

Should there be greater regulation on using stem cells in cosmetics and sports?

Long ago, in last century's nuclear age, mythical mutations were created by radiation, in a sinister play on humanity's newly discovered genetic nature, like Godzilla or Spiderman or the three-breasted prostitute in the film *Total Recall*, based on a 1966 short story.

Today, though, fear of radioactivity feels dated. Now, all the promise and peril of human nature is wrapped up in stem cells, the mysterious precursor to every kind of cell in the human body, which can grow, with proper instruction, into any new tissue or organ. Doctors have already used stem cells to grow a new trachea for a sick child, for example, and bits of livers and brains and other tissues in the lab.

Cosmetic applications of stem cell technology already abound, climbing the ladder from restoration and enhancement to full replacement of body parts. Military applications include the production of blood from stem cells on the battlefield. Sporting applications, for "stem cell doping" by speeding healing and recovery or increasing muscle strength are not far behind, so close that the World Anti-Doping Agency is monitoring the science, developing a test, and testing a "biological passport," even as countries such as Uzbekistan openly admit to screening the genes of child athletes, pursuing "sports selection at the molecular genetic level."

Read full, original article: [Building a superhuman: Stem cell advances are leading to dangers and ethical problems few have considered](#)