What is Genetic program about?

Genetic program adopt a Major angled to study they are; focused, academic, research and Diagnostics to maximize each student's learning experiences.

Overview

Genetics indeed as fresh as blossomed jasmine in Science, Genetics is the branch of science deals with the study of hereditary which influence to the offspring. **Gergor Mendel** (1856 and 1863) is the Father of Genetics; by Explaining his law of inheritance give the entry concept of genetics. **J-H Tjio and A Levan** discovered correct number of human chromosomes that is 46. **Victor Almon McKusick** (October 21, 1921 – July 22, 2008) Father of medical genetics. Form many more Scientist experiment Genetics become a bundle of knowledge. The focused, academic, research and diagnostic activities housed within our department provides outstanding opportunities for students who wish to pursue a career in research, education, and service in this field.

In addition to large group teaching sessions, the program is also delivered through small group teaching sessions (problem-based learning, laboratory practical, workshops, tutorials, seminars, and presentations). Such sessions will provide opportunities for the development of a range of skills necessary for a career in genetics. The projects in fellowship course provide an opportunity for students to conduct studies in the field of genetics and it is hoped that students will acquire critical thinking and analytical skills necessary for careers in research, academics and industry.

HIGHLIGHTS

- Focused academic, research and diagnostic activities
- Innovative teaching and assessment
- Opportunities to explore independent research under research institute
- Genetic diagnostic laboratory offers opportunities to evidence based learning.
- Excellent support and placement

ELIGIBILITY

Certification course

DMLT (Passed with minimum 50%)

Duration: 12 month Commencement: Fee: INR 1,25,000

Fellowship Program

B.Sc. [Allied Health Sciences / Biology / Biochemistry / Biomedical Sciences / Biotechnology / Botany / Emergency Trauma Care Technology / Genetics / Microbiology / Life Sciences / Zoology / Agriculture / Hons. / BDS / B.V.Sc. / B. Tech. (Biotechnology, Genetic Engineering) / degree examination of any University recognized by the University Grants Commission (UGC).

Duration: 2 years (2 semesters+Project) Commencement: Fee: INR 2,50,000

How does the program will conduct?

The Curriculum works on the internationally acknowledged choice-based credit system (CBCS). CBCS not only offers opportunities and avenues to learn core subjects but also exploring additional avenues of learning beyond the core subjects for holistic development of an individual.

PROGRAM STRUCTURE

CERTIFICATION COURSE

TOPIC
History of Genetics and Introduction to Genetics terminologies
Different types of cells and its structure
Cell Biology
Theories of genetics
Mendelian Genetics
Structure of gene
Cytogenetics
Genetic engineering

Fellowship Program	
1st Semester Topics	**2nd Semester Topics**
Introduction to Genetics	Cytogenetics
Mendelian law of inheritance	Chromosome and chromosome theory of Inheritance
Inheritance pattern	Chromosomal disorders
Model organisms and Cell Biology	Pedigree analysis and Genetic counseling
Explanation of central dogma	Immune genetics and Cancer genetics
Cell cycle and Cell Division Mechanisms	Stem cell Genetics
Branches of Genetics and Biostatistics	Molecular genetics
Radiation Genetics and Toxicology	Genetic techniques
Biochemical Genetics	ISCN

ASSESSMENT

Students will be assessed (formative and summative) through their class tests, practical reports, workshops, projects, logbooks, written reports, presentations, dissertations with an end-of-academic examination.

CAREERS

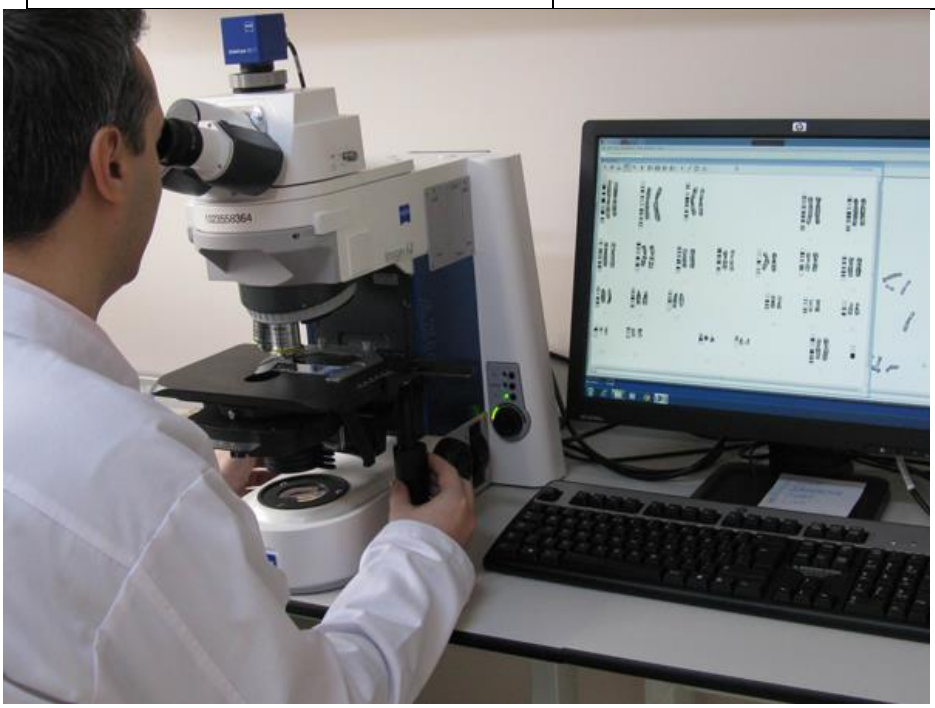
As the details of the human genome unfolded, the variety of opportunities for people with degrees and training in human genetics is continuing to expand. There are opportunities in basic and clinical research, in medical professions, and in interdisciplinary fields, such as patent law. The genetics workforce is not

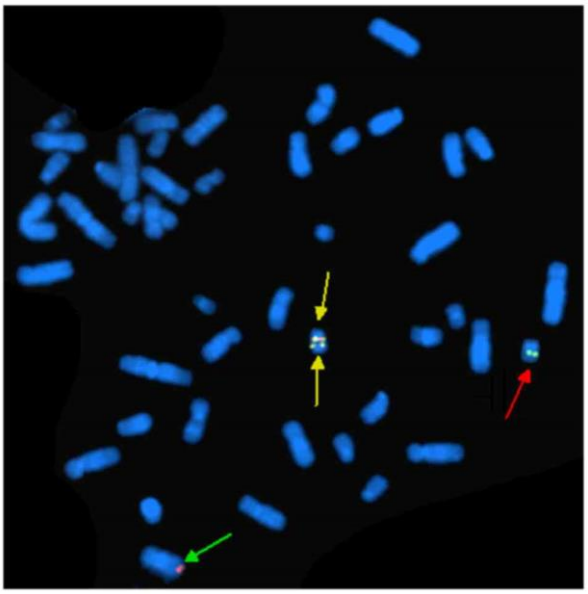
sufficient even now, and demand continues to increase. For example, as genetic testing becomes more commonplace, and a part of many routine medical evaluations, more laboratory geneticists will be needed to perform the tests, and counselors will be needed to interpret and explain the results to individuals and families. Genetic counseling is a career attracting graduates with an interest in medical genetics and face-to-face patient interaction. As genetics is recognized to be a basic part of all biological sciences, more and more teachers with expertise in genetics will also be needed. These are just a few examples of the growing demand for professions trained in genetics.

CAREER PATHS

A human genetics certificate can lead to a career in health, scientific research or industry and also provides a range of skills that can be used in many other sectors

KEY AREA	WORKSCOPE
Healthcare Public & private hospital laboratories, public health laboratories, private laboratories	• Analysis and reporting in cytogenomics, molecular genetics and FISH • Variant analysis of NGS data • Genetic Counselors • Scientific Assistants
Academia	• Teaching
Research Universities, Research / Health institutions	• Biomedical research • Basic Research • Translational Research
Industry Pharmaceutical, Biotechnology, Direct-to-consumer genetic testing companies	• Research and development of new products • Vaccine development • Genome analysts • Entrepreneurs





OUR EXPERTIES

Dr. Mohammed Ahetasham, M.B.B.S, M.D.R.D:

Sham had born in 24 April in a much authored family and his father him a well known person in Kolar because of his institute. Dr. Sham is the founder and chairman of PMHS. He is a Radiologist with around 10 years of experience. After completing his MBBS from the Vydehi Institute of Medical Sciences and Research Centre, Bangalore, India in 2009. After compilation of his MBBS he worked as Consultant and visiting Doctor for many well-known institute like **Nimhans, Kidwai, Anand Diagnostic GM Health care, Apporva Diagnostic, Apollo cradle and Narayana Hrudralaya** (Present). From Dr.B.R.Ambedkar Medical College, Bangalore he awarded his M.D.R.D on 2016. This degree gave him to fulfill his dream and He established PMHS in 2016. He had attended so many national and international conferences, poster presentation and also he is Co-Author for his publications. He is a very much Zealous about do more for +society he comes up with new course as Genetics.

Niveditha Patel, MSc (Genetics):

Niveditha Patel she is where defines with bated breath in Genetics from his childhood and also ardent about research from this she completed his Master degree in Genetics from well known institute that is University of Mysore in 2014. Her Specialization in Human Genetic Diseases and Genomics and also Drosophila genetics and evolution. She had 5 Year of experience in Human Genetics (Karyotying and FISH) with Genetic Counseling (Cancer , Prenatal, Postnatal and Tissue) in well known diagnostics center in Bangalore (Neuburg anand Diagnostic) and 1 year in Humain health Diagnostic, 1 Year of experience in Medical Microbiology. She had Skill like DNA extraction RNA extraction and in Cytogentics (Analysis, ISCN writing, Reporting, Software handling, Maintain Documentation for NABL audit, Sample process). Also she had publication in her hand it's published in Indian journal of human genetics. She had attended so many national and international conferences and also she is Author for her publication which was published in her Post graduation. For his dream of establishing genetics in every where she found PMHS