



Ramnrain Ruia College & Central Dogma Pvt. Ltd., Pune

Organizes

Analysis of SNP in Human Gene by RFLP

SNP (Single Nucleotide Polymorphism), are the most common variation among human genome. Most commonly these variations are found on the DNA of the gene. This variation in gene is then described as an allele. In such alleles, snps might code for different amino acid. Snps can also be found in the non-coding regions of the genome.

Snps may not always lead to disorders but in some cases these might be associated with the disease or can be useful in predicting the response of the individual to the drug or even susceptibility of the individual to environmental factors.

The ABO blood group is the most important cell-surface antigen which needs a special attention during transfusions. Exons 6 and 7, harbor more than 75% of the protein coding sequence of this gene and has 4 snps which can distinguish 5 ABO alleles mainly A^1 , A^2 , B , o^1 and O^2 . O^1 allele can be easily distinguished from others based on the fact that there is a single base deletion in Exon 6 in O^1 allele carrying genome which leads to removal of recognition site for restriction enzyme

The workshop will cover techniques that will help in identifying SNP variation in exon 6 to distinguish O^1 allele and non- O^1 allele.



Resource Person:

Dr. Anjali Apte- Deshpande
Director, Central Dogma Pvt. Ltd, Pune
Senior Consultant, Lupin Biopharma, Pune
<http://centraldogma.co.in/>

Workshop Dates: 29th & 30th December 2016
Last date of registration: 20th December 2016

For Further Details Contact:

Mr. Sachin Palekar,
Workshop Coordinator & Head, Dept. of Bioanalytical Sciences
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Coordinators, Bioanalytical Sciences
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Details of the Workshop:

Prerequisite: Know how about concepts like Genes, DNA: sense and antisense strand, SNP, methods of SNP analysis, PCR, Type II Restriction enzymes, Basics about protein structure.

Salient Features of the Module:

- Hands on training with more emphasis on practical skills & Troubleshooting
- Protocols & certificate for the workshop will be provided

Schedule
Day 1:29th December 2016
Genomic DNA extraction from participant's cells
Agarose gel electrophoresis to confirm quality of extracted genomic DNA
Amplification of specific gene from extracted genome by PCR
Theory on PCR and Primer design for PCR
Agarose gel electrophoresis
Day 2:30th December 2016
Restriction Fragment length Polymorphism
Digestion of amplicon with specific restriction enzymes for SNP analysis
Agarose gel electrophoresis to check finger printing (fragment length variation)
Analysis and Interpretation

Eligibility: Academicians, Researchers, Post graduate and Research scholars having Biosciences

Duration: 29th & 30th December 2016(9:30 am -5:30 pm)

Venue: Department of Bioanalytical Sciences, Ramnarain Ruia College, L. N. Road, Mumbai-19

Batch: 30 participants

Registration Fees: Rs. 3500 /for Research Scholars & PG students

Rs 4500/- for Academicians & Industry delegates

Note:

1. Registration fees can be paid through cheque or Demand draft in favor of *S. P. Mandali's Misc. account* payable at Mumbai
2. No cash will be accepted.



Registration Form

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Name of the Participant: _____

Organization/Institution: _____

Postal Address: _____

Phone No: _____

Email Address: _____

Signature: