Patrick Kugelmeier, J Stem Cell Res Ther 2018, Volume 8
DOI: 10.4172/2157-7633-C4-040

Patrick Kugelmeier

Kugelmeiers AG, Switzerland

How laws of nature should guide the development of 3D cell culture for regenerative medicine

We are at a tipping point where nature is revealing us top secrets of life. We can reveal them when we look at life how it is really in 3D. 3D cell culture systems reflecting real life processes thus provide not only sound scientific data, but also enable regenerative medicine with stem cells. Almost every life begins with cell clusters. 3D cell clusters are therefore ideal scientific models that offer additional therapeutic options. But for full functionality, clusters need to be size controlled in a physiological, cozy environment. Unfortunately, current technology is limited to either quality or scalability and therefore many desired applications are not possible. Because of this unmet medical need, we therefore developed the spherical plate 5D enabling the full translation from lab to clinics with freely scalable, size controlled spheroids in clinical grade quality. A human multi-center trial for the treatment of diabetes is beginning in 2019.

Biography

Patrick Kugelmeier is the Founder and Director of Kugelmeiers AG, Zurich Switzerland. He studied medicine and did his medical thesis on islet transplantation for the treatment of diabetes. The joy of research led to an MD-PhD program for the early differentiation of stem cells. After the MD-PhD program, he did his clinical training in visceral and transplant surgery followed by trauma surgery.

patrick@kugelmeiers.com