Chapter 8
Conclusion

Reprogramming technology surprised many cell biologists at the beginning. IPSCs caused a real U turn in cell biology; cells can be reprogrammed into their embryonic states whenever you need. The techniques are evolved enormously fast and today there are tremendous investments to develop robust and sensitive ways to generate ideal pluripotent cells. However, for obtaining the pluripotent lines, their subsequent differentiation and characterization, validated techniques and reagents in order to achieve high quality and safe progenitor cells must be conducted under controlled conditions. While those processes are helping a lot to solve the biggest problem of medicine, they are also pushing minds to think more deeply about health vs. illness. Yet, iPSCs would have profound implications for both basic research and clinical therapeutics by providing a patient-specific model system to study the pathogenesis of disease and test the effectiveness of pharmacological agents, as well as by providing ample source of autologous cells that could be used for transplantation.

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