

INSTITUTE OF GENETIC ENGINEERING

2018-2019

BEST PRACTICE – 1 RESEARCH - INTEGRAL PART OF CURRICULUM

At under-graduate level, students generally acquire only limited knowledge through lectures in class rooms, practical in laboratories and reference work in libraries. This does not expose students to real life situations. Hence, the adoption of scientific techniques, for acquiring knowledge becomes essential for students. The adoption of participatory approach in learning, whereby the students involve themselves in identifying a problem, analysing the causes and finding the solution objectively will have a positive impact on the students and will make the learning process more meaningful and interesting. Objective Provision for research project at UG level will enable the students to Adopt a scientific approach to the study of any problem. Develop analytical skills for data collection/ experimentation and analysis of data Learn how to prepare a scientific report and Develop an aptitude for research. The Practice (a) Preliminary Preparatory work: As the first step, the faculty members were given training in research methodology drawn from each department with a Co-ordinator for each group. (b) Preparatory course for Independent / Group project: All undergraduate students undertake a foundation course on research methodology called Preparatory course for Independent / Group Project during 2nd year. (c) Project Work for every project (Independent /group), a faculty will be allotted as a teacher-guide based on the area of specialization / interest of faculty. The student will constantly interact with the teacher guide at every stage of the project work in his/her Final Year. After Submission of Final Project Report as a partial fulfilment of the requirement for the undergraduate degree, the external examiner evaluates the project report and conducts viva-voce. This way student will be able to overcome their fear and get enlightened instead. We highly believe that this practice works as a stepping stone for students for their future research world and this initial experience gives them independence, self-confidence and exposer for future higher education. More over the practice of seminar on different topics also helps to build self-confidence, and art of communication among students.

BEST PRACTICE 2

Thalassaemia is the number one genetic disorder in India and is very common here in Eastern part of India, especially in West Bengal. There are so many families who are suffering social problems also here – such as distance from their relatives and neighbours and specially the carrier females are rejected by their male partners to marry. In so many cases fathers of the affected child were not cared by his/her father and mother alone is bearing the treatment. The most interesting aspect of this is that it is preventable. The developed world has taken appropriate preventive measures and successfully tamed this problem. However, in our country, prevention effort has not succeeded so far due to lack of community engagement which results from lack of awareness. Since Thalassaemia Foundation is tied up with this institute so in this context, it was felt that students should reach out to community and engage them in Thalassaemia prevention strategies in order to reduce the burden of disease. Objectives This practice is aimed at reaching out to the community with the practice message of Thalassaemia prevention. Once the masses are aware of the prevention possibilities, availing the screening facilities will become a felt need. Mass awareness campaign had been done in every year on “World Thalassaemia Day” (8th May) and students and teachers participated in this programme. The practice In association with the department of Genetics and Molecular Biology, the

plan for organizing Thalassaemia awareness campaign is worked out. The site for the camp is selected and the selected village is visited by the department representatives from all departments and available facilities are assessed. Undergraduate and postgraduate students of this institution are encouraged to participate in the practice to sensitize them about the needs of the rural public. Wide publicity is given about the date, the place and the objectives of the camp. Local political leaders and healthcare workers are also involved in spreading the information. On the day of the camp, the team from Thalassaemia Foundation, sets up the camp in the community. Problems encountered / Obstacles faced Inadequate pre-camp publicity by local community representatives' clientele not coming for follow-up and all the students are not interested (only few are present) etc. Evidence of success A large number of women from the community attend these activities and acquire knowledge about this dreadful genetic disorder. The fall-out of these camps has been that a number of women spontaneously start coming to the camps with their children. This goes a long way in reducing the occurrence of carriers. In addition, a number of new patients are also detected and appropriately treated. Resources required Medical equipment, exhibits for exhibition and human resources.