effects.

Cancer Genomics

1. Whole Genome Cancer Profiling (Software/Tool: Broad Institute’s Genome Analysis Toolkit)
    1. Extracting genomic DNA from cancer tissues and preparing libraries for whole genome sequencing.
    2. Sequencing the DNA using a high-throughput platform to cover the entire genome extensively.

3. Using the Genome Analysis Toolkit (GATK) to process sequencing data, identify variants, and analyze structural rearrangements.

2. Targeted Gene Panel Analysis (Software/Tool: QIAGEN Digital Insights)
    1. Designing and utilizing targeted gene panels specific to cancer-associated genes for deep sequencing.
    2. Performing high-throughput sequencing to achieve high coverage of target regions, ensuring detection of low-frequency variants.
    3. Analyzing sequencing data using QIAGEN Digital Insights software to interpret genetic mutations and their potential impacts on cancer.
3. Liquid Biopsy and Circulating Tumor DNA Analysis (Software/Tool: Guardant Health)
    1. Collecting blood samples from patients and isolating circulating tumor DNA (ctDNA).
    2. Utilizing advanced sequencing technologies to analyze ctDNA for tumor-derived genetic alterations.
    3. Assessing ctDNA data to monitor tumor evolution, response to treatment, and detect resistance mechanisms.

Duration: 6 Months

Fees: Rs 3,50,000/-

Module 2 Benefits: Enhancing Research Capabilities

1. **Comprehensive Skills:** Mastery of advanced genetic analysis techniques opens new research avenues and deeper insights into the genetic basis of diseases.
2. **Innovative Research:** Enables researchers to conduct cutting-edge research, using state-of-the-art tools to explore genetic mutations and their implications in cancer.
3. **Improved Diagnostics:** Skills in advanced genetic profiling can lead to the development of novel diagnostic tools, enhancing early detection and personalized treatment plans.

Module 3: Specialized Techniques in Molecular Oncology
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Immunological Techniques

1. Tumor Infiltrating Lymphocyte (TIL) Analysis (Software/Tool: ImageStreamX)
    1. Isolating lymphocytes from tumor tissues using density gradient centrifugation.
    2. Staining cells with antibodies targeting various immune cell markers.
    3. Analyzing cells using ImageStreamX to combine flow cytometry with detailed imaging, identifying and characterizing TILs.
2. Checkpoint Blockade Assay (Software/Tool: FACSDiva)
    1. Incubating cancer cell lines with immune cells in the presence of checkpoint inhibitors.
    2. Measuring immune cell activation and cancer cell killing via flow cytometry and cytotoxicity assays.
    3. Analyzing data to assess the efficacy of checkpoint inhibitors in modulating

immune responses against cancer cells.

3. Antigen Processing and Presentation Assay (Software/Tool: N/A)
    1. Culturing cancer cells with labeled antigens and monitoring antigen processing.
    2. Staining for MHC molecules and antigen peptides to assess the presentation profile on cancer cells.
    3. Using microscopy to evaluate antigen presentation and its implications for immune recognition.

In Vivo Techniques

1. Patient-Derived Orthotopic Xenografts (PDOX) (Software/Tool: N/A)
    1. Implanting patient-derived tumors into the corresponding organ in immunodeficient mice.
    2. Monitoring tumor growth and metastasis closely to mimic patient-specific tumor environment and response.
    3. Using these models to test personalized therapeutic regimens and study cancer progression and metastasis.
2. Metabolic Imaging in Live Animals (Software/Tool: Hyperion Imaging System)
    1. Injecting animals with metabolic tracers that are detectable via imaging modalities.
    2. Using the Hyperion Imaging System to visualize metabolic changes in tumors in response to treatment.
    3. Correlating imaging data with metabolic pathways to identify therapeutic targets.

High-Throughput Screening

1. Combination Drug Screening (Software/Tool: Synthace)
    1. Using robotic systems to dispense multiple drugs in varying combinations and concentrations to cancer cells.
    2. Measuring cell viability and synergistic effects of drug combinations using automated microscopy and viability assays.
    3. Using Synthace software for automated setup and analysis of complex experimental designs.
2. Genome-Scale CRISPR-Cas9 Knockout Screens (Software/Tool: CRISPResso)
    1. Designing and delivering a library of sgRNAs targeting a broad range of genomic loci into cancer cells.
    2. Selecting cells that survive under specific conditions to identify critical genes for cancer cell survival and drug resistance.
    3. Analyzing editing outcomes using CRISPResso to assess knockout efficiency and identify gene targets.

Bioinformatics Tools for Oncology

1. Single-Cell RNA-seq Data Analysis (Software/Tool: Seurat)
    1. Processing and analyzing single-cell RNA-seq data to identify distinct cell populations within tumors.
    2. Using Seurat for data normalization, dimensionality reduction, and clustering to discover cellular heterogeneity.

3. Integrating clinical data to link cellular profiles with patient outcomes and therapeutic responses.

2. Multi-Omics Data Integration (Software/Tool: MultiOmix)
    1. Aggregating genomic, transcriptomic, and proteomic data from cancer studies.
    2. Using MultiOmix to perform comprehensive integration and analysis, uncovering molecular signatures and predictive biomarkers.
    3. Applying statistical models to correlate omics data with clinical parameters and treatment outcomes.

Duration: 6 Months

Fees: Rs 4,00,000

Module 3 Benefits: Advancing Personalized Medicine

1. **Personalized Treatment Strategies:** Proficiency in these specialized techniques enables the development of personalized treatment plans based on individual genetic and proteomic profiles.
2. **Enhanced Drug Development:** Skills in high-throughput screening contribute to faster and more effective drug discovery processes, potentially lowering the time and cost associated with bringing new drugs to market.
3. **Clinical Research Applications:** Applying these techniques in clinical research settings enhances the ability to conduct rigorous, impactful studies that can lead to better patient outcomes.

Module 4: Emerging Technologies in Molecular Oncology
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Advanced Imaging Technologies

1. Multi-photon Microscopy (Software/Tool: ImageJ with plugins for advanced imaging)
    1. Preparing tissue samples with fluorescent markers specific to cancer-related proteins or structures.
    2. Using multi-photon microscopy to penetrate deeper into the tissue, reducing photobleaching and photodamage.
    3. Acquiring images and using ImageJ plugins to analyze cell morphology, interactions, and microenvironment in 3D.
2. Super-resolution Imaging (Software/Tool: Nikon NIS-Elements)
    1. Staining cancer cells with fluorescent probes that highlight specific molecular components of interest.
    2. Applying techniques like STED, PALM, or STORM to surpass the diffraction limit of conventional microscopy.
    3. Using Nikon NIS-Elements to process and visualize data for detailed subcellular localization and molecular dynamics.
3. Time-lapse Confocal Microscopy (Software/Tool: Zeiss Zen Software)
    1. Culturing live cancer cells on specialized imaging dishes and treating with drugs

or signaling molecules.
2. Recording changes over time using confocal microscopy to observe drug responses and cell behavior in real-time.
3. Analyzing videos and images with Zeiss Zen software to quantify cellular dynamics and treatment effects.

Artificial Intelligence and Machine Learning

1. AI in Cancer Diagnosis (Software/Tool: Google AI for medical imaging analysis)
    1. Training AI models using large datasets of medical images (e.g., MRIs, CT scans) annotated with diagnostic information.
    2. Applying trained models to new cancer imaging datasets to predict malignancy, tumor staging, and other clinical parameters.
    3. Evaluating model accuracy and reliability using statistical analysis tools integrated within the Google AI platform.
2. Machine Learning for Genomic Data Analysis (Software/Tool: Python with scikit-learn library)
    1. Collecting and preparing genomic data from cancer patients, including mutation profiles, gene expression levels, and epigenetic markers.
    2. Developing machine learning models in Python using scikit-learn to identify patterns and predictive biomarkers for cancer prognosis and therapy selection.
    3. Testing and validating models using cross-validation techniques to ensure generalizability and robustness of predictions.
3. Deep Learning for Pathology Image Analysis (Software/Tool: TensorFlow)
    1. Using deep neural networks to analyze pathology slides for features like tumor grading and lymph node involvement.
    2. Training models on a vast array of annotated histological images to learn distinguishing features of various cancer types.
    3. Integrating these models into clinical workflows to assist pathologists in diagnosing and understanding cancer progression.

Bioprinting and Tissue Engineering

1. 3D Bioprinting of Tumor Models (Software/Tool: Organovo 3D Bioprinter)
    1. Designing 3D models of tumors using CAD software to mimic the tumor architecture and microenvironment.
    2. Using Organovo 3D Bioprinter to print layers of cancer and stromal cells along with supportive biomaterials.
    3. Culturing bioprinted models and using them for drug testing and understanding tumor-stroma interactions.
2. Tissue Engineering for Cancer Research (Software/Tool: Autodesk Fusion 360 for model design)
    1. Designing scaffolds using Autodesk Fusion 360 that mimic the physical characteristics of the tumor microenvironment.
    2. Fabricating scaffolds using biocompatible materials and seeding them with cancer cells.

    3. Studying cancer cell behavior in engineered tissues, including invasion and angiogenesis.
3. Synthetic Tissue Constructs for Metastasis Study (Software/Tool: Simplify3D)
    1. Creating complex structures that model the tissue barriers and vascular systems encountered by metastasizing cancer cells.
    2. Embedding cancer cells in these constructs to study migration patterns and test metastasis-inhibiting drugs.
    3. Analyzing cell migration and drug effects using microscopy and molecular assays to evaluate therapeutic strategies.

Duration: 8 Months

Fees: Rs 5,50,000

Module 4 Benefits: Driving Innovation in Oncology

1. **Technological Advancement:** Utilization of cutting-edge technologies pushes the boundaries of what is possible in cancer research and therapy.
2. **Enhanced Precision:** Advanced imaging and AI provide unprecedented precision in tumor detection and treatment planning, significantly improving outcomes.
3. **Novel Research Tools:** Techniques like bioprinting offer innovative ways to create more accurate and controllable in vitro cancer models, enhancing research capabilities.

Module 5: Big Data and Informatics in Molecular Oncology
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Data Acquisition and Management

1. Techniques for High-throughput Data Collection (Software/Tool: Next Generation Sequencing platforms)
    1. Setting up sequencing experiments using Next Generation Sequencing platforms to capture genomic, transcriptomic, or epigenomic data from cancer samples.
    2. Optimizing sample preparation and sequencing parameters to maximize data quality and throughput.
    3. Monitoring sequencing runs in real-time to ensure data integrity and address any issues promptly.
2. Best Practices for Data Storage and Management (Software/Tool: Cloud storage solutions like AWS S3)
    1. Establishing protocols for secure data transfer from sequencing platforms to cloud storage solutions such as AWS S3.
    2. Implementing data management plans that comply with both local and international data protection regulations (e.g., GDPR, HIPAA).
    3. Using tools for data encryption, backup, and disaster recovery to ensure data availability and integrity.
3. High-throughput Proteomics Data Collection (Software/Tool: Mass Spectrometry platforms)

1. Preparing cancer tissue and cell samples for proteomic analysis using mass spectrometry.
2. Using automated sample handling systems to enhance throughput and reduce sample variability.
3. Analyzing proteomic data to uncover protein expression patterns and post-translational modifications unique to cancer cells.

Analytics and Data Interpretation

1. Utilizing Bioinformatics for Genetic Analysis (Software/Tool: Bioinformatics software like BLAST)
    1. Preparing sequencing data for analysis by aligning reads to reference genomes using bioinformatics software such as BLAST.
    2. Analyzing genetic variations and mutations relevant to cancer using variant calling tools.
    3. Interpreting the results to identify potential drug targets and diagnostic markers.
2. Data Mining Techniques for Identifying Biomarkers (Software/Tool: R and Python for statistical analysis)
    1. Applying advanced statistical and machine learning techniques in R and Python to analyze large datasets for patterns that predict disease outcome or drug response.
    2. Validating identified biomarkers through cross-referencing with existing databases and literature.
    3. Visualizing data insights using graphical representations to facilitate understanding and reporting.
3. Integrative Omics Analysis (Software/Tool: Integrative Genomics Viewer)
    1. Combining genomic, transcriptomic, and proteomic data to provide a comprehensive view of cancer biology.
    2. Using software tools like the Integrative Genomics Viewer to visualize and interpret complex datasets.
    3. Identifying key pathways and networks disrupted in cancer, facilitating new therapeutic targets.

Integrating Informatics into Clinical Practice

1. Development of Decision Support Systems (Software/Tool: Clinical decision support software)
    1. Designing and implementing decision support systems that integrate patient data with the latest research to provide real-time guidance on cancer treatment options.
    2. Ensuring systems are interoperable with existing electronic health records and can pull relevant patient data to aid in decision making.
    3. Training clinical staff on how to effectively use decision support tools to enhance patient outcomes.
2. Personalized Medicine Applications (Software/Tool: Personalized medicine platforms)
    1. Integrating genomic and clinical data to create personalized patient profiles that inform tailored treatment plans.
    2. Utilizing platforms that can dynamically update and revise treatment strategies

based on ongoing patient data and emerging research.
3. Collaborating with multidisciplinary teams to implement and monitor personalized treatment plans, ensuring they are effective and adjusted as necessary.

3. Artificial Intelligence in Therapeutic Development (Software/Tool: TensorFlow for Medical Imaging)
    1. Developing AI models to simulate drug interactions and predict therapeutic outcomes in virtual patient models.
    2. Integrating AI with high-throughput screening data to accelerate the discovery and optimization of oncology drugs.
    3. Using AI-driven platforms to personalize chemotherapy and radiation therapy plans based on predicted tumor responses.

Duration: 8 Months

Fees: Rs 5,50,000

Module 5 Benefits: Enhancing Precision in Cancer Research and Treatment

1. **Improved Diagnostic Accuracy:** Big data analytics enable more accurate and timely diagnosis by identifying patterns that are not obvious through traditional methods.
2. **Enhanced Treatment Personalization:** Informatics tools help tailor treatments to individual genetic profiles, improving outcomes and reducing side effects.
3. **Accelerated Research:** Rapid analysis of large datasets speeds up research, leading to quicker discoveries and innovations in cancer treatment.

Module 6: Artificial Intelligence in Molecular Oncology
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AI in Cancer Diagnosis and Prognosis

1. Deep Learning for Histopathological Image Analysis (Software/Tool: TensorFlow)
    1. Training deep learning models to analyze histopathological slides and identify cancerous tissues.
    2. Using convolutional neural networks (CNNs) to detect subtle morphological features indicative of specific cancer types.
    3. Evaluating model performance using a validation set of annotated slides.
2. AI for Radiomics in Cancer Detection (Software/Tool: PyTorch)
    1. Extracting quantitative features from radiological images using AI-driven image processing tools.
    2. Training machine learning models to correlate radiomic features with cancer presence and stage.
    3. Assessing the predictive power of radiomic features for personalized treatment planning.
3. Neural Networks for Predicting Cancer Progression (Software/Tool: TensorFlow)
    1. Developing neural networks to predict patient-specific cancer progression based on clinical data inputs.

2. Integrating time-series analysis to monitor changes in tumor markers over time.
3. Using predictive models to suggest interventions and monitor treatment effectiveness.

AI-Driven Genetic Analysis

1. AI for Genomic Variant Interpretation (Software/Tool: IBM Watson Genomics)
    1. Using IBM Watson to analyze genetic sequencing data and identify pathogenic variants associated with cancer.
    2. Integrating AI insights with clinical data to provide a comprehensive genomic profile for each patient.
    3. Developing a report that suggests targeted therapies based on identified genetic mutations.
2. Machine Learning for Epigenetic Pattern Recognition (Software/Tool: Python)
    1. Applying machine learning techniques to detect and interpret epigenetic modifications that influence cancer.
    2. Training models to identify correlations between epigenetic changes and cancer phenotypes.
    3. Utilizing predictive analytics to suggest potential epigenetic therapies.

Automating Laboratory Processes

1. Automated Cell Culturing and Monitoring (Software/Tool: Automated cell culture systems)
    1. Implementing robotic systems for the seeding, feeding, and harvesting of cell cultures in high-throughput experiments.
    2. Integrating real-time monitoring systems to track cell growth and morphology.
    3. Using data collected from automated systems to optimize culture conditions and experimental protocols.
2. AI-Enhanced High-Throughput Screening for Drug Efficacy (Software/Tool: Drug discovery AI platforms)
    1. Using AI to design and execute high-throughput screening assays to evaluate thousands of compounds for anticancer activity.
    2. Applying advanced algorithms to analyze screening data and identify promising drug candidates.
    3. Automating the process of lead optimization to improve the efficacy and selectivity of identified compounds.
3. Integration of AI with CRISPR-Cas9 for Enhanced Genome Editing (Software/Tool: CRISPR AI tools)
    1. Leveraging AI to predict the outcomes of CRISPR-Cas9 genome edits, enhancing precision and reducing off-target effects.
    2. Automating the design and testing of guide RNAs for targeted mutations in cancer genes.
    3. Using machine learning models to analyze post-editing results and refine editing strategies.

Additional AI-Driven Techniques

1. AI for Personalized Chemotherapy Regimens (Software/Tool: Clinical AI systems)
    1. Developing AI models to analyze patient data and predict responses to various chemotherapy agents.
    2. Integrating pharmacogenomic data to tailor chemotherapy treatments to individual genetic profiles.
    3. Using clinical decision support systems to recommend personalized chemotherapy protocols.
2. Virtual Tumor Boards Powered by AI (Software/Tool: AI-based decision support platforms)
    1. Utilizing AI to aggregate and analyze patient data from diverse sources for multidisciplinary treatment planning.
    2. Enhancing tumor board discussions with AI-driven insights, highlighting key patient data and suggesting evidence-based treatments.
    3. Facilitating remote collaboration among oncologists, radiologists, and pathologists through AI-supported platforms.
3. AI-Driven Molecular Diagnostic Development (Software/Tool: Diagnostic AI analytics)
    1. Applying AI to develop and validate new molecular diagnostic tests that predict cancer susceptibility and drug response.
    2. Using AI to analyze large datasets from genomic, transcriptomic, and proteomic studies to identify diagnostic markers.
    3. Integrating diagnostic AI with clinical practice to provide early detection and personalized treatment planning.

Duration: 8 Months

Fees: Rs 6,50,000

Module 6 Benefits: Transforming Oncology with AI

1. **Enhanced Diagnostic Accuracy:** AI improves the accuracy and speed of cancer diagnostics, especially in imaging and genetic analysis.
2. **Personalized Treatment Plans:** AI-driven tools facilitate the development of tailored therapies based on individual patient data, optimizing treatment efficacy.
3. **Efficiency in Research and Development:** AI accelerates the pace of research, from drug discovery to clinical trials, enhancing productivity and innovation.

Note: The NTHRYS team reserves the right to modify the modules / protocols or software/tools used in these protocols as needed to improve educational outcomes or adapt to new technologies.

Please choose a suitable time slot and inform our team via WhatsApp on +91-8977624748 (located at the top right corner) to receive the payment link for fee payment and slot confirmation.

DNA Extraction from Human Blood

Rs 1320 /-

Time in Hours: 1

Join

Radio Immunoassay (RIA)

Rs 2400 /-

Time in Hours: 24

Join

Enzyme Linked Immunosorbent Assay - ELISA

Rs 1440 /-

Time in Hours: 24

Join

Solid-phase radioimmunoassay for cell-surface antigens

Rs 4200 /-

Time in Hours: 24

Join

Cell viability assay - MTT

Rs 9600 /-

Time in Hours: 72

Join

DNA Extraction from Bacteria

Rs 1320 /-

Time in Hours: 3

Join

DNA Extraction from Plant Leaf

Rs 1680 /-

Time in Hours: 6

Join

Isolation of -normal peritoneal macrophages

Rs 14400 /-

Time in Hours: 72

Join

DNA Extraction from Chicken Liver

Rs 480 /-

Time in Hours: 3

Join

Primer designing using Bioinformatics Tools

Rs 480 /-

Time in Hours: 2

Join

Preparation of lymphocytes from blood

Rs 10800 /-

Time in Hours: 48

Join

Optimization of PCR parameters - Technical Theory - -No practical

Rs 360 /-

Time in Hours: 1

Join

Preparation of lymphocytes from lymphoid organs

Rs 21600 /-

Time in Hours: 48

Join

Direct somatic Embryogenesis in coffea canephora

Rs 30000 /-

Time in Hours: 240

Join

Isolation of human T-lymphocyte lines

Rs 42000 /-

Time in Hours: 120

Join

Agarose Electrophoresis

Rs 720 /-

Time in Hours: 3

Join

Extraction and purification of amplified DNA from Agarose gels using spin columns

Rs 720 /-

Time in Hours: 1

Join

Cultivation of pUC 18 vector bearing bacterial strain

Rs 960 /-

Time in Hours: 24

Join

Plasmid -pUC 18- isolation

Rs 720 /-

Time in Hours: 6

Join

Restriction digestion of pUC18 vector using EcoRI

Rs 1080 /-

Time in Hours: 2

Join

5- End DNA modification of restriction digested plasmid sample -Addition of Poly Ts

Rs 1920 /-

Time in Hours: 3

Join

TA Cloning

Rs 1320 /-

Time in Hours: 2

Join

DNA ligation

Rs 1080 /-

Time in Hours: 2

Join

Competent cell preparation DH5 alpha cells

Rs 1680 /-

Time in Hours: 3

Join

Bacterial Transformation -using competent cells and cloned vector

Rs 2160 /-

Time in Hours: 48

Join

Blue white screening

Rs 3360 /-

Time in Hours: 48

Join

Extraction of IgG Immunoglobulin G from plasma / serum

Rs 1080 /-

Time in Hours: 1

Join

Purification of extracted Immunoglobulins Using Dialysis process

Rs 3480 /-

Time in Hours: 48

Join

Pepsin digestion and purification of digested IgG

Rs 2280 /-

Time in Hours: 2

Join

Preparation of Antigens for Immunizations -including Adjuvant selection strategies-

Rs 4200 /-

Time in Hours: 3

Join

SDS PAGE

Rs 3600 /-

Time in Hours: 8

Join

Quantitative ELISA

Rs 3600 /-

Time in Hours: 6

Join

Enumeration of Microorganisms in Foods

Rs 9600 /-

Time in Hours: 48

Join

RID

Rs 2520 /-

Time in Hours: 8

Join

DID -Ouchterlony-

Rs 2520 /-

Time in Hours: 8

Join

Immunization of Mice or Rabbit

Rs 36000 /-

Time in Hours: 20

Join

Enumeration of Aerobic colony count in Foods

Rs 9600 /-

Time in Hours: 48

Join

Most Probable Method -MPN-

Rs 2160 /-

Time in Hours: 48

Join

Enumeration of Yeast and Moulds in Foods

Rs 960 /-

Time in Hours: 48

Join

A new Temporary immersion Bioreactor system for micropropagation

Rs 54000 /-

Time in Hours: 240

Join

Protocol to Achieve photoautotrophic coconot plants cultured In vitro with improved performance Ex vitro

Rs 78000 /-

Time in Hours: 240

Join

Isolation of pathogenic E.coli

Rs 13200 /-

Time in Hours: 48

Join

Isolation of Enterococcus from food

Rs 13200 /-

Time in Hours: 48

Join

Isolation from salmonella from foods

Rs 13200 /-

Time in Hours: 48

Join

Enumeration of Staphylococcus aureus in foods

Rs 21600 /-

Time in Hours: 48

Join

Enumeration of Listeria monocytogens from food and environmental samples

Rs 13200 /-

Time in Hours: 48

Join

Enumeration of Bacillus cereus in foods

Rs 21600 /-

Time in Hours: 48

Join

Detection of Clostridium botulinum in honey and syrups

Rs 20400 /-

Time in Hours: 48

Join

Enumeration of Clostridium perfringens in foods

Rs 20400 /-

Time in Hours: 48

Join

Microbiology of Water

Rs 10800 /-

Time in Hours: 48

Join

Standard Qualitative analysis of water

Rs 14400 /-

Time in Hours: 48

Join

Quantitative analysis of water

Rs 14400 /-

Time in Hours: 48

Join

Howard Mould Count

Rs 4800 /-

Time in Hours: 72

Join

Examination of Canned Food

Rs 6000 /-

Time in Hours: 6

Join

Aseptic culture techniques for establishment and maintenance of cultures

Rs 3600 /-

Time in Hours: 3

Join

Preparation of stock solutions of MS basal medium and plant growth regulator stocks

Rs 10800 /-

Time in Hours: 10

Join

Micropropagation of Tobacco plant by leaf disc culture

Rs 30000 /-

Time in Hours: 72

Join

Micropropagation of Rice by indirect organogenesis from embryo

Rs 30000 /-

Time in Hours: 72

Join

Preparation of competent cells of E. coli for harvesting plant transformation vector

Rs 4800 /-

Time in Hours: 6

Join

Transformation of competent cells of E. coli with plant transformation vectors

Rs 10800 /-

Time in Hours: 12

Join

Plasmid preparation from E. coli

Rs 1680 /-

Time in Hours: 6

Join

Micropropagation of Agave species

Rs 30000 /-

Time in Hours: 72

Join

Electroelution of insert DNA from agarose gel slice

Rs 4800 /-

Time in Hours: 6

Join

Mobilization of recombinant Ti plasmid from common laboratory host (E. coli) to Agrobacterium tumefaciens strain

Rs 66000 /-

Time in Hours: 72

Join

Agrobacterium tumefaciens-mediated plant transformation

Rs 180000 /-

Time in Hours: 240

Join

Direct DNA delivery to plant by Particle Bombardment

Rs 48000 /-

Time in Hours: 48

Join

Isolation of plant genomic DNA by modified CTAB method

Rs 10800 /-

Time in Hours: 12

Join

Protein Analysis

Rs 30000 /-

Time in Hours: 48

Join

Preparation of Animal Tissue Culture Media

Rs 9600 /-

Time in Hours: 8

Join

Somatic Embryogenesis in picea suspension cultures

Rs 42000 /-

Time in Hours: 72

Join

Micropropagation of Endangered plant species

Rs 42000 /-

Time in Hours: 72

Join

Cultivation of Human Cardiomyocytes

Rs 13200 /-

Time in Hours: 72

Join

Cultivation of HeLa Cells

Rs 13200 /-

Time in Hours: 72

Join

Preparation and Use of Conditional Media - Using Human Cardiomyocytes

Rs 22800 /-

Time in Hours: 72

Join

Clonal propagation of softwoods

Rs 90000 /-

Time in Hours: 72

Join

Separation of Fetal Human Serum -FHS- from Cord Blood

Rs 1080 /-

Time in Hours: 1

Join

Collection of Cardiomyocytes source and isolation of Cardiomyocytes

Rs 6000 /-

Time in Hours: 48

Join

Preparation of conditional media from cardiomyocytes cultivation

Rs 2400 /-

Time in Hours: 3

Join

Collection and Cultivation of Human Bone Marrow stem cells

Rs 6000 /-

Time in Hours: 15

Join

Utilization of Cardiomyocyte Conditional media to transform Bone Marrow stem cells to cardiomyocytes

Rs 9600 /-

Time in Hours: 10

Join

Chloroplast Transformation

Rs 78000 /-

Time in Hours: 100

Join

Confirmation of Cord Blood Stem cells

Rs 1800 /-

Time in Hours: 15

Join

Confirmation of Human Bone Marrow stem cells

Rs 1800 /-

Time in Hours: 15

Join

Confirmation of Cardiomyocytes

Rs 1800 /-

Time in Hours: 15

Join

Confirmation of Cardiomyotes transformed from Cord blood stem cells

Rs 2400 /-

Time in Hours: 72

Join

Transformation of maize via Agrobacterium tumefaciens using a Binary co integrate vector system

Rs 180000 /-

Time in Hours: 150

Join

Collection Cultivation and preservation of Cord blood stem cells

Rs 18000 /-

Time in Hours: 72

Join

Collection and Preservation of Human Cord Blood

Rs 15600 /-

Time in Hours: 48

Join

Isolation Cultivation and Confirmation of Human Liver Cell Lines

Rs 3000 /-

Time in Hours: 72

Join

Isolation Cultivation and confirmation of Human Pancreatic Cell Lines

Rs 3000 /-

Time in Hours: 72

Join

Isolation Cultivation and confirmation of Human Alveolar Cell Lines

Rs 3000 /-

Time in Hours: 72

Join

Isolation Cultivation and Confirmation of Green monkey kidney cell lines

Rs 3000 /-

Time in Hours: 72

Join

Isolation Cultivation and Confirmation of Human Neural Cells

Rs 3000 /-

Time in Hours: 72

Join

Isolation Cultivation and Confirmation of Organ specific stem cells

Rs 3000 /-

Time in Hours: 72

Join

Neural Stem Cells Cultivation

Rs 4200 /-

Time in Hours: 48

Join

Bone Marrow Stem Cells Cultivation

Rs 4200 /-

Time in Hours: 48

Join

Hexose Assay

Rs 2400 /-

Time in Hours: 3

Join

Pentose Assay

Rs 2400 /-

Time in Hours: 3

Join

Isolation and Screening of soil microorganisms

Rs 1200 /-

Time in Hours: 48

Join

Disacchharide Assay

Rs 2400 /-

Time in Hours: 4

Join

Microbial stainings -Normal and Gram Staining-

Rs 960 /-

Time in Hours: 2

Join

Bacterial Motility test

Rs 960 /-

Time in Hours: 15

Join

Polysacchharide Assay

Rs 1320 /-

Time in Hours: 24

Join

Catalase Test

Rs 1560 /-

Time in Hours: 24

Join

Mannitol Salt Agar Test

Rs 1800 /-

Time in Hours: 24

Join

Lipid Extraction

Rs 3000 /-

Time in Hours: 24

Join

Blood Agar plates assay

Rs 1560 /-

Time in Hours: 24

Join

Modified Bligh and Dyers Method for Phospholipid Extraction

Rs 3600 /-

Time in Hours: 24

Join

Optochin sensitivity test

Rs 2400 /-

Time in Hours: 24

Join

Bacitracin sensistivity test

Rs 2400 /-

Time in Hours: 24

Join

Folch Extraction

Rs 2400 /-

Time in Hours: 24

Join

CAMP Test

Rs 3600 /-

Time in Hours: 48

Join

Bile-esculin agar test

Rs 4200 /-

Time in Hours: 48

Join

Thin Layer Chromatography

Rs 1800 /-

Time in Hours: 24

Join

Nitrate broth test

Rs 2160 /-

Time in Hours: 24

Join

Nucleic Acid Analysis

Rs 2160 /-

Time in Hours: 24

Join

Spirit blue agar test

Rs 2160 /-

Time in Hours: 24

Join

Starch hydrolysis test

Rs 2160 /-

Time in Hours: 24

Join

Coagulase test

Rs 1440 /-

Time in Hours: 48

Join

Oxidase test

Rs 1440 /-

Time in Hours: 48

Join

Glucose Test

Rs 1440 /-

Time in Hours: 48

Join

Enzyme Kinetics

Rs 6000 /-

Time in Hours: 72

Join

Sucrose Test

Rs 2400 /-

Time in Hours: 48

Join

Mannose Test

Rs 2400 /-

Time in Hours: 48

Join

Methyl Red Voges Proskauer Test -MRVP Test-

Rs 1800 /-

Time in Hours: 48

Join

Amylase Assay

Rs 1800 /-

Time in Hours: 48

Join

Kliger-s Iron Test

Rs 3000 /-

Time in Hours: 48

Join

Protease Assay

Rs 1800 /-

Time in Hours: 48

Join

MacConkey Agar Test

Rs 2280 /-

Time in Hours: 48

Join

Protein Precipitations

Rs 1800 /-

Time in Hours: 5

Join

Simmon-s Citrate Test

Rs 2160 /-

Time in Hours: 48

Join

Isolation and purification of Ribosome Inactivating proteins

Rs 30000 /-

Time in Hours: 48

Join

Column Chromatography

Rs 8400 /-

Time in Hours: 24

Join

Sulfur Indole motility media test

Rs 4800 /-

Time in Hours: 48

Join

Indole Test

Rs 1440 /-

Time in Hours: 24

Join

Catharanthus roseus shoot cultures for the production of monoterpenoid indole alkaloids

Rs 42000 /-

Time in Hours: 100

Join

Tissue preservation

Rs 4200 /-

Time in Hours: 2

Join

Coomassie Blue Staining

Rs 3600 /-

Time in Hours: 5

Join

Silver Staining

Rs 6000 /-

Time in Hours: 5

Join

Grey Method for Phosphatidylinositol Phosphate Extraction

Rs 7200 /-

Time in Hours: 6

Join

Modified Alex Brown Method for Phosphatidylinositol Phosphate Extraction

Rs 7200 /-

Time in Hours: 10

Join

Hexane Extraction for Neutral Lipids

Rs 4800 /-

Time in Hours: 6

Join

Glycolipid Extraction

Rs 8400 /-

Time in Hours: 10

Join

Medical Plant Extraction using Soxhlet Apparatus

Rs 2400 /-

Time in Hours: 24

Join

Hydroextractions

Rs 2400 /-

Time in Hours: 24

Join

Methanolic Extractions

Rs 3600 /-

Time in Hours: 24

Join

Ethanolic Extractions

Rs 4800 /-

Time in Hours: 24

Join

Phytochemical Analysis

Rs 8400 /-

Time in Hours: 48

Join

HPLC

Rs 18000 /-

Time in Hours: 48

Join

GC

Rs 18000 /-

Time in Hours: 48

Join

Western Blotting

Rs 18000 /-

Time in Hours: 48

Join

Lipid Kinase Assays

Rs 14400 /-

Time in Hours: 48

Join

Protein Kinase Assays

Rs 14400 /-

Time in Hours: 48

Join

Protein Tyrosine Phasphatase Assay

Rs 14400 /-

Time in Hours: 48

Join

Alkaline Phosphatase Assay

Rs 14400 /-

Time in Hours: 48

Join

Caspase Assay

Rs 14400 /-

Time in Hours: 48

Join

Apoptosis Assay

Rs 28800 /-

Time in Hours: 48

Join

XTT Cell Proliferation Assay

Rs 33600 /-

Time in Hours: 48

Join

Chemotaxis Assay

Rs 34800 /-

Time in Hours: 48

Join

Isolation and Screening of enzyme -protease- producing microorganisms from soil

Rs 3600 /-

Time in Hours: 48

Join

Matrigel Invasion Assay

Rs 42000 /-

Time in Hours: 48

Join

Isolation and Screening of Antibiotics producing microorganisms from soil

Rs 4800 /-

Time in Hours: 72

Join

Quantitative Analysis of Enzyme levels in cultured media

Rs 6000 /-

Time in Hours: 5

Join

Splenocyte Isolation

Rs 14400 /-

Time in Hours: 72

Join

Extraction and Purification of enzymes from culture media

Rs 4800 /-

Time in Hours: 48

Join

Isolation of Peripheral Blood Lymphocytes

Rs 10800 /-

Time in Hours: 72

Join

Quantitative Analysis of Antibiotic levels in cultured media

Rs 3600 /-

Time in Hours: 24

Join

Extraction and Purification of Antibiotic from culture media

Rs 7200 /-

Time in Hours: 48

Join

Tissue fixation

Rs 4800 /-

Time in Hours: 3

Join

Production of Bioinsecticide -Biopesticide- from bacillus thuringiensis -BtK- strain

Rs 10800 /-

Time in Hours: 72

Join

Cell Maintenance

Rs 8400 /-

Time in Hours: 24

Join

Production of Biolarvicide -Biopesticide- from Bacillus thuringiensis israelensis -BtI- strain

Rs 18000 /-

Time in Hours: 72

Join

Cell Counting

Rs 840 /-

Time in Hours: 2

Join

Production of -non-symbiotic nitrogen-fixing bacteria Biofertilizers from Azobcter

Rs 18000 /-

Time in Hours: 72

Join

MTT Assay

Rs 42000 /-

Time in Hours: 72

Join

Colony Forming Unit-CFU- Assay

Rs 6000 /-

Time in Hours: 48

Join

Tryphan Blue Assay

Rs 7200 /-

Time in Hours: 48

Join

Isolation Cultivation and plant regeneration from Echinacea Purpurea Protoplasts

Rs 42000 /-

Time in Hours: 100

Join

Tissue sectioning

Rs 10800 /-

Time in Hours: 5

Join

Sample/tissue labelling using IHC markers

Rs 13200 /-

Time in Hours: 72

Join

Methods for regeneration and transformation in Eschscholzia Californica- A model plant to investigate Alkaloid Biosynthesis

Rs 42000 /-

Time in Hours: 100

Join

Immunohistochemistry staining

Rs 30000 /-

Time in Hours: 48

Join

Microscopic observation, photography and data analysis

Rs 6000 /-

Time in Hours: 48

Join

Purification of RNA expressed in vivo inserted in a tRNA scaffold

Rs 42000 /-

Time in Hours: 72

Join

Selective RNase H cleavage of target RNAs from a tRNA scaffold

Rs 42000 /-

Time in Hours: 72

Join

Preparation of long templates for RNA in vitro transcription by recursive PCR

Rs 42000 /-

Time in Hours: 72

Join

Production of Interspecific Hybrid Plants in Primula

Rs 78000 /-

Time in Hours: 150

Join

Preparation of short RNA by in vitro transcription

Rs 66000 /-

Time in Hours: 72

Join

Air sampling using Rotorod sampler

Rs 1800 /-

Time in Hours: 36

Join

Air sampling using Burkard sampler

Rs 2160 /-

Time in Hours: 36

Join

Air sampling using Anderson sampler

Rs 2160 /-

Time in Hours: 36

Join

Enumeration of fungi collected from air samples

Rs 1800 /-

Time in Hours: 60

Join

Enumeration of bacteria collected from air samples

Rs 1800 /-

Time in Hours: 60

Join

Enumeration of total airborne bacteria,yeast and mold

Rs 3000 /-

Time in Hours: 60

Join

Slide culture technique for fungi

Rs 1920 /-

Time in Hours: 60

Join

Cultivation and isolation of single colonies of bacteria and fungi and storage

Rs 4800 /-

Time in Hours: 60

Join

Isolation of total DNA from isolated fungi

Rs 720 /-

Time in Hours: 3

Join

Isolation of total DNA from isolated bacteria

Rs 1800 /-

Time in Hours: 5

Join

Native RNA purification by Gel filtration chromatography

Rs 18000 /-

Time in Hours: 72

Join

Industrial Bacterial Fermentation Aspects Practical Strategies and Approaches

Rs 16800 /-

Time in Hours: 150

Join

Industrial Microbial Fementation Upstream Processing Strategies

Rs 8400 /-

Time in Hours: 2

Join

Industrial Microbial Fermentation Downstream Processing Strategies

Rs 8400 /-

Time in Hours: 2

Join

Media Preparations and Readymade media preparations and usage techniques

Rs 13200 /-

Time in Hours: 2

Join

Streaking Techniques

Rs 2400 /-

Time in Hours: 2

Join

Isolation and Identification of S.aureus from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Isolation and Identification of Streptococcus (alpha beta and gama) from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Isolation and Identification of Salmonella from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Trans-acting antigenomic HDV ribozyme for production of in vitro transcripts with homogenous 3-ends

Rs 180000 /-

Time in Hours: 72

Join

Rapid preparation of RNA samples using DNA-affinity chromatography

Rs 42000 /-

Time in Hours: 72

Join

Guard Cell Protoplasts: Isolation,Culture and Regeneration of Plants

Rs 30000 /-

Time in Hours: 100

Join

Isolation and Identification of Shigella from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 24000 /-

Time in Hours: 48

Join

Preparation of N- GST fusion protein for affinity immobilization of RNA

Rs 90000 /-

Time in Hours: 72

Join

Affinity purification of RNA using an ARiBO tag

Rs 54000 /-

Time in Hours: 72

Join

Plasmid template design and in vitro transcription of short RNAs within a "structure cassette" for structure probing experiments

Rs 240000 /-

Time in Hours: 72

Join

In Vitro transcription of modified RNAs

Rs 300000 /-

Time in Hours: 72

Join

End labeling oligonucleotides with chemical tags after synthesis

Rs 300000 /-

Time in Hours: 72

Join

High purity enzymatic synthesis of site specifically modified tRNA

Rs 300000 /-

Time in Hours: 72

Join

Se-Derivatized RNAs for x-ray crystallography

Rs 300000 /-

Time in Hours: 72

Join

Isolation and Identification of Pseudomonas from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 14400 /-

Time in Hours: 48

Join

Biosynthetic preparation of 13C/15N labeled rNTPs for high resolution NMR studies of RNAs

Rs 180000 /-

Time in Hours: 72

Join

Preparative separation of ribonucleoside monophosphates by ion-pair reverse phase HPLC

Rs 300000 /-

Time in Hours: 72

Join

Splint ligation of RNA with T4 DNA ligase

Rs 30000 /-

Time in Hours: 72

Join

Optimising yeast as a host for recombinant protein production

Rs 30000 /-

Time in Hours: 72

Join

Preparation of pichia pastoris expression plasmids

Rs 54000 /-

Time in Hours: 72

Join

Isolation and Identification of Mycobacterium tuberculosis from clinical samples

(BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 10800 /-

Time in Hours: 72

Join

Preparation of Saccharomyces cerevisiae expression plasmids

Rs 42000 /-

Time in Hours: 72

Join

Codon optimisation for heterologous gene expression in yeast

Rs 180000 /-

Time in Hours: 72

Join

Yeast transformation to generate high yielding clones

Rs 180000 /-

Time in Hours: 150

Join

Isolation and Identification of Gram negative Bacilli (E.coli klebsiella proteus) from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 10800 /-

Time in Hours: 72

Join

Screening for high yielding pichia pastoris clones: The production of G protein coupled receptors as a case study

Rs 240000 /-

Time in Hours: 150

Join

Screening for high yielding saccharomyces cerevisiae clones: using a green fluorescent protein fusion strategy in the production of membrane proteins

Rs 240000 /-

Time in Hours: 150

Join

Isolation and Identification of Vibrio from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 14400 /-

Time in Hours: 72

Join

The effect of antifoam addition -on protein production yields

Rs 24000 /-

Time in Hours: 15

Join

Setting up a bioreactor for recombinant protein production in yeast

Rs 42000 /-

Time in Hours: 72

Join

Ureas Test

Rs 1560 /-

Time in Hours: 24

Join

Isolation and Identification of Anaerobic Pathogens from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Optimising pichia pastoris induction

Rs 18000 /-

Time in Hours: 20

Join

Isolation and Identification of Corynebacterium diphtheria from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Optimizing saccharomyces cerevisiae induction regimes

Rs 30000 /-

Time in Hours: 20

Join

Large scale production of membrane proteins in pichia pastoris: The production of G protein coupled receptors

Rs 54000 /-

Time in Hours: 72

Join

Isolation and Identification of Clostridium from clinical samples (BLOOD URINE STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Isolation and Identification of Haemophilus from clinical samples (BLOOD URINE

STOOL PUS SPUTUM WOUND CSF EAR SWAB EYE SWAB THROAT SWAB)

Rs 6000 /-

Time in Hours: 48

Join

Urine Quantitative Culture

Rs 0 /-

Time in Hours: 0

Join

Acid Fast Staining for identification of MTB

Rs 0 /-

Time in Hours: 0

Join

Montoux Test

Rs 0 /-

Time in Hours: 0

Join

Colony Counting

Rs 0 /-

Time in Hours: 0

Join

Large scale production of membrane proteins in saccharomyces cerevisiae : using a green fluorescent protein fusion strategy in the production of membrane proteins

Rs 114000 /-

Time in Hours: 150

Join

Motility Test

Rs 0 /-

Time in Hours: 0

Join

Isolation,Culture and plant regeneration from leaf protoplasts of passiflora

Rs 0 /-

Time in Hours: 0

Join

Large scale production of secreted proteins in pichia pastoris

Rs 114000 /-

Time in Hours: 150

Join

Triple Sugar Iron Test

Rs 0 /-

Time in Hours: 0

Join

Disruption of yeast cells to isolate recombinant proteins

Rs 21600 /-

Time in Hours: 5

Join

Identification of Fungi from skin Hair and Nail by KOH MOUNT and Lacto phenol Cotton Blue Staining.

Rs 0 /-

Time in Hours: 0

Join

Analysing caspase activation and caspase activity in apoptotic cells

Rs 0 /-

Time in Hours: 0

Join

WIDAL

Rs 0 /-

Time in Hours: 0

Join

VDRLPOLYMERASE CHAIN REACTION FOR DETECTION OF HBV HCV MTB)

Rs 0 /-

Time in Hours: 0

Join

Flow cytometry based apoptosis detection

Rs 0 /-

Time in Hours: 0

Join

Live to dead cell imaging

Rs 0 /-

Time in Hours: 0

Join

Detection of apoptosis in tissue sections

Rs 0 /-

Time in Hours: 0

Join

Detection of apoptosis in cell free systems

Rs 0 /-

Time in Hours: 0

Join

Methods to analyze cellular necroptosis

Rs 0 /-

Time in Hours: 0

Join

Restriction digestion of insert plasmid and binary vector

Rs 0 /-

Time in Hours: 0

Join

Detection of cell death by autophagy

Rs 0 /-

Time in Hours: 0

Join

Agrobacterium mediated Transformation of Petunia Leaf Discs

Rs 156000 /-

Time in Hours: 150

Join

Coating Antibodies -IgG- to Carbonanofibers

Rs 0 /-

Time in Hours: 0

Join

Capsaicin Accumulation in Capsicum spp. Suspension cultures

Rs 90000 /-

Time in Hours: 200

Join

Coating of antibody coated carbon nanofibers to gold surface

Rs 0 /-

Time in Hours: 0

Join

Methods to analyze transglutamination of proteins involved in apoptosis

Rs 0 /-

Time in Hours: 0

Join

Preparation of liposomal nanomedicines

Rs 0 /-

Time in Hours: 0

Join

Methods to analyze s- nitrosylation of proteins involved in apoptosis

Rs 0 /-

Time in Hours: 0

Join

Preparation of carbon nanofibers and liposomal conjugates

Rs 0 /-

Time in Hours: 0

Join

Molecular analysis of putative transformed plants by Polymerase Chain Reaction

Rs 0 /-

Time in Hours: 0

Join

Application of in vivo EPR for tissue po2 and redox measurements

Rs 0 /-

Time in Hours: 0

Join

Preparation of media and stock solution

Rs 2040 /-

Time in Hours: 24

Join

Preparation of Explants

Rs 420 /-

Time in Hours: 1

Join

Callus initiation and Maintenance -In Potato-

Rs 2640 /-

Time in Hours: 168

Join

Assays to measure p53 dependent and independent apoptosis

Rs 0 /-

Time in Hours: 0

Join

Shoot and Root Induction in potato

Rs 3360 /-

Time in Hours: 168

Join

Somatic Embryogenesis - In Barley Suspension cultures

Rs 18000 /-

Time in Hours: 500

Join

Anther and Microspore Culturing of Barley

Rs 30000 /-

Time in Hours: 500

Join

Measurement of changes in cdk2 and cyclin o- associated

Rs 18000 /-

Time in Hours: 100

Join

Immature lnflorescence Culture of Cereals

Rs 18000 /-

Time in Hours: 200

Join

Fluorometric methods for detection of mitochondrial membrane permeabilization in apoptosis

Rs 0 /-

Time in Hours: 0

Join

Meristem-Tip Culture for Propagation and Virus Elimination - In Potato or selected plant-

Rs 26400 /-

Time in Hours: 200

Join

Clonal Propagation of Orchids

Rs 21600 /-

Time in Hours: 168

Join

In Vitro Propagation of Succulent Plants

Rs 19200 /-

Time in Hours: 168

Join

A brief introduction to Plant Bioinformatics -Nomenclature and Plant Pathological Bioinfo Database designing and management standards

Rs 1800 /-

Time in Hours: 3

Join

Micropropagation of Flower Bulbs Lily

Rs 21600 /-

Time in Hours: 168

Join

DNA extraction from Fungal Plant Pathogens

Rs 3600 /-

Time in Hours: 5

Join

Spore-Derived Axenic Cultures of Ferns as a Method of Propagation

Rs 30000 /-

Time in Hours: 168

Join

DNA Extraction from Viral Plant Pathogens

Rs 6000 /-

Time in Hours: 8

Join

Identification of Fungal Plant Pathogens using PCR

Rs 7200 /-

Time in Hours: 12

Join

Identification of Viral Plant Pathogens using PCR

Rs 10800 /-

Time in Hours: 12

Join

Cryopreservation of embryogenic cell suspensions by Encapsulation vitrification

Rs 10800 /-

Time in Hours: 40

Join

DNA extraction from Insect Plant Pathogens

Rs 8400 /-

Time in Hours: 8

Join

Human tissue collection and preparation

Rs 0 /-

Time in Hours: 0

Join

Identification of Insect Plant Pathogens using PCR

Rs 10800 /-

Time in Hours: 12

Join

Regulation of apoptosis by the unfolded protein response

Rs 0 /-

Time in Hours: 0

Join

Total Protein Extraction from plant materials

Rs 18000 /-

Time in Hours: 8

Join

Detection of uncoupling protein-2 (ucp2) as a mitochondrial modulator of apoptosis

Rs 0 /-

Time in Hours: 0

Join

Semi Ultra Purification of extracted plant proteins

Rs 8400 /-

Time in Hours: 6

Join

Multiple approach to analyzing the role of microRNAs in apoptosis

Rs 0 /-

Time in Hours: 0

Join

Immunological Identification of plant pathogens using ELISA

Rs 4800 /-

Time in Hours: 8

Join

Assessment of apoptotic cell phagocytosis by macrophages

Rs 0 /-

Time in Hours: 0

Join

Microbiological Quality Assurance Measures in Plant Tissue Culture Practices

Rs 12000 /-

Time in Hours: 1

Join

Detection of apoptosis in mammalian development

Rs 0 /-

Time in Hours: 0

Join

Stock Plant treatment for detection and Identification of viriods viruses bacteria and fungi in plant tissue culture plant materials

Rs 18000 /-

Time in Hours: 8

Join

Detection of apoptosis in the central nervous system

Rs 0 /-

Time in Hours: 0

Join

Genetic mapping of anti apoptosis pathways in myeloid progenitor cells

Rs 0 /-

Time in Hours: 0

Join

Various Surface sterilization to control microbial hazards plant tissue culture plant materials

Rs 600 /-

Time in Hours: 1

Join

Analysis of apoptosis in isolated primary cardiac myocytes

Rs 0 /-

Time in Hours: 0

Join

Molecular identification of Viral contamination of plant material selected for plant tissue culture

Rs 30000 /-

Time in Hours: 8

Join

Cell death in myoblasts and muscles

Rs 0 /-

Time in Hours: 0

Join

Reliable method for detection of programmed cell death in yeast

Rs 0 /-

Time in Hours: 0

Join

Detection of cell death in drosophila

Rs 0 /-

Time in Hours: 0

Join

Identification of Plant Disease Resistance Genes

Rs 14400 /-

Time in Hours: 8

Join

Detecting apoptotic cells and monitoring their clearance in the nematode caenorbabditis elegans

Rs 0 /-

Time in Hours: 0

Join

In silico PCR tools for a fast primer,probe, and advanced searching

Rs 4800 /-

Time in Hours: 10

Join

Detection of herpes simplex virus dependent apoptosis

Rs 0 /-

Time in Hours: 0

Join

Introduction -on using the fastPCR software and the related java web tools for PCR

and oligonucleotide assembly and analysis

Rs 4800 /-

Time in Hours: 10

Join

Long fragment polymerase chain reaction

Rs 3600 /-

Time in Hours: 10

Join

Strategies to improve efficiency and specificity of degenerate primers in PCR

Rs 1800 /-

Time in Hours: 2

Join

Inverse PCR for point mutation

Rs 7200 /-

Time in Hours: 20

Join

Indirect somatic Embryogenesis in cassava for genetic modification purposes

Rs 0 /-

Time in Hours: 0

Join

Synthesis of fusion genes for cloning by megaprimer based PCR

Rs 18000 /-

Time in Hours: 20

Join

A -novel platform for high throughput gene synthesis to maximize recombinant expression in Escherichia coli

Rs 36000 /-

Time in Hours: 40

Join

Colony PCR

Rs 10800 /-

Time in Hours: 10

Join

Crename - A molecular microbiology method enabling multiparametric assessment of potable / drinking water

Rs 30000 /-

Time in Hours: 30

Join

Multiplex detection of food borne pathogens

Rs 7200 /-

Time in Hours: 10

Join

Fast real time PCR for the detection of crustacean allergens in foods

Rs 8400 /-

Time in Hours: 10

Join

Fast real time PCR method for detection of soy in foods

Rs 15600 /-

Time in Hours: 10

Join

RAPD / SCAR Approaches for identification of adulterant breeds milk in dairy products

Rs 10800 /-

Time in Hours: 20

Join

Genetic diversity analysis of medicinally important horticultural crop Aegle marmelos by ISSR markers

Rs 24000 /-

Time in Hours: 30

Join

PCR in the analysis of clinical samples: prenatal and postnatal diagnosis of inborn errors of metabolism

Rs 24000 /-

Time in Hours: 20

Join

Harnessing the power of PCR molecular fingerprinting methods for understanding structure and function in microbial communities

Rs 36000 /-

Time in Hours: 20

Join

PCR (Polymerase Chain Reaction)

Rs 3000 /-

Time in Hours: 5

Join

Production of Cybrids in Brassicaceae species

Rs 33600 /-

Time in Hours: 168

Join

Arbitrarily primed PCR for comparison of meta genomes and extracting useful loci from them

Rs 24000 /-

Time in Hours: 20

Join

Duplicate Cultivation of DH5 alpha cells and Competent cell preparation using cultivated DH5 alpha cells

Rs 0 /-

Time in Hours: 0

Join

Duplicate Bacterial Transformation -using competent cells and cloned vector obtained above-

Rs 0 /-

Time in Hours: 0

Join

Transformation of Wheat via Particle Bombardment

Rs 0 /-

Time in Hours: 0

Join

Agar diffusion method

Rs 0 /-

Time in Hours: 0

Join

aspergillus niger cultivation media

Rs 0 /-

Time in Hours: 0

Join

cultivation of Paracoccus pantotrophus

Rs 0 /-

Time in Hours: 0

Join

Cultivation of Pichia pastoris

Rs 0 /-

Time in Hours: 0

Join

DHA screening from natural sources

Rs 0 /-

Time in Hours: 0

Join

identification of DNA producing strains

Rs 0 /-

Time in Hours: 0

Join

Media for MIC

Rs 0 /-

Time in Hours: 0

Join

RNA extraction from brain tissue

Rs 3840 /-

Time in Hours: 6

Join

Immobilisation of cells using sodium alginate

Rs 0 /-

Time in Hours: 0

Join

E.coli cultivation media

Rs 0 /-

Time in Hours: 0

Join

Radial Immuno Diffusion

Rs 0 /-

Time in Hours: 0

Join

Serial dilution technique

Rs 0 /-

Time in Hours: 0

Join

MS media Macro micro and vitamins stock

Rs 0 /-

Time in Hours: 0

Join

Bacillus Licheniformsis media composition

Rs 0 /-

Time in Hours: 0

Join

Bacillus Megaterium media composition

Rs 0 /-

Time in Hours: 0

Join

Lactobacillus brevis media composition

Rs 0 /-

Time in Hours: 0

Join

Lactobacillus casei media composition

Rs 0 /-

Time in Hours: 0

Join

Bifidobacterium media composition

Rs 0 /-

Time in Hours: 0

Join

Glycerol stock preparation

Rs 0 /-

Time in Hours: 0

Join

Reverse transcriptase PCR

Rs 3000 /-

Time in Hours: 5

Join

Sporulation of BTI

Rs 0 /-

Time in Hours: 0

Join

CRY protein extraction protocol (Bacillus thuringiensis israelensis)

Rs 0 /-

Time in Hours: 0

Join

bacitracin media composition

Rs 0 /-

Time in Hours: 0

Join

Growth in anaerobic agar

Rs 4200 /-

Time in Hours: 48

Join

Reduction of -NO3 to -NO2

Rs 7800 /-

Time in Hours: 48

Join

Parasporal body generation in sporangium

Rs 13200 /-

Time in Hours: 240

Join

Analysis of Microbial growth at 65 degree centigrade

Rs 3000 /-

Time in Hours: 48

Join

Width of rod 1um or greater

Rs 0 /-

Time in Hours: 0

Join

Microbial decomposition of casein

Rs 7800 /-

Time in Hours: 48

Join

Lactose fermentation

Rs 7800 /-

Time in Hours: 48

Join

C-Reactive Protein Test -To identify the presence of inflammation-

Rs 0 /-

Time in Hours: 0

Join

Erythrocyte Sedimentation Rate Test -To detect the presence of inflammation caused by -one or more conditions-

Rs 0 /-

Time in Hours: 0

Join

Serum Autoantibody Assay -To check the presence of autoantibodies in blood-

Rs 0 /-

Time in Hours: 0

Join

Periodic acid–Schiff -PAS- staining -Staining macrophages in Erythroleukemia-

Rs 0 /-

Time in Hours: 0

Join

Total WBC Count

Rs 0 /-

Time in Hours: 0

Join

Differential WBC Count

Rs 0 /-

Time in Hours: 0

Join

Platelet Count

Rs 0 /-

Time in Hours: 0

Join

RBC Count

Rs 0 /-

Time in Hours: 0

Join

Systemic Lupus Erythematosus Diagnostic test

Rs 0 /-

Time in Hours: 0

Join

Rheumatoid Arthritis dignostic test

Rs 0 /-

Time in Hours: 0

Join

A brief exposure to Fermentation design & Fermenter components - Theory

Rs 3600 /-

Time in Hours: 1

Join

Preparation of Synthetic Media, semisynthetic Media, Complex Media

Rs 7200 /-

Time in Hours: 15

Join

Media Components - Carbon, Nitrogen, Elements, Growth Factors, Inhibitors - Theory

Rs 9600 /-

Time in Hours: 5

Join

Media Formulation - Designing Media for specific Function

Rs 90000 /-

Time in Hours: 100

Join

Media Sterilizations

Rs 3600 /-

Time in Hours: 3

Join

Handling bacteria cell cultures

Rs 2400 /-

Time in Hours: 2

Join

Handling Actinomycetes cell cultures

Rs 3600 /-

Time in Hours: 2

Join

Handling filamentus fungi cell cultures

Rs 3600 /-

Time in Hours: 2

Join

Handling yeasts cell cultures

Rs 3600 /-

Time in Hours: 2

Join

Handling plant cell cultures

Rs 8400 /-

Time in Hours: 3

Join

Handling mammalian cell cultures

Rs 36000 /-

Time in Hours: 5

Join

Preparing Fermenter for Operation

Rs 13200 /-

Time in Hours: 1

Join

The Batch culture Growth Curve

Rs 30000 /-

Time in Hours: 20

Join

Fed Batch Fermentation

Rs 42000 /-

Time in Hours: 25

Join

Fixed & Variable Fed-batch Fermentations

Rs 42000 /-

Time in Hours: 25

Join

Control Techniques for Fed-batch control - Theory

Rs 6000 /-

Time in Hours: 1

Join

Control Techniques for Continuous Culture

Rs 6000 /-

Time in Hours: 1

Join

Running a Continuous Process

Rs 36000 /-

Time in Hours: 30

Join

A brief insight into Fermentation Kinetics

Rs 48000 /-

Time in Hours: 20

Join

Antigen design

Rs 0 /-

Time in Hours: 0

Join

Human Thymus Cell Antigen preparation

Rs 0 /-

Time in Hours: 0

Join

Host Selection preparation for Immunization

Rs 0 /-

Time in Hours: 0

Join

Selection of Adjuvant for Antigen & Complete Antigen Preparation

Rs 0 /-

Time in Hours: 0

Join

Immunization Schedule

Rs 0 /-

Time in Hours: 0

Join

Testing Bleeds using ELISA

Rs 0 /-

Time in Hours: 0

Join

Bleeds & Plasma Collection

Rs 0 /-

Time in Hours: 0

Join

Antisera processing

Rs 0 /-

Time in Hours: 0

Join

Purification of Processed Antisera

Rs 0 /-

Time in Hours: 0

Join

Antisera Affinity testing against initial antigen used for Immunization

Rs 0 /-

Time in Hours: 0

Join

Pharmacogenomics, Pharmacogenetics, Personalized Medicines - Introduction & Definitions

Rs 0 /-

Time in Hours: 0

Join

Drugs and Genes

Rs 0 /-

Time in Hours: 0

Join

Drug Responses -Variation in Drug Response-

Rs 0 /-

Time in Hours: 0

Join

Factor Effecting Drug Responses

Rs 0 /-

Time in Hours: 0

Join

Absorption

Rs 0 /-

Time in Hours: 0

Join

Distribution

Rs 0 /-

Time in Hours: 0

Join

Metabolism

Rs 0 /-

Time in Hours: 0

Join

Elimination

Rs 0 /-

Time in Hours: 0

Join

Target proteins

Rs 0 /-

Time in Hours: 0

Join

Downstream messengers

Rs 0 /-

Time in Hours: 0

Join

Phase I Metabolism

Rs 0 /-

Time in Hours: 0

Join

Phase II Metabolism

Rs 0 /-

Time in Hours: 0

Join

Insertions / Deletions

Rs 0 /-

Time in Hours: 0

Join

Copy Number Polymorphisms

Rs 0 /-

Time in Hours: 0

Join

Alleles, Haplotype, Haplotype Profile, Allele Frequency

Rs 0 /-

Time in Hours: 0

Join

SNP Profile

Rs 0 /-

Time in Hours: 0

Join

Outside Genes

Rs 0 /-

Time in Hours: 0

Join

In the Gene Coding Sequence

Rs 0 /-

Time in Hours: 0

Join

In Promoter Region

Rs 0 /-

Time in Hours: 0

Join

In the mRNA 3'-untranslated region

Rs 0 /-

Time in Hours: 0

Join

Population Pharmacogenomics

Rs 0 /-

Time in Hours: 0

Join

SNP Microarrays

Rs 0 /-

Time in Hours: 0

Join

SNP Datatypes & Databases

Rs 0 /-

Time in Hours: 0

Join

Various SNP Research Works reported world wide

Rs 0 /-

Time in Hours: 0

Join

Main Objectives of Pharmacogenomics

Rs 0 /-

Time in Hours: 0

Join

Bioinformatics Tools for Pharmacogenomics Studies

Rs 3600 /-

Time in Hours: 2

Join

Various Drugs under Pharmacogenomics Studies World Wide

Rs 0 /-

Time in Hours: 0

Join

Selection of Specific Drug & Disease for Pharmacogenomics Study

Rs 0 /-

Time in Hours: 0

Join

Download SNP Database

Rs 0 /-

Time in Hours: 0

Join

SNP Identification

Rs 0 /-

Time in Hours: 0

Join

Allele Frequencies

Rs 0 /-

Time in Hours: 0

Join

Genotype Frequencies

Rs 0 /-

Time in Hours: 0

Join

Hardy-Weinberg Equilibrium

Rs 0 /-

Time in Hours: 0

Join

SNP Association with Response

Rs 0 /-

Time in Hours: 0

Join

Interactions between SNPs and Covariant

Rs 0 /-

Time in Hours: 0

Join

Linkage Disequilibrium

Rs 0 /-

Time in Hours: 0

Join

Haplotype Frequency Estimation

Rs 0 /-

Time in Hours: 0

Join

Haplotype associated with Response

Rs 0 /-

Time in Hours: 0

Join

Interactions with Halpotype and Covariant

Rs 0 /-

Time in Hours: 0

Join

Cytochrome P450 -CYP450-

Rs 0 /-

Time in Hours: 0

Join

DAB Staining

Rs 21600 /-

Time in Hours: 48

Join

Paraffin Microtome Sectioning

Rs 14400 /-

Time in Hours: 3

Join

Tissue Preparation

Rs 13200 /-

Time in Hours: 48

Join

Sectioning

Rs 30000 /-

Time in Hours: 48

Join

Deparaffinization and Rehydration

Rs 18000 /-

Time in Hours: 48

Join

Antigen Retrieval

Rs 54000 /-

Time in Hours: 72

Join

Blocking

Rs 18000 /-

Time in Hours: 5

Join

Primary Antibody Incubation

Rs 18000 /-

Time in Hours: 48

Join

Washing

Rs 9600 /-

Time in Hours: 5

Join

Secondary Antibody Incubation

Rs 18000 /-

Time in Hours: 48

Join

Amplification

Rs 18000 /-

Time in Hours: 48

Join

Detection

Rs 30000 /-

Time in Hours: 48

Join

Counterstaining

Rs 24000 /-

Time in Hours: 48

Join

Dehydration and Mounting

Rs 18000 /-

Time in Hours: 24

Join

Microscopy

Rs 12000 /-

Time in Hours: 3

Join

Image Analysis

Rs 30000 /-

Time in Hours: 5

Join

Data Interpretation

Rs 18000 /-

Time in Hours: 3

Join

Documentation and Reporting

Rs 18000 /-

Time in Hours: 3

Join