❖ **Course Title**	**Genome Editing (CRISPR/Cas9)**
❖ **About this course**	CRISPR technology, a gene editing tool that can be used to splice and alter the DNA inside a cell, has for years been hailed as the future of genetic disease medicine. CRISPR-edited cells could also be used to test new therapies and discover which work at the molecular level. Researchers are also now modeling patient cancers more efficiently by editing specific genes using CRISPR-Cas9 in vitro, providing large-scale biomass whereby functional and drug studies can be performed.
❖ **Audience:** **Level (BSc. MSc., PhD, etc.)**	All Levels
❖ **Department** ❖ **Instructor**	Genetics
❖ **Modules/Resources**	-Comprehend the concepts of CRISPR/Cas9, its component and mechanism. -Explain the way in which CRISPR can be used to edit the genomes. -Understand and interpret appropriate "Cas nuclease" for lab Crispr experiment. -Demonstrate the strategies of designing sgRNA and it's in vitro target validation. -Comprehend the skill of designing sgRNA through Bencheling tool. -Explain the different viral and non-viral Crispr gene delivery methods. -Understand & interpret the best Crispr delivery method for Crispr lab experiment.
❖ **Course Requirements**	-A desire to learn about CRISPR/Cas9 - Background knowledge about RNA, DNA, and protein
❖ **Registration Costs**	200 $
❖ **Duration:**	1 days