

Response from the Young Academy of Sweden regarding "the Green Paper on a Common Strategic Framework for future EU Research and Innovation Funding".

- Promote investigator initiated research let the ERC grow. The Young Academy of Sweden believes that curiosity-driven research 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 economical support to European science at both starting and established levels. Just as importantly, however, this has also sent a strong signal to young scientists world-wide that Europe is willing to compete actively with the US and other regions to recruit and support talented researchers. (The cooperation grants, for all their other benefits, failed to accomplish this.) Funding through the ERC should therefore continue to increase not only in absolute terms but as a proportion of total EU science funding as well. The humanities and social sciences form an integral and essential part of the scientific response to global challenges; a relationship that needs to be reflected at the ERC funding level. 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 characterized by novelty and creativity is the right way forward to scientifically generated solutions to societal challenges. The need to stimulate scientists to thinking out of the box is exemplified by the recent demonstration that 75 % of protein research in human biology and disease is concentrated on the same 10 % of proteins known before the Human Genome Project, even if a lot more proteins have been genetically linked to diseases (Edwards et al. 2011, Nature: 470:163-5). 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. This is a true European added value.
- Further simplification of EU funding. The simplicity of applying for and handling an ERC grant compared to the larger cooperation projects is very much appreciated and we 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 extensive peer-review process that characterizes the ERC is a key factor behind the success of this funding body and should serve as an example not just for the EU but for national research councils overall.



- A voice for young science leaders in research strategy. Young researchers must be involved in strategies for tackling future societal challenges and the Common Strategic Framework (CSF) should be organised in a flexible way in order to be able to meet new and unforeseen challenges. Young researchers will be the ones facing and dealing with future 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 have neither national nor European boundaries. 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 streamlined European tenure track system. Academic career paths vary widely, not just between European countries but 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 the attractiveness of a research career.
- Science careers compatible with family life. The possibility to combine a research career with a family life should be supported throughout Europe, making a research career an attractive option. The increasing gender imbalance towards the top of the scientific career ladder is a serious but complex problem. Part of the solution may, however, be general and gender-equal rights to deduct time for career-breaks such as parental leave and the access to proper daycare for children.
- 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 Curie program and related initiatives plays an important role in enabling mobility within Europe and should be allowed to grow but could be put to better use as a tool for recruiting young researchers to Europe from other continents. Immigration regulations that make it difficult for non-native European scientists to establish themselves at research institutions in Europe (at all career levels) should be minimized.

The Young Academy of Sweden is a recently formed independent organisation consisting of 22 of the most talented young researchers in Sweden within all scientific fields (up to approximately 10 years after PhD). The initiative to start the Young Academy of Sweden was taken by the Royal Swedish Academy of Sciences. For more information: www.kva.se/sverigesungaakademi.