



Professor Karim Nayernia is an alumnus of the University of Göttingen, where he had defended his dissertation in 1993. He worked at the university until 2006, when he started to work at the Newcastle University. In 2003, he got the professorship (Habilitation) in Molecular Human Genetics from Medical Faculty of Georg-August University in Göttingen. His professorship thesis focused on molecular genetics of germ cell tumors. In 2006, he was appointed as Chairman and Professor for Stem Cell Biology at the Newcastle University Institute of Human Genetics.

In 2009, he created human sperm-like cells from male stem cells in the laboratory for the first time. Previously, in 2006, he used sperm created from embryonic stem cells to impregnate mice. The mice produced seven pups, although one died and the other six had health problems.

In 2010, he discovered a new marker for detection of breast cancer stem cells. This finding defines this novel marker and its effector signalling pathways as key factors in the proliferation and survival of breast cancer stem cells. He is working now on projects in the field of personalized medicine and director and founder of the International Center for Personalized Medicine ([p7medicine.com](http://p7medicine.com)) and GENECELL company focusing on stem cell technologies and cell therapy. He is Director of International Stem Cell Academy which was established in 2016 ([stemcell-academy.com](http://stemcell-academy.com)) focusing on education of new scientists in the field of stem cell sciences at international level. He is currently director of International Center for Personalized Medicine in Düsseldorf/Germany ([www.icpm.center](http://www.icpm.center)) and Director of International Stem Cell Academy ([www.stemcell-academy.com](http://www.stemcell-academy.com)).

He carried out pioneering work that has the potential to lead to future therapies for a range of medical conditions such as heart disease, Parkinson's disease and male infertility. His team was the first in the world to isolate a new type of stem cell from adult mouse testes (male sex glands), called spermatogonial stem cells. It was able to show that some of these stem cells, called multipotent adult germline stem cells (maGSCs), turned into heart, muscle, brain, and other cells. Prof Nayernia and his team proposed that similar cells could be extracted from men using a simple testicular biopsy. Based on these cells, new stem cell techniques could be developed to treat a variety of illnesses.

He published more than 80 scientific publications in renowned Journals like Nature, Cell and Cancer Research. Furthermore, he presented his projects in more than 900 scientific meetings.

He supervised more than 62 MSc thesis, 45 PhD thesis and 12 professorship theses.

He is leading now the International Center for Personalized Medicine in Düsseldorf ([www.icpm.center](http://www.icpm.center)) , Germany, International Stem Cell Academy and European Center for Personalized Medicine ([www.ecpm.center](http://www.ecpm.center) ). He is member of Director Board of German Society for Stem Cell Research.

#### References:

- [Newscientist.com](http://Newscientist.com)
- [The Guardian article](#)
- [The Guardian article](#)
- [BBC article](#)
- <https://www.youtube.com/watch?v=PWDOdClIUUA>
- <https://www.youtube.com/watch?v=4Tt8ncDFikg>
-