

Genomics for Everyone

Open Science Conference 2018 – Berlin

Prof. Dr. Christine Mannhalter on behalf of **Genom Austria**



What is "Genom Austria?"

A scientific, cultural and educational project based on whole genome sequencing

Genomic information of volunteers

Personal data (age, origin, education, socioeconomic status, medical history, biometric features)

Stored in quality-controlled open access research data base to make data easily available

Genom Austria was approved by the Ethics Commission of the Medical University of Vienna



www.genomaustria.at



MEDIZINISCHE
UNIVERSITÄT WIEN

Ce-M-M-

Research Center for Molecular Medicine
of the Austrian Academy of Sciences

ÖAW

AUSTRIAN
ACADEMY OF
SCIENCES



What is the purpose of Genom Austria?

Creation of a large, comprehensive and quality-assured Middle European genome database as basis for high-quality research and education

- **Bridging Natural Sciences with Humanities and Social Science**

Basis for interdisciplinary research on many scientific questions (demographics, language, ...)



- **Engagement and Education of the Public**

Education of the general public

Understanding of the benefits of future research



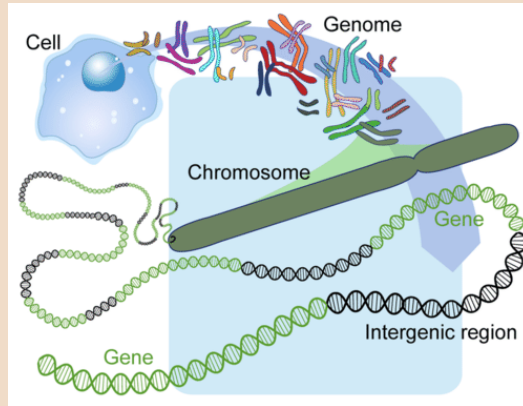
- **Demonstration of human equality and diversity**

Only 0.1% of the genomic sequence differs between two individuals

The majority of differences are located in non-coding regions



Why is the human genome interesting?



<https://www.ck12.org/biology/human-genome/lesson/Human-Genome-BIO/>



© MOPIC/SHUTTERSTOCK

- The genome is the **biological fingerprint of a person**
- Scientific advances of the 21st century allow to **analyze and interpret the genome**



Who are stakeholders, who wants/needs open access to genomic information?

The tension between FAIR-principles
and data protection issues has to be managed

Legal and ethical aspects have to be considered
Privacy of personal data has to be respected

Suitable solutions are necessary

Coding of data?
Controlled, limited or restricted access to data?



Acknowledgement of Genom Austria Collaborators

Overall Responsibility: Christine Mannhalter

Steering Board: Christiane Druml, Markus Hengstschläger, Helga Nowotny, Michael Speicher, Giulio Superti-Furga

Project Team: Christoph Binder, Christoph Bock, Kaan Boztug, Anita Ender, Ulrich Jäger, Franco Laccone, Thomas Perkmann, Eva Schweng, Elisabeth Simböck

Host Institutions:

CeMM Forschungszentrum für Molekulare Medizin der
Österreichischen Akademie der Wissenschaften
Medizinische Universität Wien

Funding of the Pilot Project:

CeMM Research Center for Molecular Medicine
of the Austrian Academy of Sciences

Websites:

<http://genomaustria.at> (Austrian website)

<http://www.cemm.oeaw.ac.at> (institute website)

Patronage: Margit Fischer

Advisory Board: Matthias Beck, Walter Berka, Meinrad Busslinger, Hans-Christoph Duba, Ulrike Felt, Gabriele Fischer, Barbara Horejs, Ulrich Körtner, Markus Müller, Michael Nentwich, Peter Pakesch, Christina Peters, Barbara Prainsack, Eva Schlegel, Barbara Streicher, Johannes Zschocke



Thank You for Your Attention!

