The European Human Exposome Network

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Currently chairing the

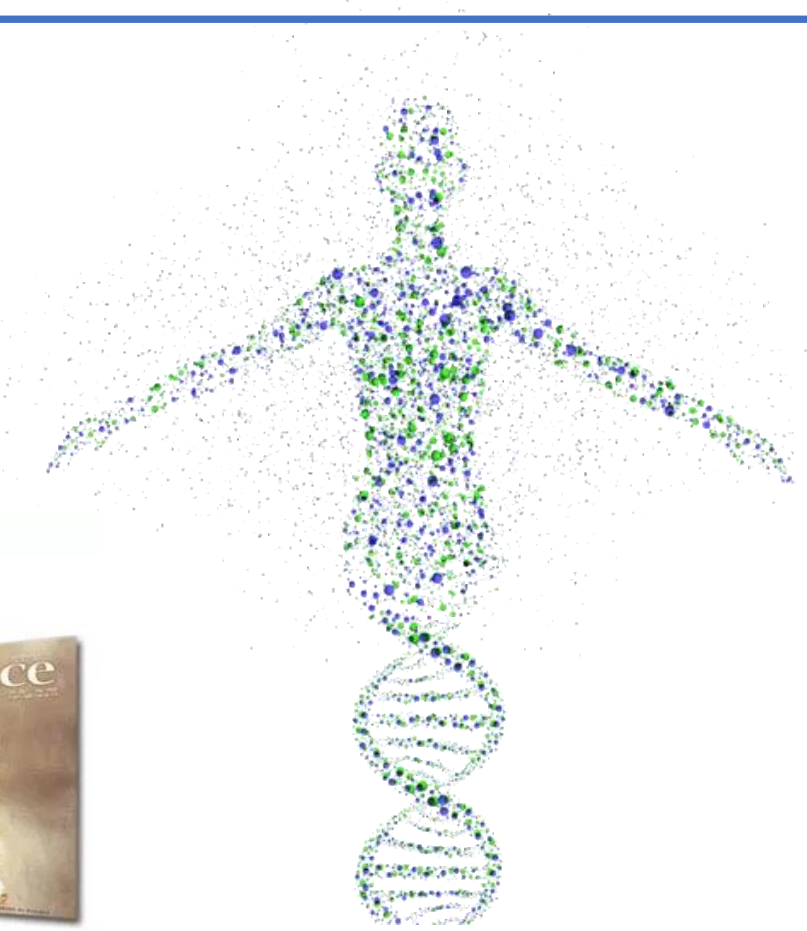**European Human Exposome Network**

www.humanexposome.eu

Human genome project:
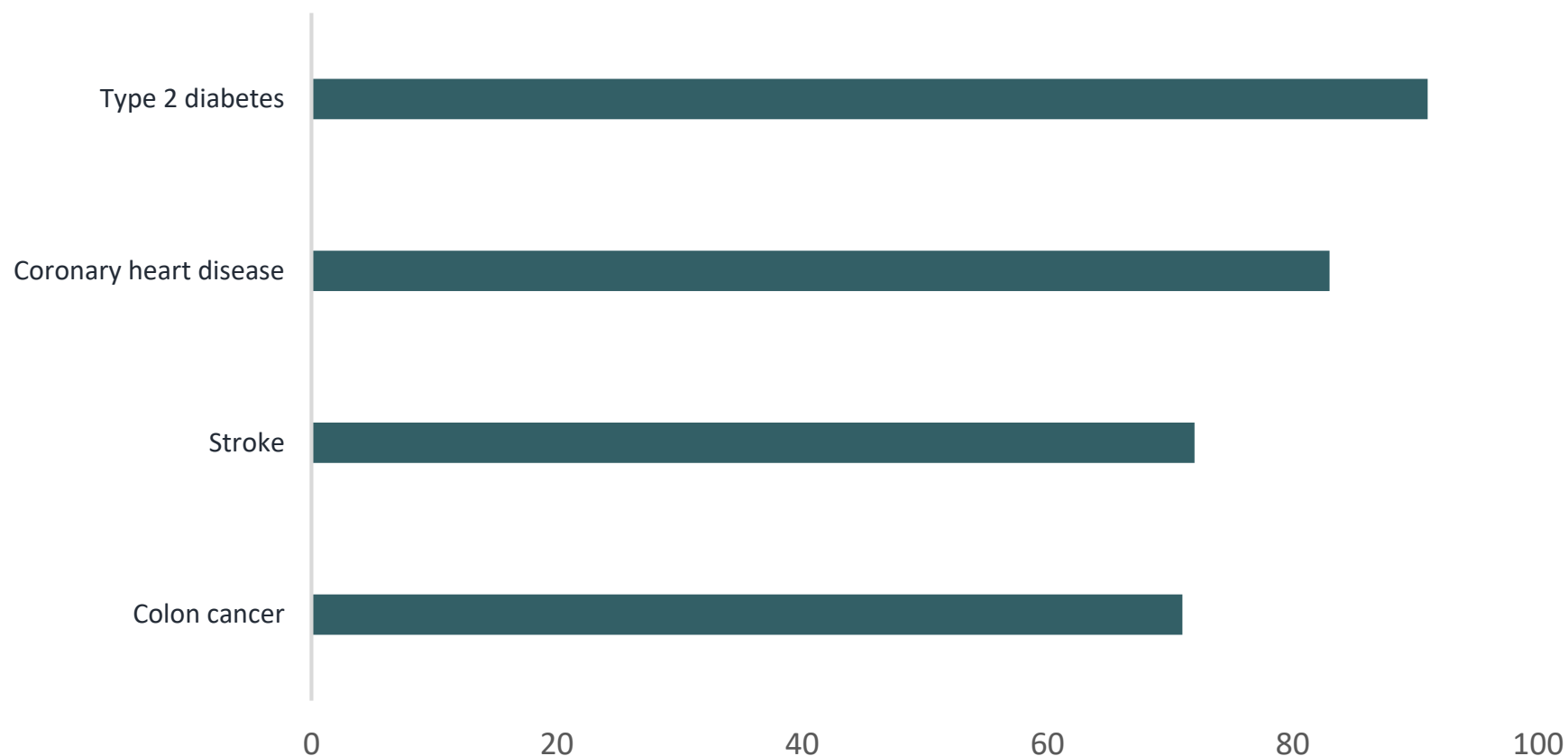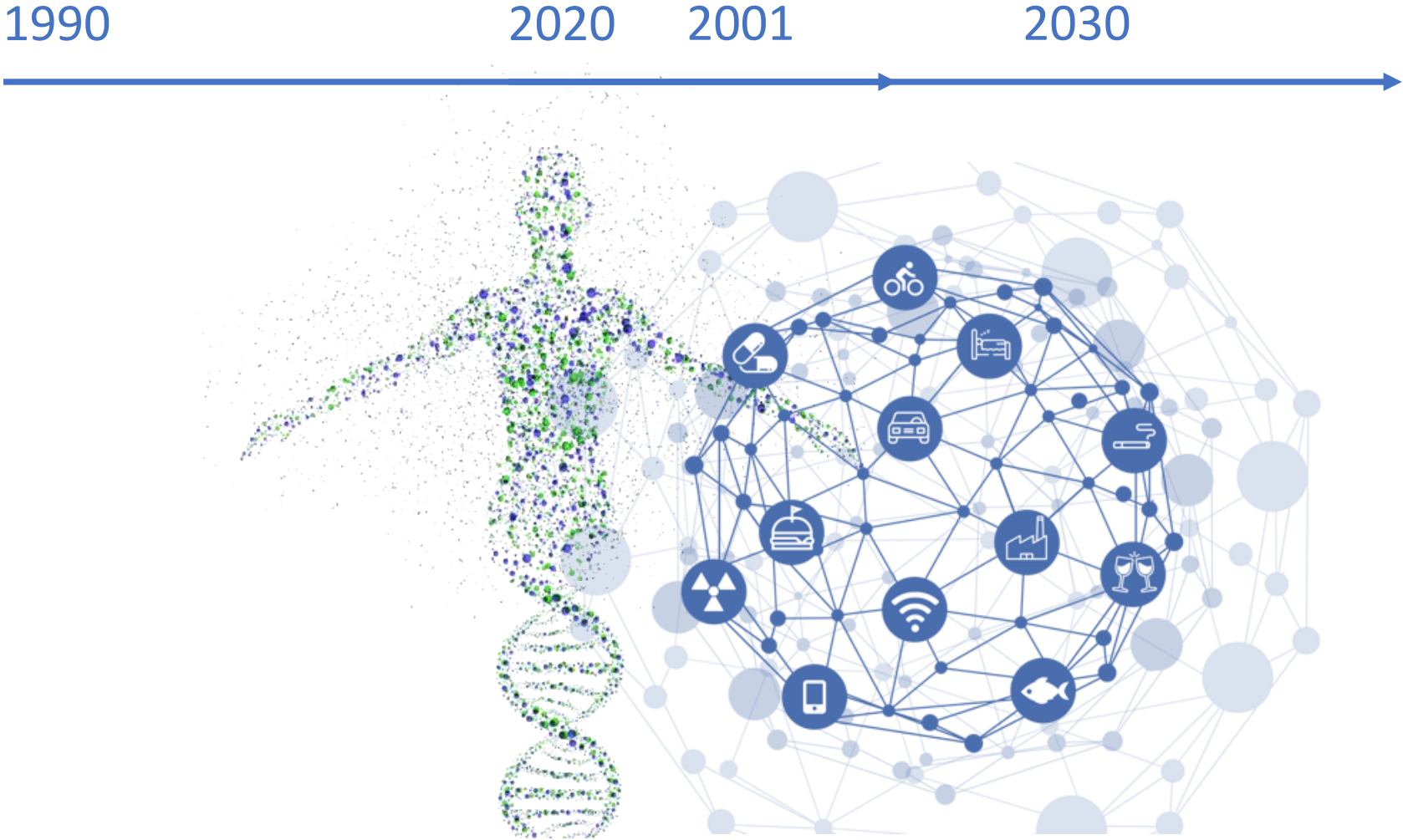# new level of understanding in the cause of diseases

1990   2001

But genes do not kill (on their own)

Percent driven by ENVIRONMENTAL factors

Walter Willet, 2002

Human EXPOSOME project: A paradigm shift to a new systematic understanding of the cause of diseases

1990   2020   2001   2030

For the health of our citizens, our children and grandchildren, Europe needs to move towards a zero-pollution ambition. I will put forward a cross-cutting strategy to protect citizens' health from environmental degradation and pollution, addressing air and water quality, hazardous chemicals, industrial emissions, pesticides and endocrine disruptors

EXPOSOME

The human exposome encompasses exposures to environmental factors **throughout life**, starting from conception and pregnancy.

Environmental factor exposures are diverse

POLLUTION

DIET

URBAN

And have an impact on our health

The European Human Exposome Network

126
Research groups

24
Countries

9
Large-scale projects

106
Million euros from the European Commission

One Common Goal

Understanding the health impacts of a lifetime of environmental exposures

Nine large consortia in a formalized collaboration

ATHLETE - Advancing tools for human early lifecourse exposome research and translation

EPHOR - Exposome project for health and occupational research

EQUAL-LIFE -Early environmental quality and life-course mental health effects

EXIMIOUS - Mapping exposure-induced immune effects: connecting the exposome and the immunome

EXPANSE - Exposome powered tools for healthy living in urban settings

HEAP - Human exposome assessment platform

HEDIMED - Human exposomic determinants of immune mediated diseases

LONGITOOLS - Dynamic longitudinal exposome trajectories in cardiovascular and metabolic non-communicable diseases

REMEDIA - Impact of exposome on the course of lung diseases

Goals of today

Actually measuring the environmental exposures…….

- How could this affect the health and welfare of all of us in EU?

- What are the biological effects of the different exposures?

- How could the data on exposures help us to promote a healthy environment?

- What could be done to promote *data-driven* interventions towards a healthier environment?