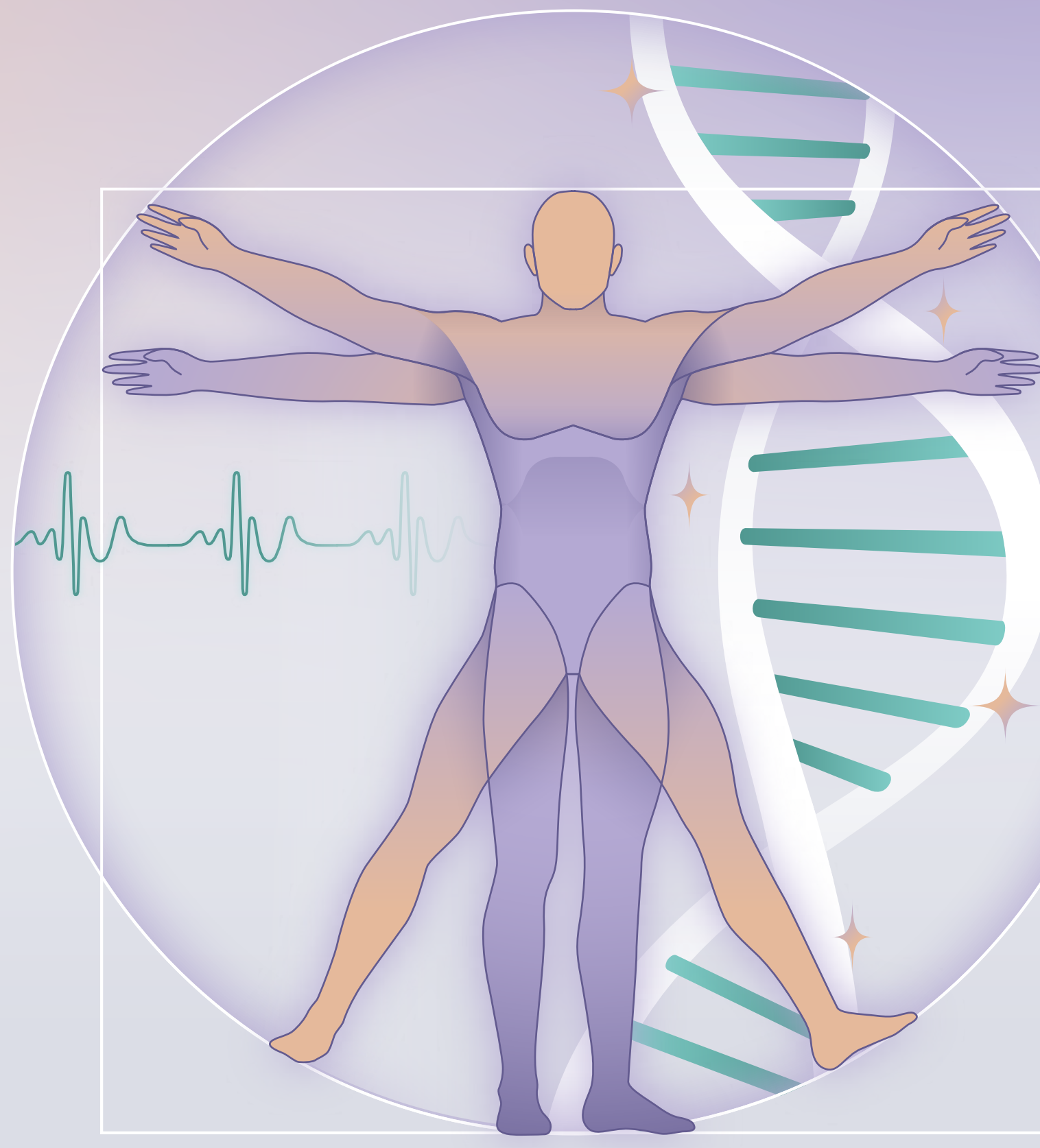


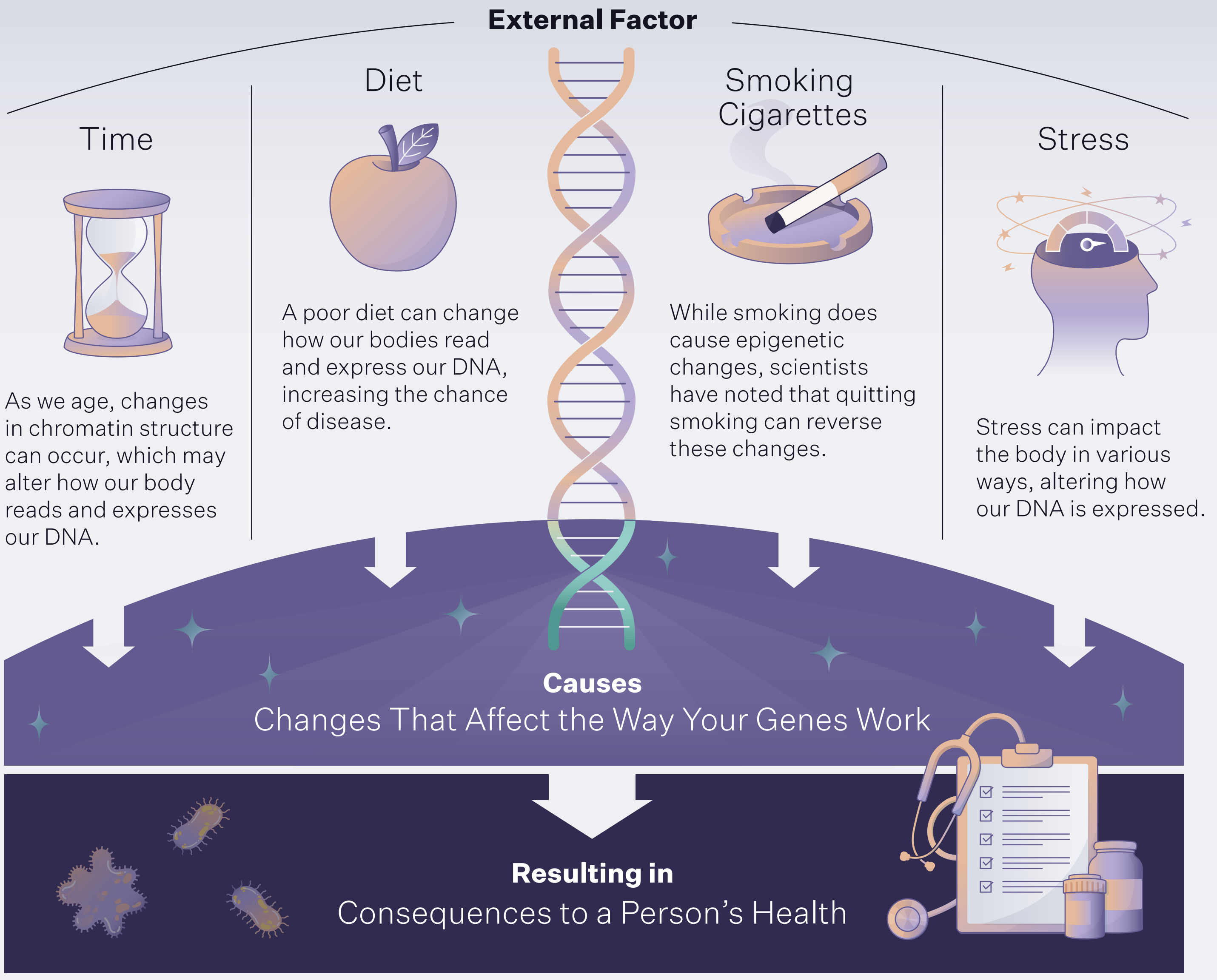
Biohacking Your Health with Epigenetics

Healthy genes are essential to the body's overall well-being. However, a person's experiences and environment can change how our bodies read, or express, our DNA, with significant consequences for our health.

By optimizing environmental factors, a person can hack their genes and improve their health; this is called **epigenetics**.



How Epigenetics Works

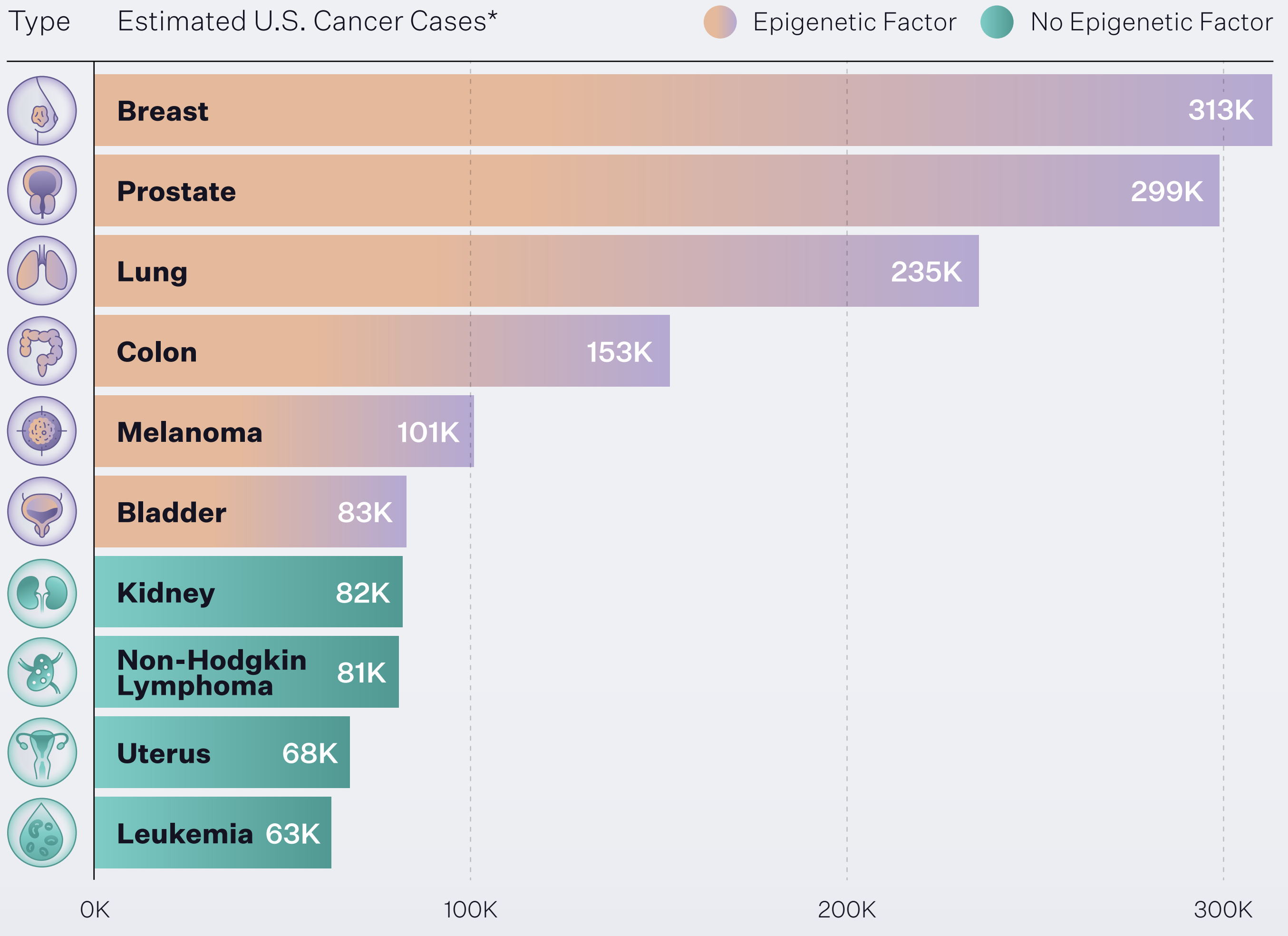


Source: U.S. National Library of Medicine; Lorenzo et al. via Science Direct; Translational Psychiatry

Scientists have linked epigenetic factors to many mental conditions, patterns of addiction, and cancers.

Prevalence of Epigenetic Diseases

When the way our bodies read DNA is changed, it can increase the likelihood of contracting diseases, and is particularly true for cancers, many of which have an epigenetic component.



While external factors can negatively impact epigenetics, they can also help optimize health.

Promoting Your Health Using Epigenetics

A healthy lifestyle ensures that the right genes are switched on, at the right time, which can significantly reduce disease risk. It enables our bodies to create disease-resistant cells, suppress tumors, and more.

Epigenetic Factor	Solution
Exercise	Physical exercise triggers changes in how our DNA is read, improving functional capacity, resiliency, and health.
Sleep	Sleep is a fundamental part of a healthy lifestyle and plays a critical role in gene expression in our bodies.
Hydration	Consistently staying hydrated can promote positive epigenetic changes, supporting overall health and reducing disease risk.
Diet	Studies have shown that certain foods, such as tea, soy, herbs, garlic, and vegetables like cabbage or broccoli, can switch on the genes that suppress tumors.

Sources: U.S. National Library of Medicine; Rupa Health

Understanding epigenetics empowers everyone to make better lifestyle choices and improve mental and physical health.

Weigh in on the solutions that the field of epigenetics offers at the following session at Dubai Future Forum 2024:

Epigenetic Editing: What Can It Achieve?