“CRISPR–Cas9 unlocking the door to new beginnings.”

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Scientific research is important because of its significant discoveries, the development of new therapies, and remarkable improvement in health care and public health. Muscular dystrophies are a group of about 50 different diseases that lead young people and children to lose their ability to walk, or to breathe, and make them wheelchair-bound within a couple of years.

Muscle regeneration is possible with the muscle stem cells. Simone Spuler from Experimental and Clinical Research Centre, Berlin stated that Genetic mutations leading to muscular dystrophies can now be corrected with CRISPER-Cas9 Correcting muscle stem cells means muscle can be rebuilt, which was not previously possible whatsoever in these muscular dystrophies. CRISPR-Cas9 gene editor does not cut the DNA, but only tweaks it at one spot with pinpoint accuracy. Corrected muscle stem cells are just as capable as healthy cells of fusing and forming young muscle fibres. IM&DC is providing a research platform to help students clarify a career path which is valuable not only for the student but for the community at large.