



## Molecular Biology Training

# Molecular Biology Training Program

NTHRYS Biotech Labs offers Molecular Biology Training Program 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 o 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 structures, Eligibility, Protocols and Modules etc.,. Please do call / message / whatsapp for more details on 9014935156 [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 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.

## Molecular Biology Training

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)
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
59. 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

## Molecular Biology Training

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
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

Rs 1320 /-

Time in Hours: 1

[Join](#)

### DNA Extraction from Bacteria

Rs 1320 /-

Time in Hours: 3

[Join](#)

#### DNA Extraction from Plant Leaf

Rs 1680 /-

Time in Hours: 6

[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](#)

#### Optimization of PCR parameters - Technical Theory - -No practical

Rs 360 /-

Time in Hours: 1

[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](#)

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

Rs 4800 /-

Time in Hours: 10

[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](#)

### 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](#)

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

Rs 24000 /-

Time in Hours: 20

[Join](#)

**RNA extraction from brain tissue**

Rs 3840 /-

Time in Hours: 6

[Join](#)

**Reverse transcriptase PCR**

Rs 3000 /-

Time in Hours: 5

[Join](#)