



European
Commission

JRC PORTFOLIO 28

INNOVATION IN LIFE AND HEALTH SCIENCES

We are witnessing an unprecedented acceleration of innovation in the life and health sciences, driven by the convergence and emergence of technologies, novel concepts and social developments. The data and artificial intelligence (AI) revolutions, the bio-revolution – including new genomic techniques, omics and personalised medicine – are just a few such innovations. They will accelerate biomedical and life science research and deliver novel solutions for tackling disease. Innovations also have profound societal and ethical repercussions, including bias, healthcare equalities and security. Innovative technologies are often applicable to various fields, thus requiring a holistic approach.

The portfolio aims to:

Support the promotion and uptake of innovative approaches in life and health science research and healthcare

Ensure that transformative innovations are evidence-based and supported by risk-benefit-determinations, ethical and compatible with the European Way of Life

Help foster a multidimensional and interdisciplinary understanding of innovation and future regulatory and policy needs

Delivering on anticipation, integration and impact of EU policies:

- ▶ supporting the promotion and uptake of innovative approaches in life and health science research and healthcare, while ensuring that transformative innovations are ethical, fair and supported by evidence-based risk-benefit determinations,
- ▶ clarifying the principles to be respected for gathering, compiling and using data including through AI and exploring practical aspects of data exploitation for the development of innovations in healthcare and health research,
- ▶ identifying new genomic techniques and their applications in a variety of fields including micro-organisms, plants, animals, and humans with a view to risk assessment, monitoring, and anticipation,
- ▶ driving the standardisation and uptake of new models and methods in priority disease areas and biomedical research.

Time frame:

The roadmap of this portfolio comprises milestones for the identification of innovations, their assessment, translation, and anticipation of emerging technologies, setting its time horizon within **short-, medium- and long-term perspectives**. It aligns its current objectives with the policy timetables of partner Directorates-Generals, while working on shaping future policy frameworks.

Main partners:

Partner DGs

CNECT, DEFIS, ENV, GROW, HERA, RTD, SANTE

Selected stakeholders

EFSA, EMA, ENISA, OECD, WHO

Health science

Life science

Healthcare

Digital health

Health data

Vaccines

Artificial intelligence

Ethics

Innovation

Biomedical research

Cancer

Rare diseases

Antimicrobial resistance

New genomic techniques

Find out more



INNOVATION IN LIFE AND HEALTH SCIENCES

<https://joint-research-centre.ec.europa.eu/jrc-research-portfolios/life-and-health-sciences>

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