Geneticist's Darling, Ethicist's Villain?

Illustration: Nora Gamper

CRISPR: What can and should we (not) do with this powerful genetic tool?

Wednesday, 27th April, 18h30 to 20h00, Apéro afterwards University of Basel, Kollegienhaus, Room HS 102

Keynote	speakers:
Dr. Priya	Satalkar

Researcher at the Institute of Bio- and Medical Ethics, University of Basel

Prof. Dr. Rolf Zeller

Professor in Anatomy and Embryology at the Department of Biomedicine, University of Basel

Moderation: Akash Arasu, reatch

Forschung für Leben



The next stage of genetic engineering?

In 2013, researchers announced a fast and precise new method for editing the genetic code – much more powerful than all other genetic tools so far known. The so-called CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) system takes advantage of an antiviral defence strategy used by bacteria and allows precise genetic manipulations in a wide range of different species.

This genetic method has caused a massive hype in genetic research and already spawned many start-up companies and impressive venture capital investment, since it could make the old dream of genetic therapy finally come true. Chinese researchers have even tried to alter the genetic code of human embryos using CRISPR, triggering an ethical debate among scientists and ethicists alike and stirring up fears of a long neglected taboo: the (non-therapeutic) genetic engineering of humans.



Rolf Zeller is Full-Professor in Anatomy and Embryology at the Department of Biomedicine, University of Basel. His research group heavily relies on using the CRISPR-system to study the signal pathways that control organ-growth in vertebrate embryos.

"Getting CRISPR in genome editing is a great advance for life science research. As CRISPR can be used to alter the genomes of plants, animals and humans in an unprecedented manner, we need an open and informed discussion among all stakeholders and the general public."



Priya Satalkar holds Master degrees in Public Health, Medical Anthropology and Bioethics and received a PhD in Biomedical Ethics from the University of Basel. In her work at the Institute of Bio- and Medical Ethics, she examines the ethical challenges of cutting edge biotechnology like CRISPR.

"Regulation of CRISPR should not be based on the fear of unknowns alone. It should rather involve an open and transparent multi-stakeholder debate, setting research priorities in line with patients' unmet treatment needs while demonstrating adequate level of precaution."

This discussion panel about the promises and perils of genetic engineering is organised by reatch, the grassroots think tank for research and technology in switzerland, in collaboration with the association Forschung für Leben (FfL). More information about the event and about reatch & FfL is available on www.reatch.ch and www.forschung-leben.ch