

Die DNA als Wahrsagerin? Fortschritte aus der Genomwissenschaft

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Zürcher Diagnostikkongress 2022
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Volkshaus Zürich

7. Zürcher Diagnostik-Kongress

Der Kongress steht für einen fundierten fachlichen Austausch und innovative Anwendung psychologischer Diagnostik.

Inhalte



Partner



**Diagnostik – zwischen neuen Möglichkeiten und
Verantwortung**

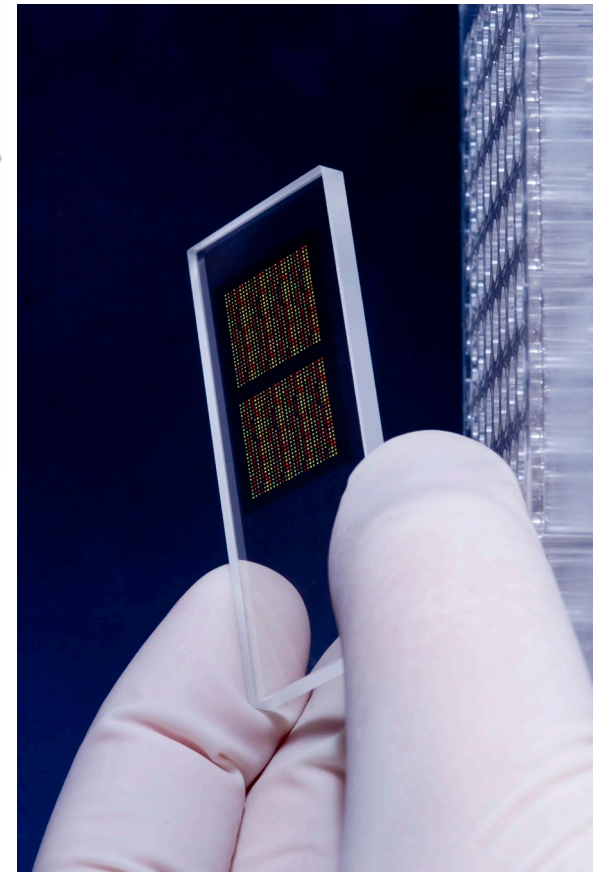
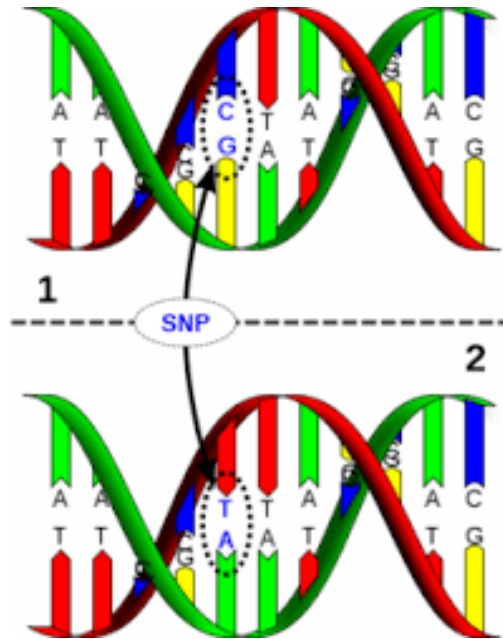
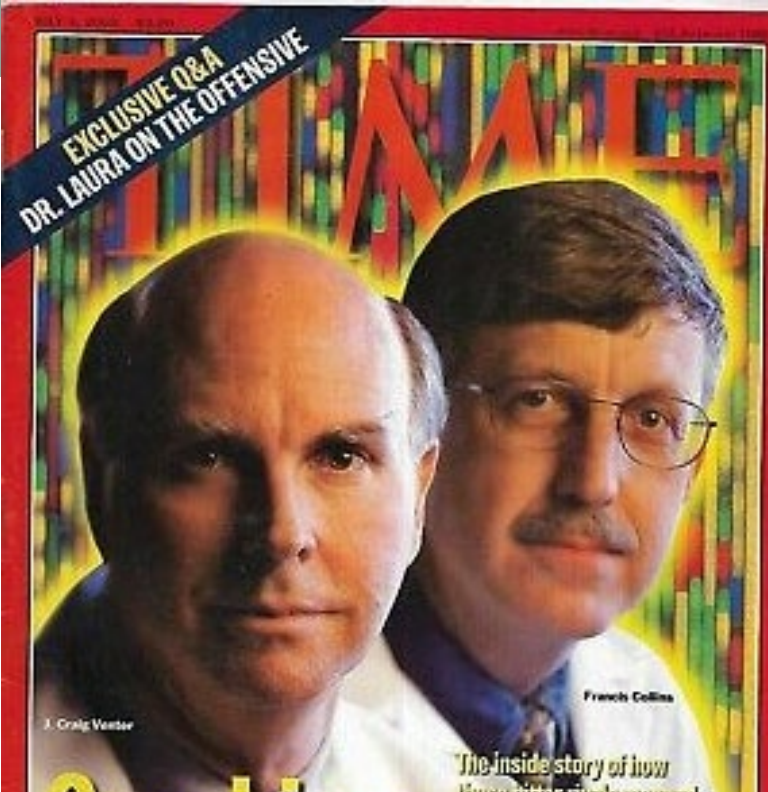




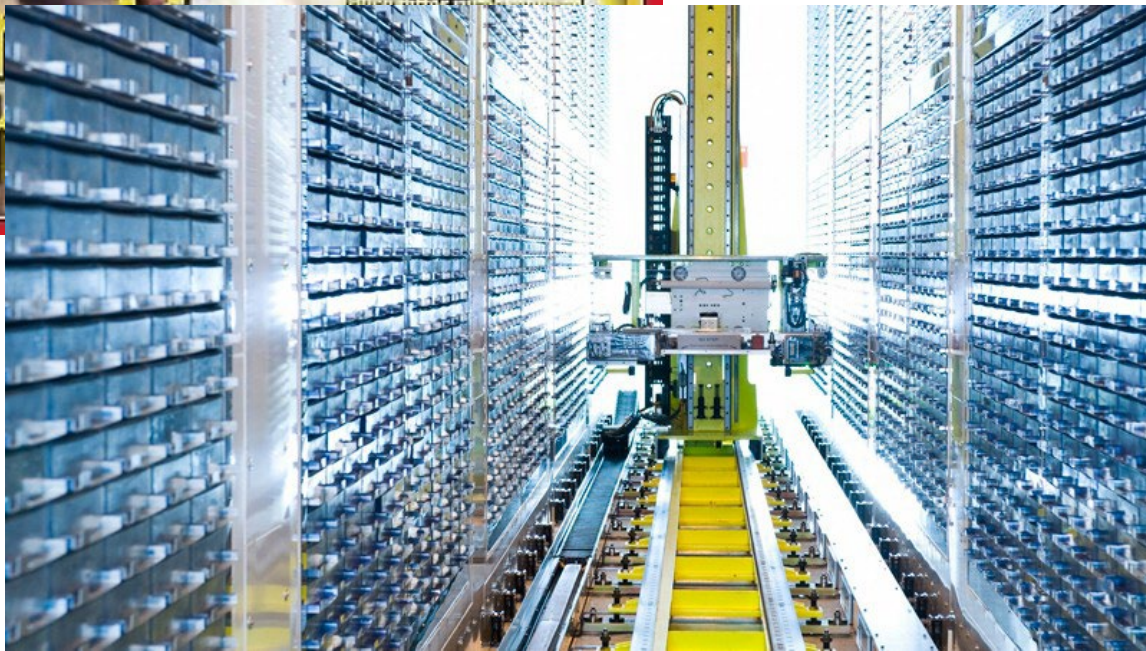




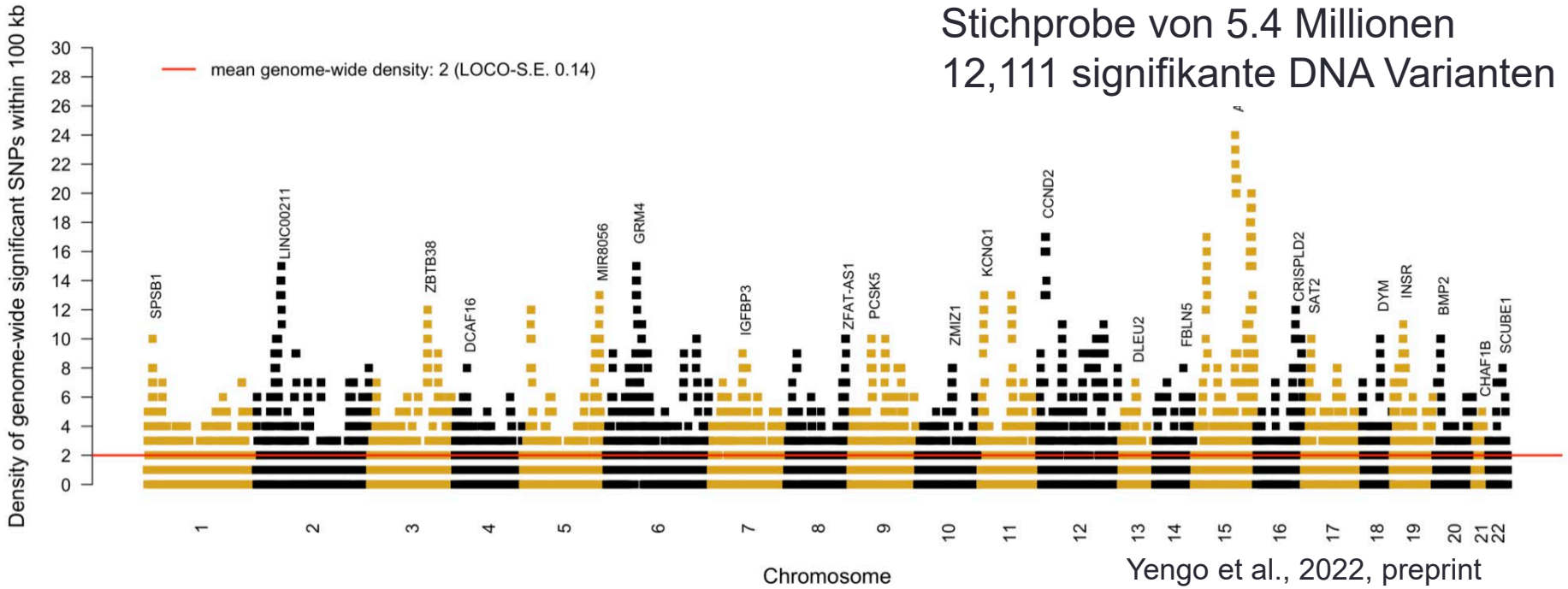




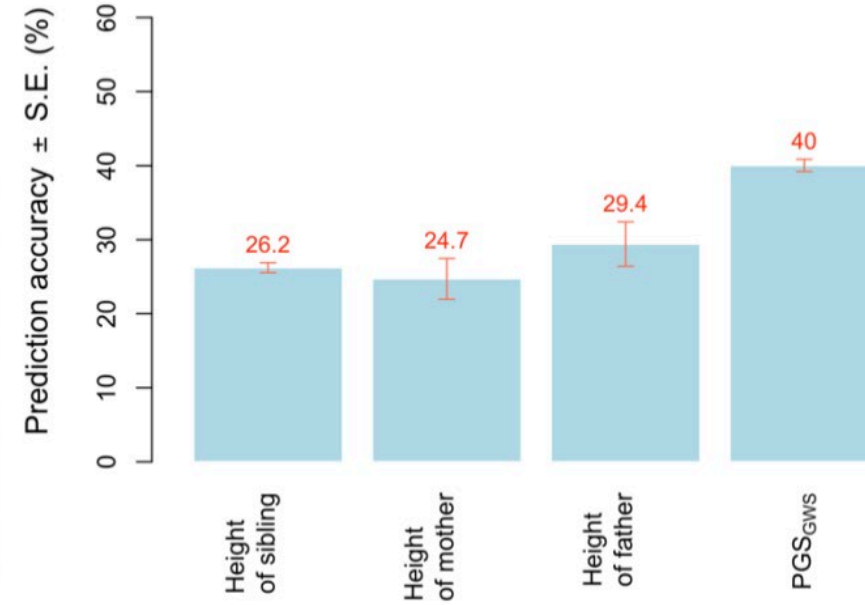
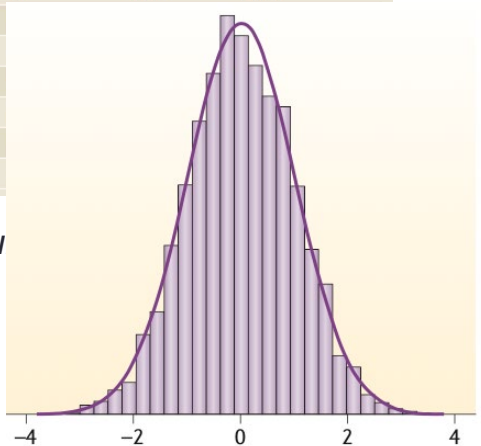
2003 Decoding of Human Genome
2005 HapMap completed
DNA microarrays
Biobanks



Stichprobe von 5.4 Millionen 12,111 signifikante DNA Varianten

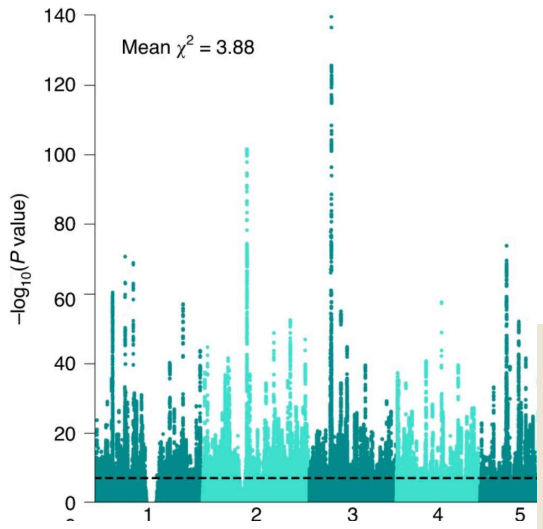


SNP	Increasing allele	Allele 1	Allele 2	Genotypic score	Correlation with trait	Weighted genotypic score
SNP 1	T	A	T	1	0.005	0.005
SNP 2	C	G	G	0	0.004	0.000
SNP 3	A	A	A	2	0.003	0.006
SNP 4	G	C	G	1	0.003	0.003
SNP 5	G	C	C	0	0.003	0.000
SNP 6	T	A	T			
SNP 7	C	C	G			
SNP 8	A	A	A			
SNP 9	A	T	T			
SNP 10	C	C	G			
Polygenic score						



Plomin & von Stumm, 2018, *Natu*

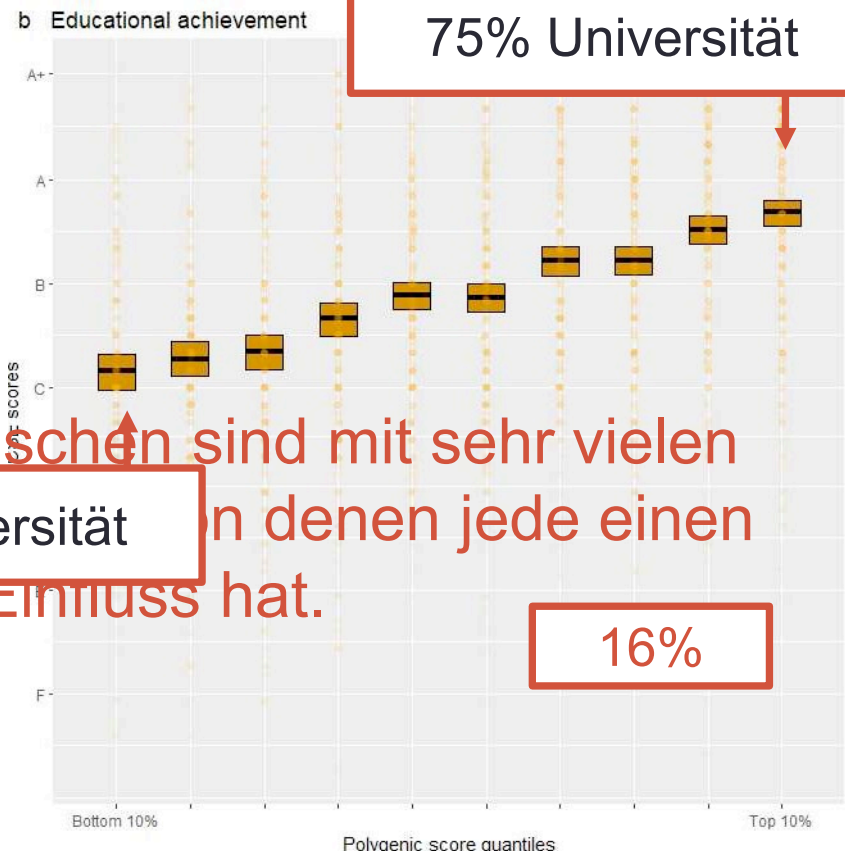
Stichprobe von 3 Millionen



Okbay et al., 2022, *Nature Genetics*

SNP	Increasing allele	Allele 1	Allele 2	Genotypic score	Correlation with trait	Weighted genotypic score
SNP 1	T	A	T	1	0.005	0.005
SNP 2	C	G	G	0	0.004	0.000
SNP 3	A	A	A	2	0.003	0.006
SNP 4	G	C				
SNP 5	G	C				
SNP 6	T	A				
SNP 7	C	C				
SNP 8	A	A				
SNP 9	A	T				
SNP 10	C	C				
Polygenic score						

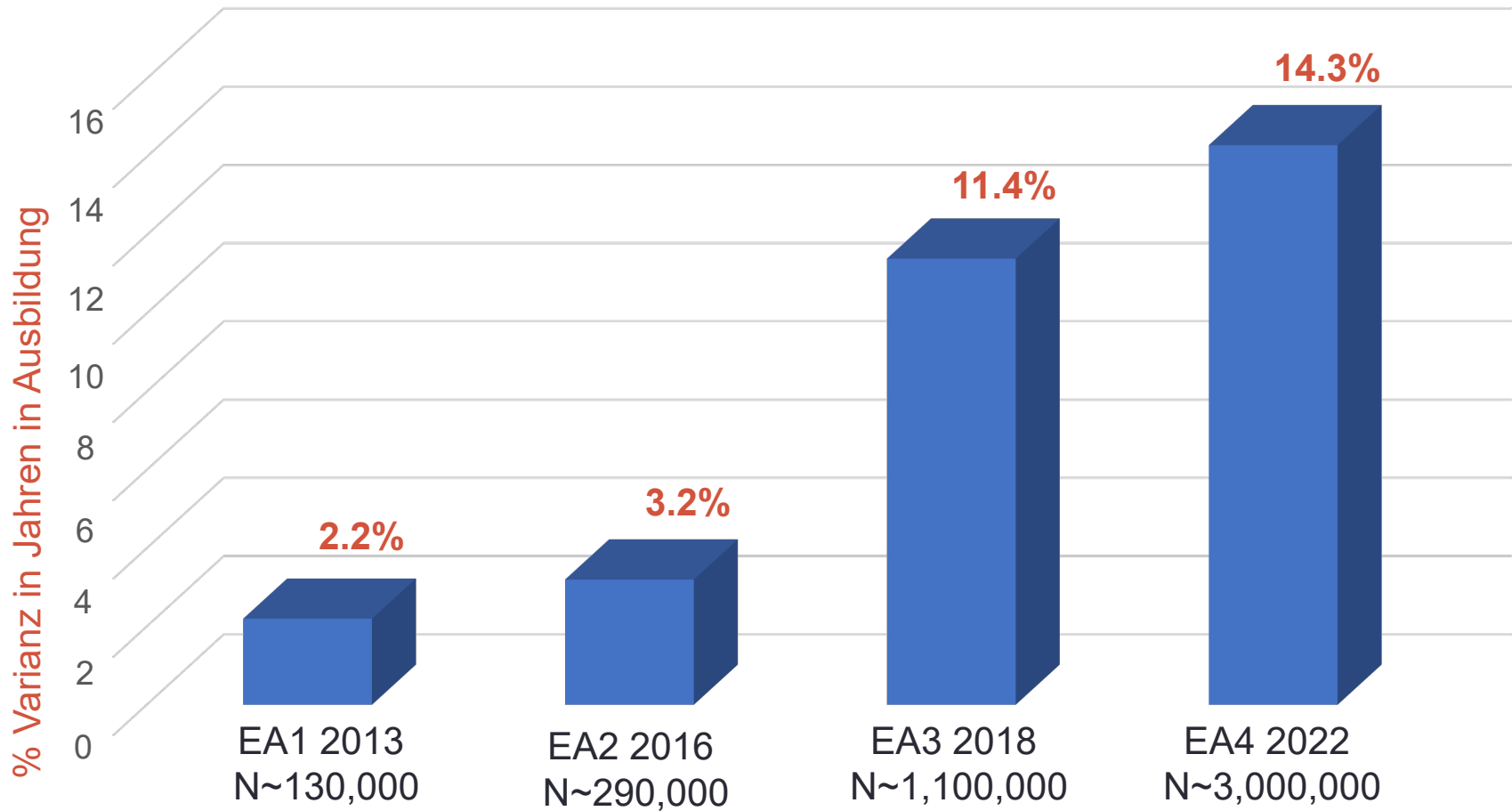
Plomin & von Stumm,



Unterschiede zwischen Menschen sind mit sehr vielen genetischen Variablen in denen jede einen sehr kleinen Einfluss hat.

Allegri et al.

“A typical human behavioral trait is associated with very many genetic variants, each of which accounts for a very small percentage of the behavioral variability.” Chabris et al., 2015, *Current Directions*



Erblich \neq Angeboren
Kindern muessen gelehrt werden
um lesen zu lernen

Erblich \neq Unveraenderbar
Wahrscheinlichkeiten, kein
Determinismus

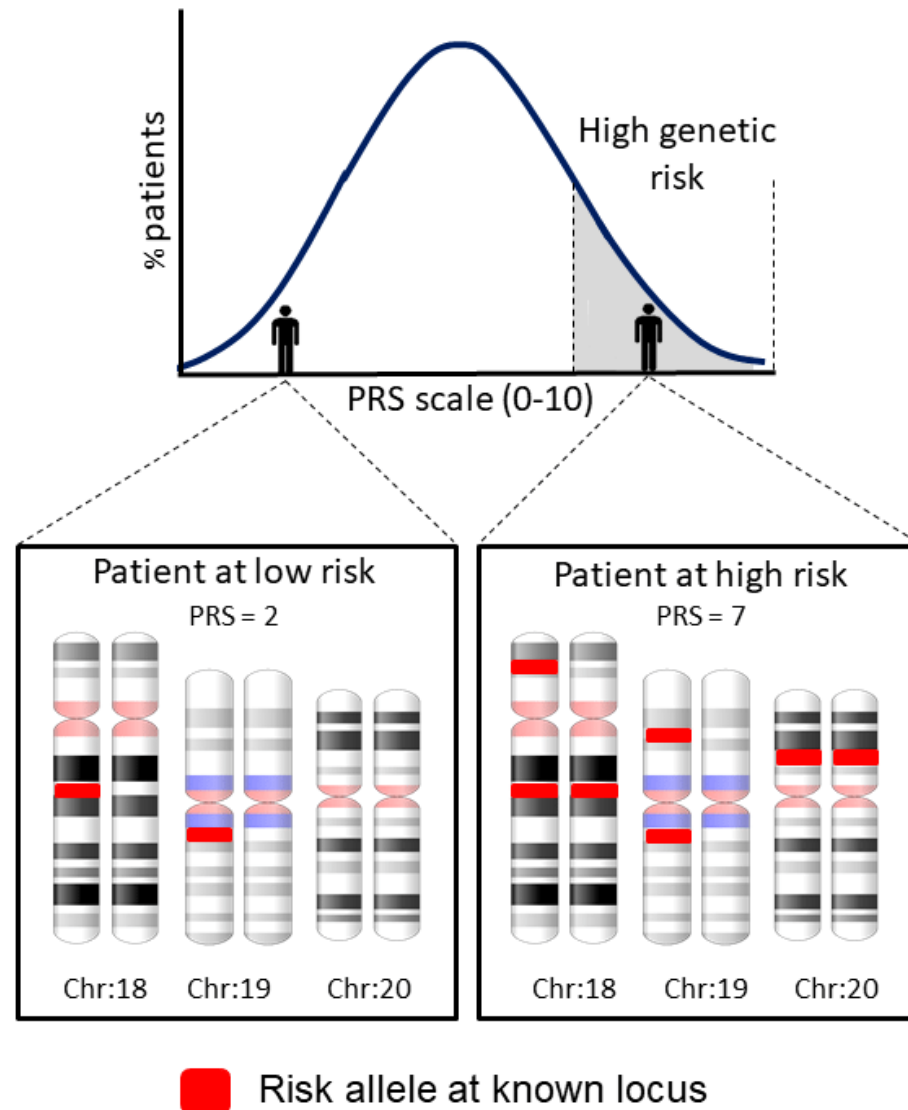
Erblich \neq Politische Strategie
Werte x Ethik x Wissenschaft

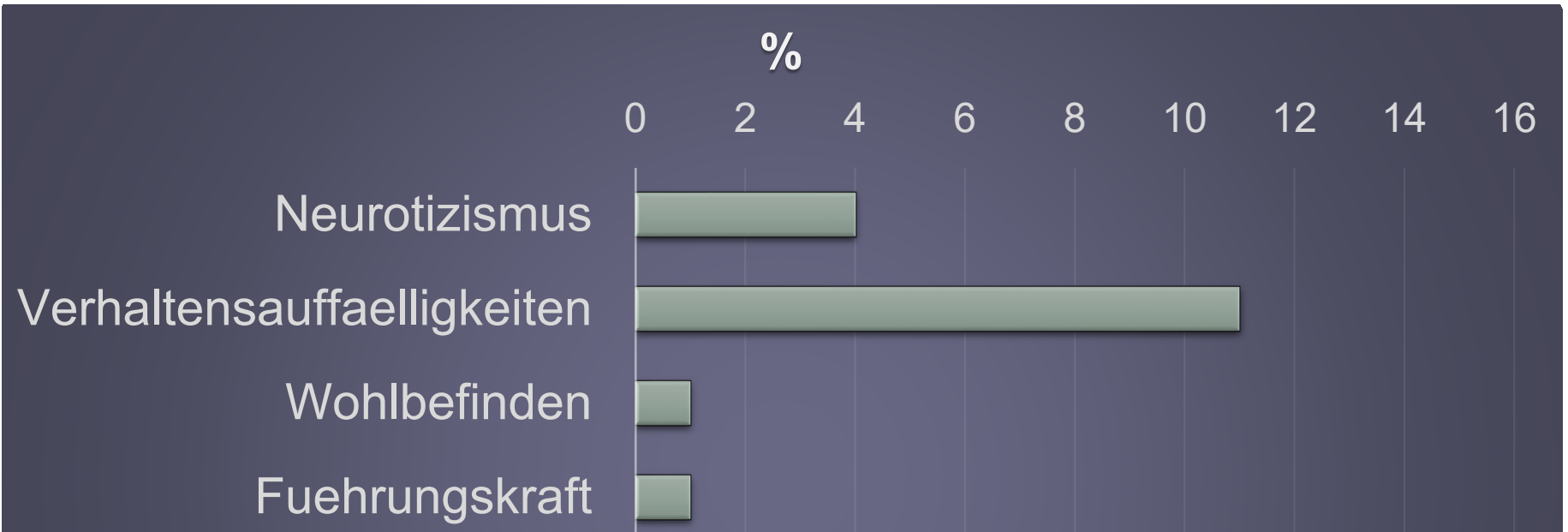


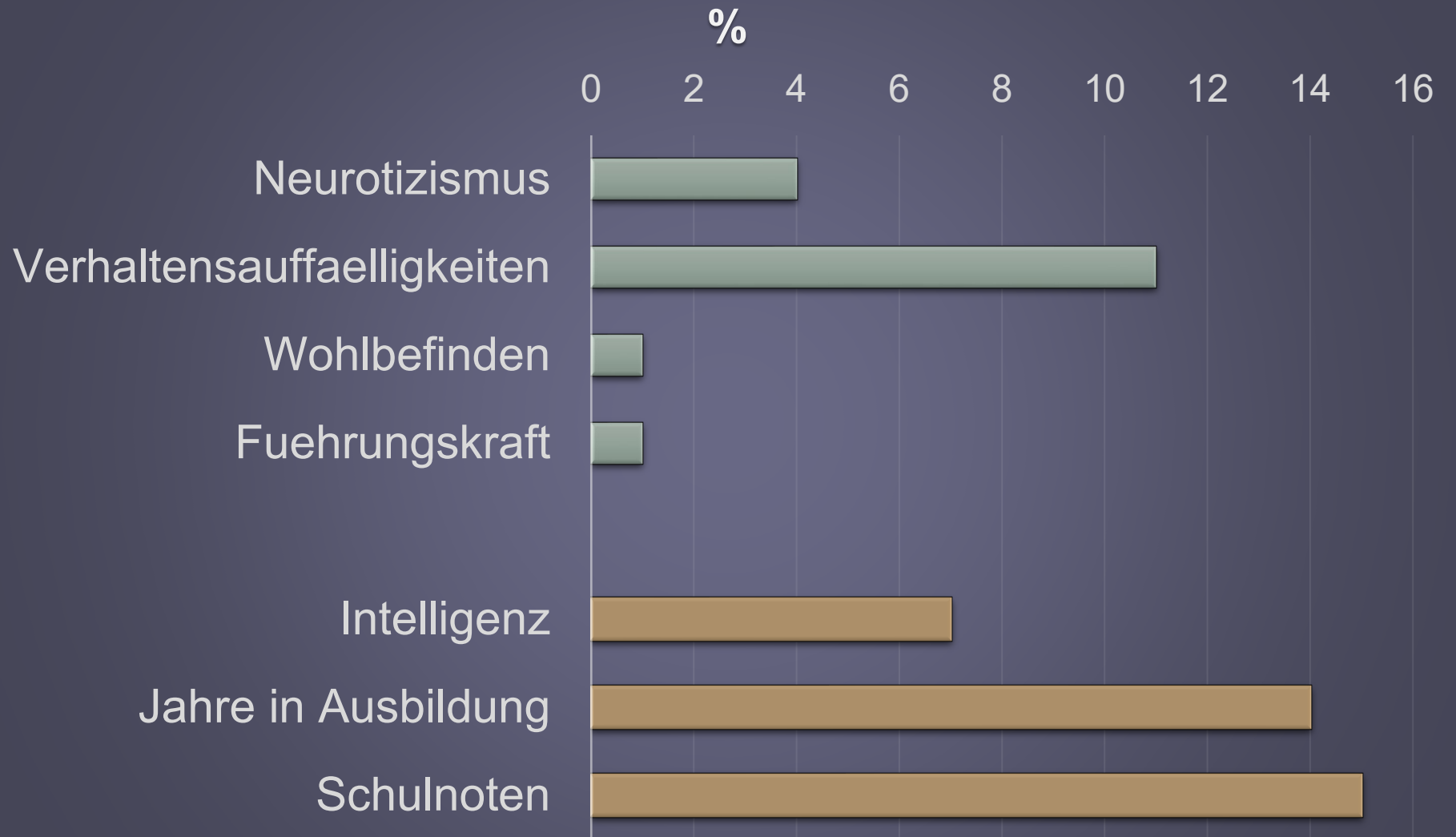
Normal verteilt,
reliable, unbiased
(Stress oder
Training haben
keinen Einfluss)

Einmalige Kosten
(etwa 100 Euro),
Genotypen sind
unveraendert

Vorhersage von
Risiko und
Resilienz
(Prevention)







23andMe
Biotechnology company



**Ancestry + Traits
Service**

€99

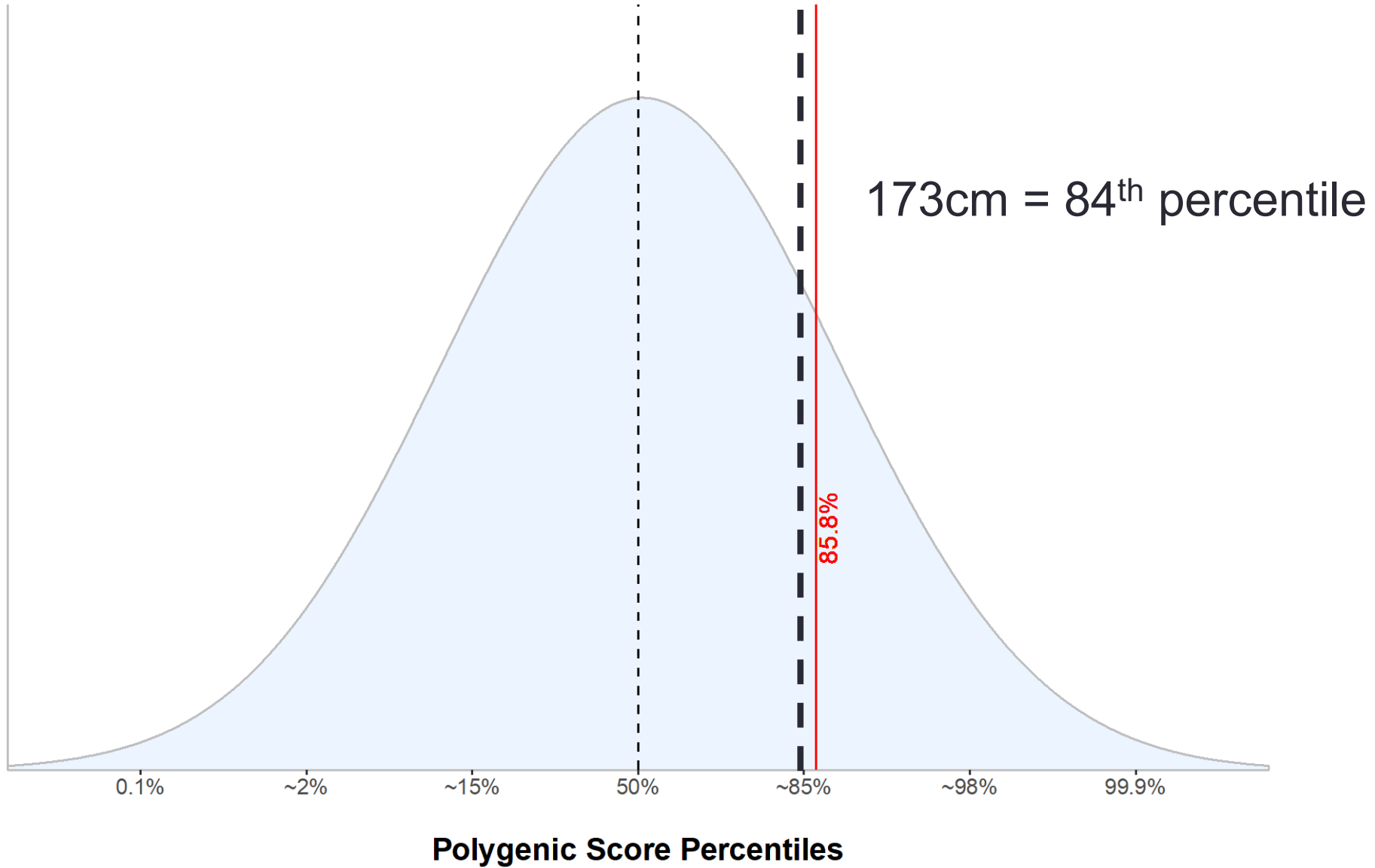


**Health + Ancestry
Service**

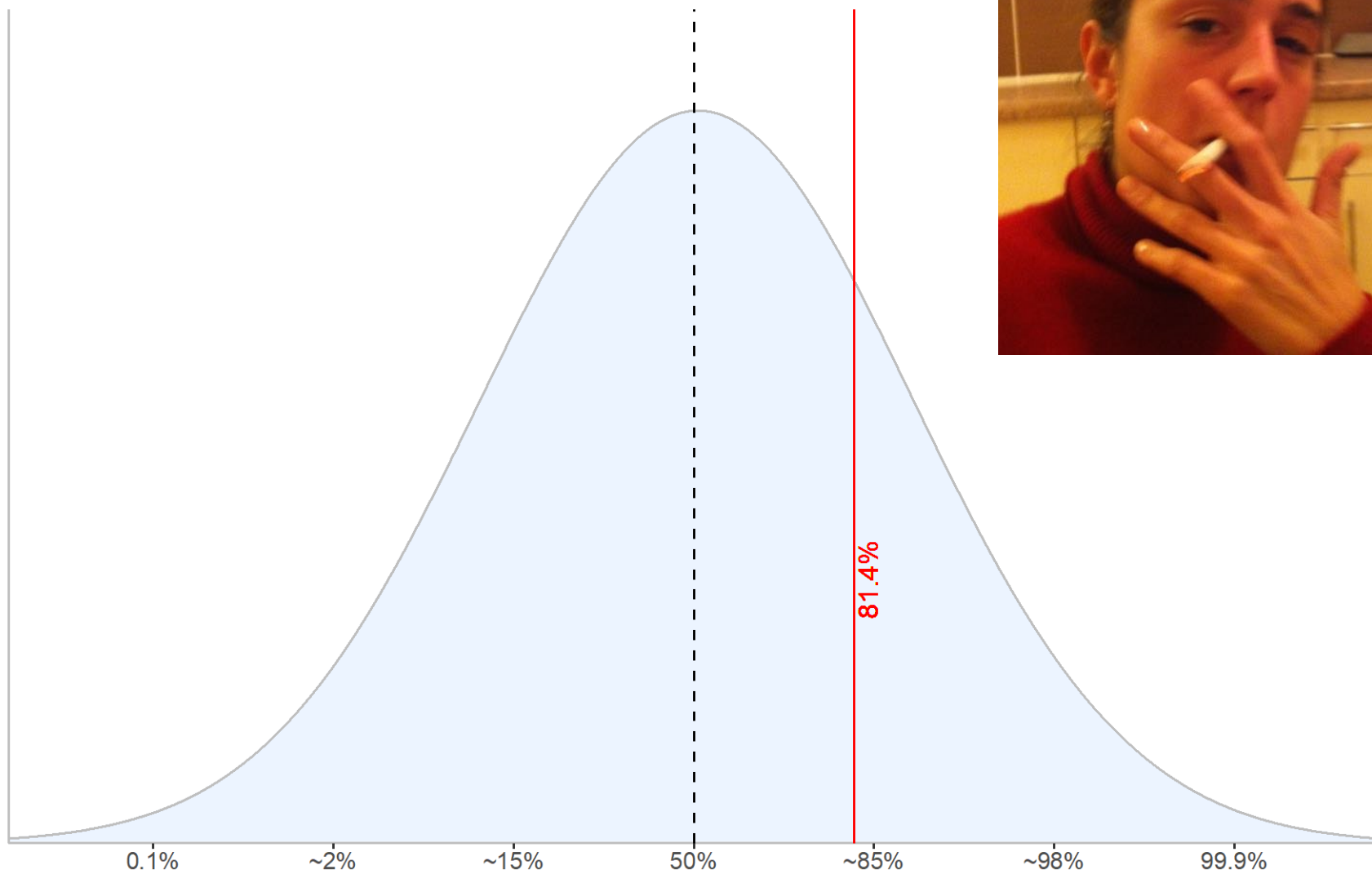
€169

Direct-to-consumer testing

Height

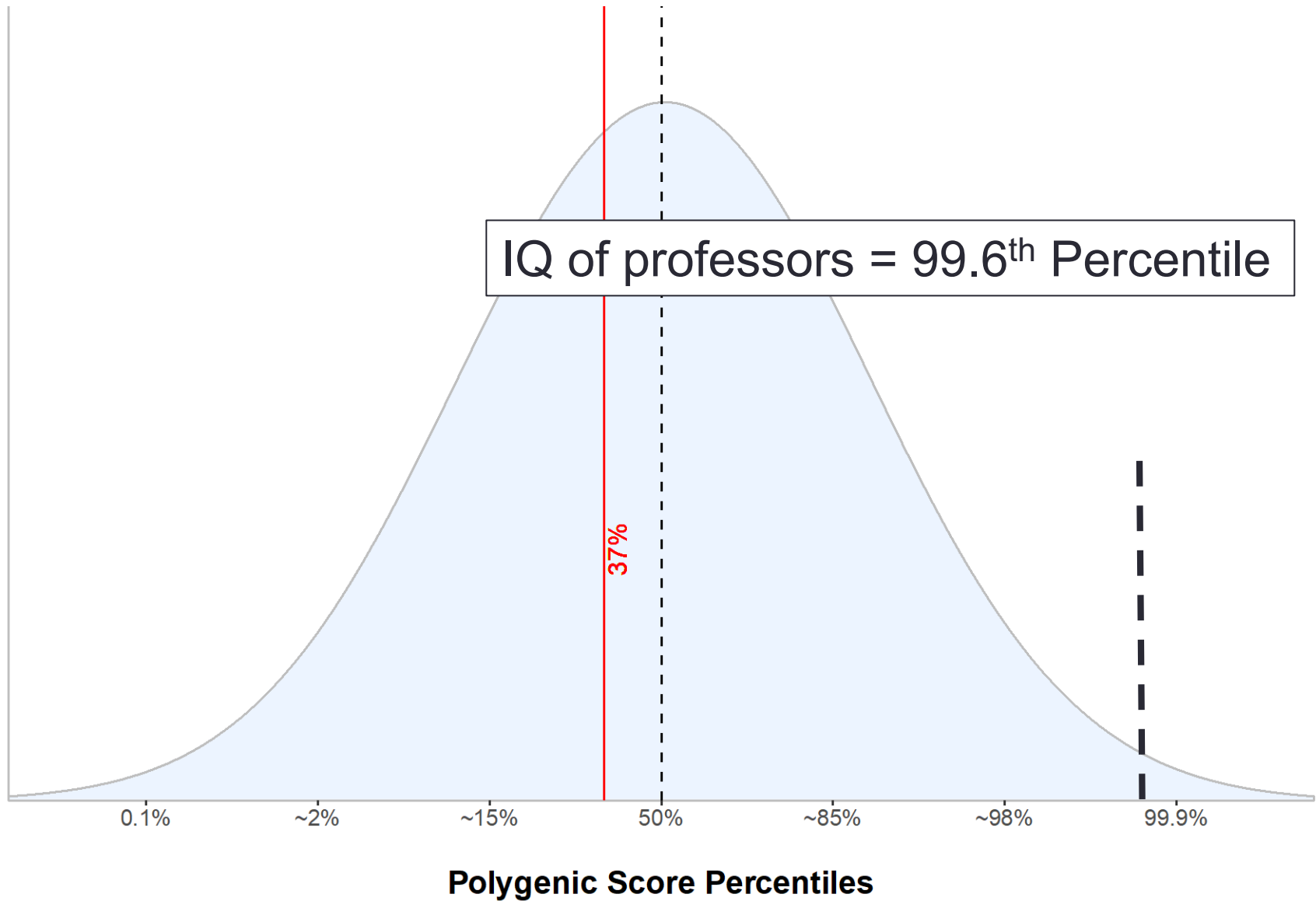


Ever smoked



Polygenic Score Percentiles

Intelligence



Caffeine Metabolism

Your risk



Fast

Slow

Slow Metaboliser

You are a slow caffeine metaboliser.

52%

of DnaNudge users have a similar risk to you

Your genetic result was calculated by assessing a gene that influences caffeine metabolism.

Slow caffeine metabolisers break down caffeine slowly, meaning caffeine remains active in the body for longer. High caffeine intake can have undesired physiological affects including jitters, increased heart rate and anxiety.



DNA Bar



Products



DNA Report

Below is your DNA report. To help you understand your results we have placed them into one of five levels - **Very High Risk**, **High Risk**, **Medium Risk**, **Low Risk** and **Very Low Risk**.

[Tap here for more information.](#)

A-Z

Risk

Caffeine Metabolism
Slow

How do you compare? >

Calories
Medium

How do you compare? >

Carbohydrate
Medium

How do you

Fat
Medium

How do you

DNA TESTING FOR PERSONALIZED WELLNESS

Optimize your daily exercise & health routines with DNA fitness, diet & nutrition, sleep, vitamin insights and more.

- 30+ insights
- 10+ categories
- Includes DNA fitness, diet & nutrition, sleep, vitamins insights, caffeine and more.
- Plus, receive 30 days FREE Premium Membership

\$99.00

 BUY ONLINE

myDNA



UNLOCK
THE POWER
OF YOUR DNA
DNA INSIGHTS + PL

PERSONALISED WELL

MARRIED AT FIRST SIGHT



Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less.

Marie Curie (1867-1934)

Contact: sophie.vonstumm@york.ac.uk

Web: www.hungrymindlab.com

Danke!



hungrymindlab.com