

Course Title	Production Technology of Transgenic Mouse
About this course	<p>To provide all knowledge and experience necessary to perform injection of mouse blastocysts with embryonic stem cells for the production of transgenic mouse.</p> <ol style="list-style-type: none"> 1. Preparation of glass instruments used in transgenic mouse production. 2. Harvesting of mouse blastocyst 3. Preparation of pseudo-pregnant recipient mice 4. Gene Isolation and cloning 5. Preparation of transgenic mESCs by insert DNA construct into ESCs with electroporation 6. Preparation of transgenic mESCs for microinjection 7. Microinjection of blastocyst 8. Embryo transfer 9. Genotyping and analysis of transgene expression in founder mice
Audience: Level (BSc. MSc., PhD, etc.)	BSc. MSc., PhD
Department Instructor	Stem Cell Biology & Technology Department Dr. Yaser Tahamtani, Dr. Totonchi, Behrouz Asgari
Modules/Resources	6
Course Requirements	Micromanipulator system, Centrifuge, Microscope, Laminar flow, Incubator, Micro warm plate
Registration Costs	500 \$
Duration:	5 day