

# **Chapter 5**

## **Training**

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ART necessitates that the laboratory staff must have basic knowledge of mammalian embryology, reproductive endocrinology, genetics, biochemistry, molecular biology, microbiology, and *in vitro* culture techniques. The laboratory staff must also be knowledgeable in the subjects practiced by the clinician. The clinical staff must be well-versed in reproductive endocrinology, pathology, endoscopy, ultrasonography, gynaecology and/or andrology. The clinician must be knowledgeable about the importance of the procedures used in the embryology laboratory. It is only through an understanding of the basic principles of the several disciplines involved that an integrated team can be put in place to make a successful ART clinic.

ART does not form a part of the medical curriculum anywhere in India although the number (10 – 15% of the adult population in the reproductive age group) of infertile couples needing ART is quite large. There is, therefore, a need to institute training programmes in ART. Such training can best be imparted in a teaching institution, which has all the branches of the basic life sciences as distinct disciplines, so that the trainees are exposed to the diverse disciplines involved in ART. Alternatively, universities or other institutions having the appropriate basic science departments can offer training for the laboratory staff, and medical institutions can offer training in the clinical aspects of ART. Nevertheless, there must be a nodal point where the staff trained in the above two types of institutions can come and work together to acquire capabilities of practicing ART. Speciality ART clinics, either in the public or the private sector, can act as such nodal points and play a major role in establishing such training programmes.

Scientific discoveries and advances, especially in modern biological sciences, are occurring at a very rapid pace. There is concomitant development of new reproductive technologies. Training in ART should, therefore, be a continuous and an ongoing process. The only way in which already trained staff could keep up with the new advances is to take part in workshops and conferences organized by scientific societies. The Government of India must encourage such conferences through organizations such as the ICMR, Department of Science and Technology, Department of Biotechnology, CSIR, and the various science academies in India.