



Figure 8. Pluripotent cells have the capacity to reprogram somatic cells. ES or EG cells can be fused with somatic cells, resulting in tetraploid hybrids. This leads to epigenetic reprogramming of the somatic nucleus, with changes in, for example, 5MeC, H3 and H4 acetylation, and H3K4 methylation. The tetraploid cells resulting from this fusion or reprogramming that occurs when producing iPSCs also have a pluripotent phenotype: When injected into blastocysts, they can contribute to many different cell types in the embryo.