R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)
Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.
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Affiliated to UNIVERSITY OF MUMBAI II NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

Department of Biotechnology

On Job Training Completion Report

This is to certify that Vedanti Sanjay palav. has completed On Job Training at

agilus diagnostics Dr. Phadke Labs [Mahim]

Date of Commencement	Date of Completion	Total Number of Days	Total Number of Hours completed in OJT
27/12/2023	28/1/2024	33 Days	99 hrs

Name of the Guide/ PI/ Incharge : Dr. Sonal Dhawan

Phone Number of Guide/ PI/ Incharge : 8291097313

Email Address of the Guide/ PI/ Incharge : Sonal.Dhawan@agilus.in

Ramniranjan Jhunjhunwala College NAAC Re-Accredited "A" Grade Ghatkopar, Mumbai-86

Dgupta 22-03-24

AGILUS PATHLABS PRIVATE LIMITED MUMBAI

Signature of Guide/ PI/ Incharge

Stamp

ON JOB TRAINING REPORT

Name – vedanti Sanjay palav roll no. 427

LOCATION	Agilus Pathlabs Pvt. Ltd. (Formerly SRL Diagnostics Pvt. Ltd.) Mahalaxmi Engineering Estate, 2nd Floor, L. J. Cross Road No. 1, Near J. K. Khilnani High School, Mahim (W), Mumbai400016
DATE OF JOINING	27th December 2024
TRAINING PERIOD	1 month
DEPRATMENT	ELISA and biochemistry

The overall objective of training activities is for experience, skill improvement and basic knowledge of the work environment.

I have completed my training in 15 day per department time duration.
BIOCHEMISTRY DEPARTMENT- In this department i observed different biochemical test on cobas machine. the principle of this machine is based on the electrochemoluminescence. This machine accept the serum sample, plasma sample etc and capacity is about 300 to 500 test samples.

Following List of the test has performed on cobas pro e801-

1. Cholesterol — to identify the cholesterol level from the given sample.
2. Triglyceride-to understand the risk of heart attack and stroke.
3. Ceroloplasmin- to measure the copper-containing protein in the blood.
4. BUN (Blood urea nitrogen)- to check the function of kidney.
5. Total protein —to check the protein contain in the blood.
6. GGTP(gamma glutamyl transpeptidase)-to detect the diseases of the liver.
7. Calcium —to check the general health

8. SGOT and SGPT —to check the liver health, assess liver damage.
9. Total billirubin — to diagnose jaundice
10. Haptoglobin — to diagnose hemolytic anemia
11. C3 and C4- to monitor people with an autoimmune disorder.
12. G6PD —to check the level of glucose-6-phosphate.

Widal test is one test which is not automated and originally kit based method was performed to identify the typhoid.

ELISA DEPARTMENT- I performed_enzyme-linked immunosorbent assay kit base method with series of steps -

- Addition of sample in microtiter plate (incubation as per test required)
- Washing with suitable wash buffer for required number of times. • Addition of conjugate (incubation as per test required)
- Washing with suitable wash buffer for required number of times. • Addition of substrate (incubation as per test required) • Addition of stop solution.
- Measure the OD at microplate reader.

Following List of the test has performed by ELISA —

1. Leptospira IgM
2. Herpes
3. Brucella IgG
4. Anti-PR3-hn-hr
5. Chikunguniya
6. Anti- acetylcholine receptor
7. HEV ELISA
8. Anti-GAG
9. Normetanephrine plasma.
10. Anti-cardiolipin and other test.

SEMI-AUTOMATED ELISA MACHINE

KIT STORAGE AREA

WORK PLACE

KARYOTYPING REPORT

Name – vedanti sanjay palav. (Roll no 427)

I have completed the karyotyping course in about 3 months under the guidance of Dr.poosam mam. In few lectures we have learn about the abnormalities related to chromosome, types chromosomal disorders, information about the list of instrument used in practical, identantification of the chromosome after banding.

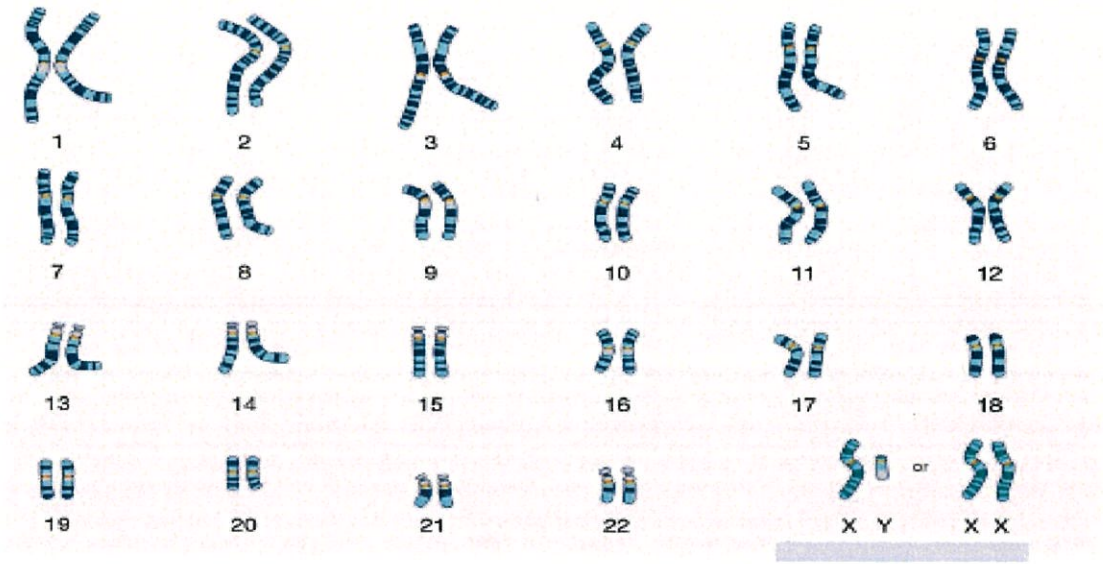
For this practical we have followed the principle- T-lymphocytes from peripheral blood are induced to divide using a plant lectin, phytohemagglutinin. The maximum mitotic index is reached at 72 hours of culture. The culture is treated with colcemid to arrest cells at metaphase. The cells are harvested using the standard hypotonic treatment and fixation. Clinical indications include diagnosis of congenital abnormalities and genetic counseling of parents with congenitally abnormal infants, sex chromosome abnormalities, and habitual abortion studies.

This practical start from planting the culture in clean vial by adding RPMI 1640 culture Media, Human Serum, PHA and Blood and incubated in 37 ° C for 72 hour. After the incubation added the colchicine in the vial and again incubated for 1hour then termination step initiated.

In termination we removed the supernatant by centrifuged the tubes and leaving the pellet behind then added the prewarmed KCL to make up the volume about 5ml and incubated at 37° C for 20 min.

The third step is fixation in that we have collected the pellet by removing the supernatant using the centrifuge at 1000rpm and added fixative reagent with has 1:3 glacial acetic acid: methanol in it and kept in the refrigerator for overnight.

The forth step is preparation of slide in which we have initially prepared the gimsa stain for observing of the chromosome.than fixed the chromosomes on the cold slide by keeping them on hot plate and stained them with gimsa stain and observed under the microscope.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HUMAN KARYOTYPE