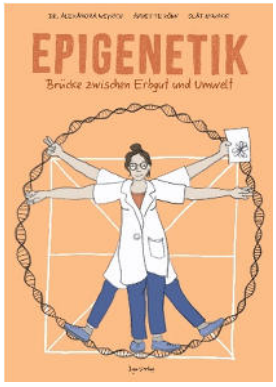
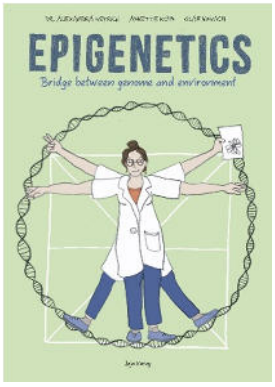
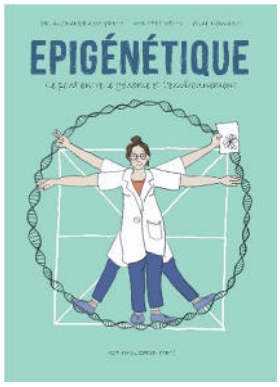
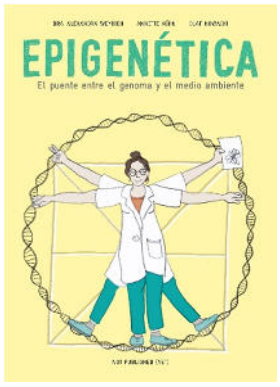
Project report

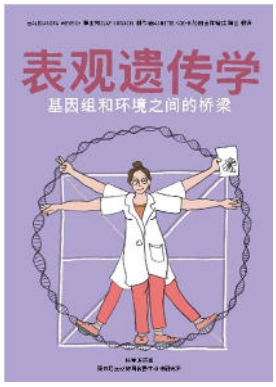
Science Comic “Epigenetics – Bridge between genome and environment”











For a long time, genetic adaptability of living beings was thought to be based entirely on changes in the building blocks of the genome passed on from one generation to another. Nowadays, however, there is evidence of mechanisms that cause the genome to respond flexibly to environmental factors – this is precisely what the field of epigenetics describes. Epigenetics builds a bridge between the genome and the environment. Just like on a piano keyboard, the genome in each cell of a living being is identical, whilst epigenetics determines the song that is played.

The Leibniz Institute for Zoo and Wildlife Research in Berlin created this science comic in which Ada tells us how epigenetics composes these songs. We learn more about wildlife, evolution, science, and about us as human beings.

Organizers: Dr. Alexandra Weyrich, Dr. Kathleen Roellig
Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW), Berlin, Germany

The ESEB funds were used for translation, layout and printing of the comic in french, spanish and chinese.

More information on
http://www.leibniz-izw.de/knowledgetransfer.html

The Science Comic "Epigenetics – bridge between genome and environment"

Science Comic for (young) adults, 17x24 cm, 24 pages
Idea, concept and story: Dr. Alexandra Weyrich
Texts: Dr. Alexandra Weyrich and Olaf Nowacki
Illustrations: Annette Köhn
Translation into English: Steffen Walter and Armorel Young
Translation into French: Pierre Dubin and Sarah Benhaiem
Translation into Spanish: Tania Guerrerro
Translation into Chinese: Dr. Chen Yujie
Scientific consultation: Prof. Dr. Jörns Fickel, Dr. Miriam Brandt, Prof. Dr. Heribert Hofer
Project management: Miriam Brandt, Heribert Hofer

Target group: Science Comic for educational use in schools, and to inform broader audiences about the impact of epigenetics on evolutionary processes.

Original article: Weyrich A, Lenz D, Jeschek M, Chung TH, Rübensam K, Göritz K, Jewgenow K, Fickel J (2015): Paternal intergenerational epigenetic response to heat exposure in male Wild guinea. Running Title: Paternal epigenetic response to heat. MOL ECOL – special issue Epigenetic Studies in Ecology and Evolution.