The Next Horizon:
EU-LIFE's vision for FP9

Contribution to the concept of FP9 under the H2020 mid-term evaluation

January 2017

This declaration is included in EU-LIFE contribution to the H2020 mid-term consultation process.

eulife

EU-LIFE's vision for FP9: key priorities

Through the launch of the H2020 programme the European Commission has taken an important step towards the promotion of an open, inclusive innovation and research landscape with a strong emphasis on uptake and implementation by society. As a result Research & Innovation (R&I) now forms a strong base for the revival of Europe's economy helping to stimulate investment for the creation of jobs, economic growth and competitiveness. However, as our society is constantly, and at an ever-increasing speed, exposed to new challenges in areas such as health, environment and social equality, it is now time to push the horizon further by truly opening up R&I to excellent, creative minds who have access to cutting edge infrastructures and can lead the breakthroughs that Europe needs to achieve its goals.

EU-LIFE member institutes call upon the European Commission to recognise that for R&I to create meaningful IMPACT beyond 2020, it is essential that the next framework programme, FP9, takes the following key actions into account:

1. Prioritise scientific excellence across the whole framework programme by reinforcing excellence as the major criterion; through expansion of the excellence-based ERC granting scheme; and support of large and medium-scale collaborative research projects with real opportunities for innovation at the early Technology Readiness Level (TRLs) across all the pillars of FP9

2. Scale up the scientific and innovation achievements of Europe by stronger investment in early Technology Readiness Level (TRLs 1-4) to feed the innovation cycle with breakthrough discoveries. This requires a revised strategy that acknowledges the different outputs from across the TRL spectrum

3. Connect research and professional knowledge transfer effectively by investing in efficient models that break through the silos of research and innovation

4. Implement funding schemes to set-up, renew and sustain state-of-the-art small scale research infrastructure that enable outstanding science and innovation in all corners of Europe

5. Attract and train the next generation of excellent scientists

eulife

1. Prioritise scientific excellence across the whole framework programme by reinforcing excellence as the major criterion; through expansion of the excellence-based ERC granting scheme; and support of large and medium-scale collaborative research projects with real opportunities for innovation at the early Technology Readiness Level (TRLs) across all the pillars of FP9

Support for research and innovation across all EU programmes should be excellence-driven, with a strong emphasis on bottom-up, open-ended research which will enable Europe to support truly innovative ideas. The ERC has proved to be the gold standard for excellence in FP7 and H2020. An additional crucial aspect of excellent research is its collaborative and interdisciplinary nature, which is not being properly addressed in H2020 for early TRLs (TRL 1-4). Therefore, we urge the EC to expand the funding of the current ERC granting schemes and to strengthen collaborative research across Europe by supporting large and medium –scale consortia in all FP9 pillars with a specific focus on early TRLs.

2. Scale up the scientific and innovation achievements of Europe by stronger investment in early Technology Readiness Level (TRLs 1-4) to feed the innovation cycle with breakthrough discoveries. This requires a revised strategy that acknowledges the different outputs from across the TRL spectrum.

We strongly support the EC's goal to promote research and innovation that brings benefits to society; Europe cannot and should not afford research that does not promise useful results. However, it is important to acknowledge that it is not always possible to anticipate which new ideas will result in improved wellbeing and prosperity, or lead to disruptive innovation. In addition, although the time needed for basic excellent research to develop into real benefits for society can be long and unpredictable, it brings the highest potential for true innovation. Therefore, we call on the EC to relinquish the pressure for narrow, short term impact research that does not support breakthrough scientific discoveries. This means shifting the focus from the unbalanced emphasis that H2020 places on the highest Technology Readiness Levels (TRLs) by providing more opportunities for discovery research falling within TRLs 1-4 across all pillars of FP9.

3. Connect research and professional knowledge transfer effectively by investing in efficient models that break through the silos of research and innovation

R&I is a complex environment where different stakeholders such as the research community, industry, funders and many other sectors including end-users, make their own contribution. Only by addressing each stakeholder's assets and building realistic expectations on how they contribute to R&I outputs can we succeed in transferring knowledge and technology to the benefit of the citizens. The next framework programme, and in particular the European Innovation Council (EIC), should focus on bringing research and innovation together – working at the INTERSECTION of research and innovation.

4. Implement funding schemes to set-up, renew and sustain state-of-the-art small scale research infrastructure that enable outstanding science and innovation in all corners of Europe

The Research Infrastructure (RI) needed to boost European capacity, jobs and economic growth works at many different levels. Alongside ESFRI, FP9 should create a generic support programme that promotes the development of European networks of small scale scientific platforms focusing not only on the technology per se, but on their interoperability, complementarity and access. Such a programme is currently lacking in Europe and is key to a sustainable RI ecosystem. In fact, small scale research infrastructures, including core facilities, are technological facilities that provide highly-specialised technological expertise as well as state-of-the-art technology. However, currently only large scale RI are considered at the European level. Focusing solely on large RI, the European Commission: a) underestimates the potential of innovative, emergent technologies and methodologies that exist in niche environments; b) narrows the range of already installed capacity and innovation existent in small, regional scale RIs; c) disregards the optimisation of small or regional RI which are key to the success of the Research & Innovation ecosystem in Europe by providing users with the expertise and technology they need where they are and on the scale they need; d) disregards the contribution of the small scale scientific platforms to the sustainability of the overall RI needs in Europe, including the sustainability of large RIs.

5. Attract and train the next generation of excellent scientists

Skilled and motivated people drive scientific innovation, but currently a wide range of excellent talent is underutilised in Europe as illustrated by the low overall success rate of H2020 and the high fraction of outstanding researchers that are left out of the ERC structure due to budgetary constraints (and not lack of excellence). We believe Europe cannot afford to forego fostering this high potential for innovation. Only by training the next generation of scientists in the best standards of open, collaborative and innovative research, can Europe aspire to successfully compete with other regions of the world. We urge the EC to expand the investment in research talent through significantly increased financial support to the global ERC budget, as well as to intra-national training schemes across FP9 sections for researchers at different career levels.

eulife

EU-LIFE is an alliance of research centres whose mission is to support and strengthen European research excellence (www.eu-life.eu). EU-LIFE members are leading research institutes in their countries and internationally renowned for producing excellent research, widely transferring knowledge and nurturing talent.

EU-LIFE Partners

Center for Genomic Regulation (CRG, Spain) | Central European Institute of Technology (CEITEC, Czech Republic) | European Institute of Oncology (IEO, Italy) | Friedrich Miescher Institute for Biomedical Research (FMI, Switzerland) | Institut Curie (France) | Institute for Molecular Medicine Finland (FIMM, Finland) | Instituto Gulbenkian de Ciência (IGC, Portugal) | Max Delbrück Center for Molecular Medicine in the Helmholtz Association (MDC, Germany) | Research Center for Molecular Medicine of the Austrian Academy of Sciences (CeMM, Austria) | The Netherlands Cancer Institute (NKI, The Netherlands) | The University of Copenhagen Biotech Research & Innovation Centre (BRIC, Denmark) | The Babraham Institute (Babraham, United Kingdom) | VIB (VIB, Belgium)