

## Molecular Biology and Translational Science

Patents, ethics, biosafety and regulation using CRISPR technology

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### **Abstract:**

In this review chapter, we provide full comprehensive analysis on the patent, ethics and biosafety regulation with respect to the application of CRISPR technology in mammalian systems. We focused on recent development in CRISPR technology and its patent landscape between countries such as US, European Union, China and Australia. Further, we emphasized on the current scenarios on the ethics regulations with respect to CRISPR research, its applicability in patent and technology transfer. Finally, we elaborated on the biosafety regulation on CRISPR/Cas9 technology application in both mammalian and non-mammalian host system.