

Molecular Biology Training

NTHRYS Biotech Labs offers Molecular Biology Training Program in Offline (at Hyderabad, cherlapalli IDA branch) and Online / Virtual modes under below mentioned protocols. Candidates can opt their interested protocols from the list below. 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 Check Modules as well as individual protocols (if any) under this training program. Module has its fee given in the fee structure table and individual fee in its block. Please communicate with our Help Desk Team via whatsapp on +91-8977624748 for any queries.

Modules

NTHRYS provides Molecular Biology Training for interested candidates 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 8977624748 [India - +91]

Protocols / Techniques Covered

- 1. DNA Extraction from Human Blood
- 2. DNA Extraction from Bacteria
- 3. DNA Extraction from Plant Leaf
- 4. DNA Extraction from Chicken Liver
- 5. Primer designing using Bioinformatics Tools
- 6. Optimization of PCR parameters
- 7 PCR
- 8. Agarose Electrophoresis using 1 10 Kbp ladder
- 9. Extraction & purification of amplified DNA from Agarose gels using spin columns
- 10. Cultivation of pUC 18 vector bearing bacterial strain
- 11. Plasmid [pUC 18] isolation
- 12. Restriction digestion digestion of pUC18 vector using EcoRI
- 13. 5` End DNA modification of restriction digested plasmid sample [Addition of Poly Ts]
- 14. TA Cloning [PCR Product and sample obtained above]
- 15. DNA ligation
- 16. Cultivation of DH5 alpha cells and Competent cell preparation using cultivated DH5

alpha cells

- 17. Bacterial Transformation [using competent cells and cloned vector obtained above]
- 18. Blue white screening [checking for the transformed colonies]
 - 5 Days Duration [Protocols 1, 5, 6, 7 & 8 are covered]
 - 10 Days Duration [Protocols 1, 2, 3, 5, 6, 7 & 8 are covered]
 - 20 Days Duration [Protocols 1, 2, 3, 4, 5, 6, 7 & 8 are covered]
 - 1 Month Duration [Protocols 1 to 13 are covered]
 - 45 Days Duration [All the above mentioned protocols are covered]

Note

3 Months, 4 Months, 5 Months & 6 Months duration training programs are provided only in Molecular Biology Industrial Training, Molecular Biology Course Finishers Training, Molecular Biology Job Oriented Training, Molecular Biology Research Training

Fee Structures for Molecular Biology Training

Fee details in Rs per student					
Fee	5 Days	10 Days	20 days	1 Month	45 Days
Individual	5880	8520	9360	14760	25360
Group 2 - 4	5000	8000	9000	14000	25000
Group 5 - 7	4500	7300	8000	13000	23000
Group 8 - 10	3500	6000	7000	11000	21000

Various PCRs offered for Training

Please contact for below PCRs training fee details.

- 1. Alu-PCR
- 2. Arbitrary PCR
- 3. Asymmetric Inverse PCR
- 4. Asymmetric PCR
- 5. Assembly PCR
- 6. Chimeric Primer-Initiated Amplification (CPIA)
- 7. Circularizable Probe PCR (Cir-PCR)

NTHRYS OPC PVT LTD Molecular Biology Training

- 8. Colony PCR
- 9. Combinatorial PCR
- 10. Constant Denaturant Capillary Electrophoresis (CDCE)
- 11. CRISPR-Cas-Assisted PCR (CAPTURE-PCR)
- 12. Cold PCR
- 13. Cross-Priming Amplification (CPA)
- 14. DASEL (DNA Annealing, Selection, Extension, and Ligation) PCR
- 15. Delayed-Template PCR
- 16. Digital PCR
- 17. DNA-templated DNA Ligation (RTDL) PCR
- 18. Direct Isothermal Recombinase Polymerase Amplification (RPA)
- 19. Droplet Digital Barcoding PCR
- 20. Droplet Digital PCR (ddPCR)
- 21. Droplet-Loop-mediated Isothermal Amplification (Droplet-LAMP)
- 22. Enhanced Specificity Amplification (ESA) PCR
- 23. Exonuclease-Specific PCR
- 24. Exponential Amplification Reaction (EXPAR)
- 25. Fast-cycling PCR
- 26. Fluorescence Resonance Energy Transfer (FRET) PCR
- 27. Genome Partitioning PCR
- 28. Genome Walking PCR
- 29. HDA (Helicase-Dependent Amplification) PCR
- 30. Helicase-Dependent Isothermal Amplification (HDA)
- 31. Helicase-Dependent PCR (HDPCR)
- 32. Helicase-Dependent Amplification (HDA)
- 33. Helicase-Dependent Isothermal Amplification (HDA)
- 34. High-fidelity PCR
- 35. High-Resolution Melt (HRM) PCR
- 36. Hybrid PCR
- 37. Hybridization-Extension Loop-mediated Amplification (HE-LAMP)
- 38. Hybridization-Based Extension (HBE) PCR
- 39. Hybridization Chain Reaction (HCR)
- 40. Hybridization-Based Extension (HBE) PCR
- 41. Immuno-PCR
- 42. Intersequence-Specific PCR (ISSR)
- 43. Ligation-Mediated PCR (LM-PCR)
- 44. Long-range PCR
- 45. Loop-mediated Isothermal Amplification (LAMP)
- 46. Magnetic Capture Hybridization (MCH) PCR
- 47. MDEP-PCR (Mutation Detection Enhancement by Polling PCR)
- 48. MDA (Multiple Displacement Amplification) PCR
- 49. Methylation-specific PCR (MSP)
- 50. MLPA (Multiplex Ligation-dependent Probe Amplification)
- 51. Multiplex PCR
- 52. Multiplexed Error Robust Single-Tube Identification-PCR (MERSI-PCR)
- 53. Multiplex Ligation-dependent Probe Amplification (MLPA)

- 54. Multiplex Real-time Loop-mediated Isothermal Amplification (MRT-LAMP)
- 55. Next-Generation Sequencing PCR (NGS-PCR)
- 56. Nick Translation PCR
- 57. Nested PCR
- 58. One-Sided PCR
- Overlap Extension PCR
- 60. Padlock Probe Ligation PCR
- 61. PCR with Locked Nucleic Acids (LNA-PCR)
- 62. PCR with Universal Primers
- 63. Peptide Nucleic Acid PCR (PNA-PCR)
- 64. Primer-Free DNA Amplification
- 65. Primer Walking PCR
- 66. QASP (Quantitative Allele-specific PCR)
- 67. Quantitative Allele-specific PCR (QASP)
- 68. Quantitative PCR (qPCR)
- 69. Random Amplified Polymorphic DNA PCR (RAPD-PCR)
- 70. Real-time Loop-mediated Isothermal Amplification (RealAmp)
- 71. Recombinase Polymerase Amplification Linked with Lateral Flow (RPA-LF)
- 72. Recombinase Polymerase Amplification (RPA)
- 73. Recombinase Polymerase-Mediated Isothermal Amplification (RPA)
- 74. Recombinase-aided Amplification PCR (RAA-PCR)
- 75. Restriction Endonuclease-Facilitated Real-Time PCR
- 76. Restriction Site PCR (RSP-PCR)
- 77. Ribonuclease H2-Dependent PCR (rhPCR)
- 78. Rolling Circle Amplification (RCA)
- 79. RTDL (RNA-templated DNA Ligation) PCR
- 80. SAT-PCR (Simultaneous Amplification and Testing PCR)
- 81. Scorpion Amplification Refractory Mutation System (ARMS) PCR
- 82. Seamless Ligation Cloning Extract (SLICE) PCR
- 83. Sequence-Characterized Amplified Region (SCAR) PCR
- 84. Single-Cell Multiplex PCR
- 85. Single-Cell PCR
- 86. Single-Molecule Real-Time PCR (SMRT-PCR)
- 87. Single-Primer PCR
- 88. SMART (Switching Mechanism at 5 End of RNA Template) PCR
- 89. Solid-Phase PCR
- 90. Staggered Extension Process (StEP) PCR
- 91. Switch-Block-Notch Amplification (SBNA) PCR
- 92. Switching Mechanism at 5 End of RNA Template (SMART) PCR
- 93. Targeted Locus Amplification (TLA)
- 94. Temperature-Switch PCR
- 95. Temperature Gradient PCR
- 96. Template-Directed Ligation-Assisted PCR (TLA-PCR)
- 97. Template-Switching PCR
- 98. Temperature-Switch PCR
- 99. Thermo-Fast PCR

NTHRYS OPC PVT LTD Molecular Biology Training

- 100. Thermal Asymmetric Interlaced PCR (TAIL-PCR)
- 101. Three-primer PCR
- 102. TIP-chip PCR (Transposon Insertion Profiling by microarray PCR)
- 103. TLA-PCR (Template-Directed Ligation-Assisted PCR)
- 104. Touchdown Extension PCR
- 105. Touchdown PCR
- 106. Touching-Template PCR
- 107. Transcription-Mediated Amplification PCR
- 108. Transposon Insertion Profiling by microarray (TIP-chip PCR)
- 109. Two-step PCR
- 110. uLAMP (Universal Loop-Mediated Isothermal Amplification)
- 111. Universal Fast Walking PCR
- 112. Universal Loop-Mediated Isothermal Amplification (uLAMP)
- 113. Universal Primer PCR (UP-PCR)
- 114. Zero Background Cloning (ZBC) PCR

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.

Training based on Individual Protocols

DNA Extraction from Human Blood
Fee: ? 1320/-
Time: 1 Hours
Join
DNA Extraction from Bacteria
Fee: ? 1320/-
Time: 3 Hours
<u>Join</u>
DNA Extraction from Plant Leaf

Fee: ? 1680/-Time: 6 Hours Join DNA Extraction from Chicken Liver Fee: ? 480/-Time: 3 Hours Join Primer designing using Bioinformatics Tools Fee: ? 480/-Time: 2 Hours Join PCR Optimization - Research Mode - No practical Fee: ? 9600/-Time: 72 Hours Join Agarose Electrophoresis Fee: ? 720/-Time: 3 Hours Join Extraction and purification of amplified DNA from Agarose gels

```
using spin columns
 Fee: ? 720/-
 Time: 1 Hours
Join
       Cultivation of pUC 18 vector bearing bacterial strain
 Fee: ? 960/-
 Time: 24 Hours
Join
                   Plasmid -pUC 18- isolation
 Fee: ? 720/-
 Time: 6 Hours
Join
        Restriction digestion of pUC18 vector using EcoRI
 Fee: ? 1080/-
 Time: 2 Hours
Join
5- End DNA modification of restriction digested plasmid sample -
                       Addition of Poly Ts
 Fee: ? 1920/-
 Time: 3 Hours
Join
```

TA Cloning
Fee: ? 1320/-
Time: 2 Hours
Join
DNA ligation
Fee: ? 1080/-
Time: 2 Hours
<u>Join</u>
Competent cell preparation DH5 alpha cells
Fee: ? 1680/-
Time: 3 Hours
<u>Join</u>
Bacterial Transformation -using competent cells and cloned vector
Fee: ? 2160/-
Time: 48 Hours
<u>Join</u>
Blue white screening
Fee: ? 3360/-
Time: 48 Hours
Join

```
In silico PCR tools for a fast primer,probe, and advanced searching
 Fee: ? 4800/-
 Time: 10 Hours
Join
 Introduction -on using the fastPCR software and the related java
   web tools for PCR and oligonucleotide assembly and analysis
 Fee: ? 4800/-
 Time: 10 Hours
Join
             Long fragment polymerase chain reaction
 Fee: ? 3600/-
 Time: 10 Hours
Join
  Strategies to improve efficiency and specificity of degenerate
                         primers in PCR
 Fee: ? 1800/-
 Time: 2 Hours
Join
                 Inverse PCR for point mutation
 Fee: ? 7200/-
 Time: 20 Hours
```

Join Synthesis of fusion genes for cloning by megaprimer based PCR Fee: ? 18000/-Time: 20 Hours Join A -novel platform for high throughput gene synthesis to maximize recombinant expression in Escherichia coli Fee: ? 36000/-Time: 40 Hours Join Colony PCR Fee: ? 10800/-Time: 10 Hours Join Crename - A molecular microbiology method enabling multiparametric assessment of potable / drinking water Fee: ? 30000/-Time: 30 Hours Join Multiplex detection of food borne pathogens Fee: ? 7200/-

```
Time: 10 Hours
Join
Fast real time PCR for the detection of crustacean allergens in foods
  Fee: ? 8400/-
 Time: 10 Hours
Join
     Fast real time PCR method for detection of soy in foods
  Fee: ? 15600/-
  Time: 10 Hours
Join
 RAPD / SCAR Approaches for identification of adulterant breeds
                      milk in dairy products
  Fee: ? 10800/-
  Time: 20 Hours
Join
 Genetic diversity analysis of medicinally important horticultural
              crop Aegle marmelos by ISSR markers
  Fee: ? 24000/-
 Time: 30 Hours
Join
  PCR in the analysis of clinical samples: prenatal and postnatal
             diagnosis of inborn errors of metabolism
```

```
Fee: ? 24000/-
 Time: 20 Hours
Join
Harnessing the power of PCR molecular fingerprinting methods for
  understanding structure and function in microbial communities
 Fee: ? 36000/-
 Time: 20 Hours
Join
                PCR (Polymerase Chain Reaction)
 Fee: ? 3000/-
 Time: 5 Hours
Join
   Arbitrarily primed PCR for comparison of meta genomes and
                extracting useful loci from them
 Fee: ? 24000/-
 Time: 20 Hours
oin
                RNA extraction from brain tissue
 Fee: ? 3840/-
 Time: 6 Hours
oin
```

	Reverse transcriptase PCR
Fee: ? 3000/-	
Time: 5 Hours	
Join	