



CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF MEDICAL SCIENCES CHAROTAR INSTITUE OF PARAMEDICAL SCIENCES (A Constituent of CHARUSAT) DEPARTMENT OF MEDICAL LABORATORY TECHNOLOGY

A REPORT ON ONE DAY EDUCATIONAL TOUR TO AKANKSHA HOSPITAL & RESEARCH INSTITUTE 14th NOVEMBER, 2017

Department of Medical Laboratory Technology from Charotar Institute of Paramedical Sciences (CIPS), a

constituent of CHARUSAT has visited Akanksha Hospital & Research Institute, Anand on 14th November 2017, as a part of industrial visit. 10 post graduate students along with 3 faculty members (Dr. Dhara Patel, Dr. Artee Tyagi and Mrs. Amita Patel) reached the destined institute at 10:45 am. Akanksha Hospital, under the flagship of Satkaival Trust is a well-known In vitro Fertilization clinic nationally as well as internationally.



Mrs. Harsha Ahir (Chief Embryologist, Akanksha IVF centre) and her Asistant Ms. Kruti Patel (M.Sc. Embryology) gave an

introduction about vision and mission of Ankansha IVF Hospital and Research Institute. Our Paramedical team visited various departments of the institute from 11:00 am to 1:30 pm in the noon.

Our team started from Physiotherapy department and its importance during all the three trimesters of pregnancy. The head of the physiotherapy department shared her experiences in treating patients with various medical complications. The next department was dental department and we were explained about all different types of neonatal dental problems and prenatal dental problems. They shared with us the latest medical therapy they are using for treating patients. As a part of treatment they use platelet rich plasma injections for regeneration of new dental tissues. Another attractive department was of Cosmetology, the chief cosmetologist again shared her experiences and ongoing recent techniques in the field of cosmetic surgery, liposuction and various other post pregnancy treatments. She also explained the usage of platelet rich plasma in hair transplantation, cosmetic surgery and face lifting.

Our next destination was the Molecular Biology Lab where a detailed explanation by Ms. Shefali helped us

tknow the latest techniques of DNA fingerprinting, karyotyping and Polymerase Chain Reaction based determination of various genetic mutations. She also showed us an Illumina platform based Ion Torrent Next Generation Sequencing Technique to rule out certain rare genetic mutation right from the developing embryo. She also explained various basic instruments used in the molecular biology lab like centrifuge, SDS gel units, Agarose gel units.





Dr. Ketan, Chief Pathologist of the Pathology department gave detailed information about various immunological based tests for hormones. The pathology department was well equipped with modern instruments including Cobas, Automated ESR, Coagulometer, Automated Urinalysis, Biochemistry Analyzer and Haematological Cell Counter. He interacted with students by asking them questions and to which our students responded very well.

We departed from pathology lab to visit the final and the most awaited lab of the hospital which was the Embryology lab. Ms. Harsha and Ms. Kruti showed us various techniques used in collection of embryo and semen. She in detail explained the in vitro fertilization technique and its importance in infertility. She showed her painstaking work for the selection of best embryo to be implanted. She demonstrated the in vitro stage by stage development of the embryo through video. She also highlighted another technique called Intracytoplasmic Sperm Injection (ICSI). We had a lunch break from 1:30 pm to 2:00 pm where we enjoyed the meal served inhouse.









The second session from 2:00 pm onwards was interactive session where Dr. Maulina Patel, Ms. Harsha Ahir and Ms. Kruti Patel gave power point presentation on various fertilization techniques and showed various videos showing the whole IVF and ICSI technique and cleared all the doubts regarding it which were raised by students. Finally we left the institute at 3:45 pm with all the knowledge absorbed throughout the visit. We returned back the campus by 4:15 pm. The visit created interest in students and encouraged to think about research going on in the field.