The Framework Programmes for Research and Technological Development (FP) have been highly successful funding programmes from the European Commission (EC) to support and foster research and innovation in the European Research Area. The current programme FP8 or Horizon 2020 with a budget of circa €60 billion focuses on the three pillars of Excellent Science, Industrial Leadership, and Societal Challenges. The European Council of Doctoral Candidates and Junior Researchers (Eurodoc), representing early-career researchers (ECRs) from 32 countries across Europe, would like to see the next framework programme FP9 aim beyond the horizon. We encourage the EC to significantly increase the budget for Excellent Science and for ECRs, to implement and support research in an Open Science framework, and to put researchers centre stage ensuring equal opportunities, relevant skills training, broad career development, and a balanced workload for researcher activities.

(1) Increase the Budget for Excellent Science and Early-Career Researchers

The budget for Excellent Science in Horizon 2020 is circa €24 billion. Excellent science is at the heart of research and innovation. If Europe wants to lead the field, especially given rising competition from Asia, then the budget for Excellent Science must be doubled to €50 billion. The budget for Marie Skłodowska-Curie Actions (MSCA) should be raised and applications from ECRs should be encouraged by increasing the number of doctoral and postdoctoral positions and directing specific funding calls at ECRs. All researchers in MSCA projects should be contractually employed for a minimum of 36 months and ideally in some cases for 48 months. The budget for the European Research Council should similarly be raised and aimed to nurture more ECRs. A new funding initiative before the Starting Grants should be introduced for 1-2 year research stays abroad for PhD holders of 0-2 years since PhD graduation. There should also be specific research funding calls in the Starting Grants aimed at encouraging more applications from ECRs. It is hereby crucial that the funding application procedure is further simplified to stimulate ECRs to apply. It is also crucial that attention is paid to addressing funding imbalances for researchers from the arts, humanities, and social sciences as well as from countries on the eastern and southern periphery of Europe.

(2) Raise Awareness and Train and Support Researchers in Open Science

The EC has ambitious plans to open up research and innovation through a threefold strategy of Open Innovation, Open Science, and Open to the World. Eurodoc supports this new vision for Europe and in particular embraces Open Science. A recent survey from Eurodoc and the EC shows that researchers are unaware of Open Science practices and policy initiatives, are not receiving training or institutional support for Open Science, and are not yet using standardised guidelines, metadata, or Data Management Plans (DMPs) to do Open Science. We ask the EC to take the next step in implementing Open Science and address these issues by creating a fourth pillar of Open Science in FP9 which will directly fund raising awareness, training, and supporting researchers in Open Science. Open Science should be integrated into the Innovative Doctoral Training Principles for doctoral candidates on FP9.
projects. All FP9 proposals should require a DMP, which does not count in the proposal judgement, but helps researchers to plan their data management using FAIR data principles. DMP templates should be provided by FP9 for this purpose. All research publications from FP9 projects should be mandated and funded to be published in Open Access journals and/or repositories. The EC should hereby encourage academic publishers to improve their publication options and reduce the fees for Open Access. All FP9 researchers should also have access to standardised guidelines, training, and support for minimally Research Integrity, Open Access, FAIR Open Data, and Citizen Science. The European Open Science Cloud (EOSC) should lastly involve all stakeholders playing a role in EOSC. Grassroots organisations representing researchers in particular should be on the EOSC Advisory Body.

(3) Support Career Development and Intersectoral Mobility of Researchers

The career structure of academia is essentially a pyramid consisting of a higher number of ECRs and a lower number of senior researchers. While most ECRs want to stay in academia, the reality is that the majority must find employment in the public/private sector (henceforth ‘industry’). A recent report from the EC has highlighted this issue and called for improved intersectoral mobility for researchers. We call on the EC to fund and support the career development of researchers on all FP9 projects. Transferable skills training aimed at industry should be offered such as project management and leadership, working in a team, communication skills, job interview skills, networking, and entrepreneurship. All researchers should have access to a Career Development Plan and to an institutional career counsellor for career support. Open Science activities should hereby be rewarded in the career assessment of ECRs. FP9 should also stimulate interaction and collaboration between researchers and industry through mentorship programmes with industry experts, networking and career events, and placements in industry during research. It is lastly crucial that diversity in research careers is not only recognised but is stimulated and supported by FP9.

(4) Support Research into Work-Life Balance and Mental Health of Researchers

Academics are increasingly becoming multi-skilled researchers with many additional tasks. They conduct research, publish articles, attend conferences, give workshops, teach and supervise students, apply for funding, and manage research projects and teams. They must now also be aware of implicit bias, collaborate with industry, open up their research, and involve the general public. On top of this, they are often under extreme pressure to excel, have short contracts, are highly mobile, are unsure of their careers, and have an unhealthy work-life balance. It is thus not surprising that academics suffer from work-related stress and show signs of clinical depression as in studies on ECRs in Belgium and the Netherlands. This indicates a potential failure of academic institutions to safeguard the work-life balance and mental well-being of researchers. We thus call on the EC to face this growing concern and to fund research in FP9 into the work-life balance and mental health of researchers to identify core issues, to assess the degree of the problem, and to provide recommendations.