

INTERNATIONAL WORKSHOP ON GENOMIC TESTING AND GENETIC COUNSELLING FOR REPRODUCTIVE SCIENCES.

Tentative itinerary:

First Week

Lectures presented by Prof. Seyed Mehdi Kalantar and Prof Mohammad Hassan Sheikha:

Cytogenetics and Genomics

1. Mitosis/Meiosis, Nondisjunction/Aneuploidy, Chromosome Structure
2. Chromosome Analysis and Cytogenetic Nomenclature
3. Structural Abnormalities-translocation, inversion, del/dup, abnormal segregation
4. Sex Chromosomes Abnormalities, X-Inactivation
5. Congenital FISH and microarray testing, including UPD

Day 1

Welcoming students and introducing the Mentors.

Introduction to course and main subjects.

Visiting related Labs and equipment.

Welcome dinner in Talar Yazd.

Day 2-5

There will be lecture on related subjects every day and students will shadowing the technicians doing the related experiments. At the end of each day 1 hour for questions.

Day 6

Meeting for all the students to have a discussion and evaluation by the Mentors.

Day 7

Time to review the first week and prepare for second week.

Second and Third Week

Lectures presented by Prof. Nasrin Ghasemi and Prof. Mohammad Reza Dehghani

Molecular Genetics and Genomics

- Genetic Counselling Basic
- Normal Structure/Nomenclature/Types of Variation
- Common Disorders/Screening
- Neurogenetic Disorders
- Triplet Repeat Disorders
- Non-mendelian and Identity
- Introduction to Next-Generation Sequencing (NGS)

Day 8-9

Lectures on related topics

Day 10-15

Attending counselling sessions and related lab works.

Day 16

Meeting with Mentors and have discussion on the visited cases, trying hypothetical cases for counselling.

Day 17

Time to review the first and second week and prepare for last week.

Day 18-21

Hands on session to try what you learnt in lab, supervising by senior technician.

Day 22

Meeting for all students and Mentors.

Farwell Dinner.