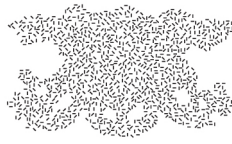


The Young Academy of Sweden

Recommendations for the preparation of the next European Framework Programme for Research and Innovation

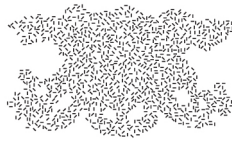
- **Continued support for the ERC.** The Young Academy of Sweden believes that curiosity-driven research across all scientific fields is the foundation for innovation and development. By investing in promising individuals and their ideas, Europe will strengthen its competitiveness in the world. The establishment of the ERC has provided vital economic support to European science at both starting and established levels. The reinforcement of the budget allocated to the ERC in Horizon 2020 (an increase in real terms of 60 % compared to FP7) has also sent a strong message to scientists worldwide that Europe is willing to compete actively with the US and other regions to recruit and support talented researchers in all fields. By increasing the pool of competition to a European level, the possibility to identify breakthrough ideas and the possibility to finance more high risk-high gain projects increases. As demonstrated in an independent pilot study¹ released in July this year, over 70 % of the ERC projects evaluated were highly successful and made scientific breakthroughs or major advances. The evaluation also indicated that interdisciplinarity was very frequent in productive projects, and that there was a significant potential for impact or applications within the economy, society, or public policy. While these findings were the result of only 199 out of the 500 completed projects so far, they give a clear indication that the ERC is investing in truly high risk-high gain research and contributing significantly to the society at large. We believe that funding excellent individuals, or small groups, is far more efficient than funding large consortia. The ERC's allocation of substantial funds to research characterised by novelty and creativity is the right way forward to scientifically generated solutions to societal challenges. **We therefore recommend that the ERC's**

¹ Qualitative Evaluation of completed projects funded by the ERC. European Commission, 2016.

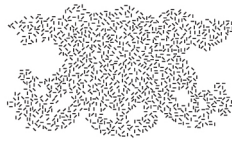


share of the next framework programme budget should be further increased.

- **Support European and global mobility for researchers.** Mobility is key for a flourishing research environment. Throughout history, scientifically strong nations have invariably reached that position by attracting talents also from outside their own borders. **The Marie Skłodowska Curie program and related initiatives play an important role in enabling mobility into, as well as within, Europe and should be allowed to grow.**
- **A voice for young science leaders in research strategy.** The next Framework Programme should be organised in a flexible manner in order to meet new and unforeseen challenges. **Young researchers must be involved in shaping the strategies for tackling future societal challenges**, which will need to be addressed in an inter- and transdisciplinary manner. We believe that this must be done with a global perspective since neither science, nor the future challenges, know any borders. Dialogues with third countries are thus required. In this context, however, we wish to stress that historically, solutions to health, environmental, societal and other challenges often have arisen from curiosity-driven research, rather than research initiatives orchestrated from the government level.
- **A proper role for the Humanities and Social Sciences.** The humanities and social sciences form an integral and essential part of the scientific response to global challenges in and of themselves; a relationship that needs to be reflected more clearly within the societal challenge pillar of the Framework programme. **We therefore recommend that the Humanities and Social Sciences maintain their position as independent scientific domains with a corresponding budget.**



- **Further simplification of EU funding.** Even though there is still room for improvement regarding the time and effort required for scientific and financial reporting of ERC-funded projects, the simplicity of applying for and handling an ERC grant compared to the larger cooperation projects is very much appreciated. **We therefore strongly encourage further simplification of EU funding in general.** This applies both to the application process, where shorter application texts and two-step application processes are encouraged, and to administration, management, and auditing of granted projects. The time-to-payment after grant decision should also be shortened to avoid delays in project starts and recruitment of team members. The extensive peer-review process that characterizes the ERC is a key factor to guarantee a qualitative scientific evaluation and it is behind the success of this funding body, and should thus serve as an example not just for the EU but for national research councils overall.
- **A streamlined European career system compatible with family life.** Academic career paths vary widely, not just between European countries but also sometimes even among universities in the same country. We believe that a clear and harmonised research tenure track system in Europe would facilitate the mobility between countries and increase attractiveness of a research career. This is crucial for the further development of the European Research Area for which **the Framework Programme is a key instrument and should be used to put in place harmonising measures with the ERC granting scheme as a role model.** A related and serious concern is the increasing gender imbalance towards the top of the scientific career ladder. The possibility to combine a research career with a family life should be supported throughout Europe, making a research career an attractive option.



- **Support for wide implementation of Open Access and Open Data.** In two joint statements², the Young Academy of Sweden and other young academies of Europe and the world support the European Commission's initiative to make both Open Access and Open Data key elements for a transition to an open science system that will enable researchers and citizens to benefit from publicly funded research. However, **we also urge European policy makers to ensure the viability and sustainability of Open Access** scholarly publishing by protecting standards of scholarly excellence, ensuring financial sustainability and transparency, as well as taking into account differences in the publishing habits of the different scientific domains. The effective adoption of Open Data on the other hand, requires substantial investments, specialized infrastructure, field-specific evaluation and regulatory efforts. **We therefore recommend a staged adoption of Open Data**, where benefits, and the investments required to achieve those benefits are carefully evaluated and balanced against each other at every step.
- **Secure grant-based funding as the main financial instrument.** The increasing use of loan-based financing within Horizon 2020 is a worrisome trend. Grant-based funding is essential to guarantee support to breakthrough research and the innovations it can lead to. **The Young Academy of Sweden thus agrees with the Competitiveness Council's conclusions³ in that the Framework Programme should ensure that loan-based financing is not further expanded to the detriment of grant-based research and innovation funding.**

² Position statement on Open Data, and Position paper on Open Access, by the Young Academies of Europe and the Global Young Academy (April 1, 2016)

³ Adoption of Draft Council conclusions on FP7 and the Future Outlook: Research and innovation investments for growth, jobs and solutions to societal challenges (8785/16)