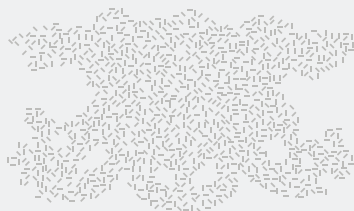




Best practices for supporting success in ERC grant competitions: Learning from national leaders

Policy recommendations developed by
the Young Academy of Sweden



SVERIGES UNGA AKADEMI

Best practices for supporting success in ERC grant competitions: Learning from national leaders

– Policy recommendations developed by the Young Academy of Sweden



SVERIGES UNGA AKADEMI

Published by the Young Academy of Sweden 2023

Project working group: Academy members Frida Bender, Hanne Fjelde, Alison Gerber, Jessica Jewell, Mia Liinason, Ewa Machotka, Janina Seubert and Helena Rosik at the Young Academy of Sweden's secretariat.

Report authors: Ewa Machotka, Jessica Jewell, Mia Liinason and Helena Rosik

Project leader: Ewa Machotka

Secretary to the investigation: Helena Rosik

Graphic design: ©Fräulein Design AB

Translation: Peter Wennersten/HIBOU

Please cite this publication: The Young Academy of Sweden. 2023. Best practices for supporting success in ERC grant competitions: Learning from national leaders. Report. Stockholm: The Young Academy of Sweden.

We would like to thank the Young Academies of Denmark, the Netherlands, Norway and Switzerland for their contribution to this study and all interviewees for sharing their experiences and views on best practices for supporting success in ERC grant competitions.

The Young Academy of Sweden would like to thank our main funders Erling-Perssons Stiftelse, Knut och Alice Wallenbergs Stiftelse, Natur & Kultur, and Ragnar Söderbergs stiftelse. Thanks also to Riksbankens Jubileumsfond for funding projects within the framework of the academy's international activities.

The Young Academy of Sweden is an interdisciplinary academy for a selection of the most prominent younger researchers in Sweden. The academy is an independent platform that provides young researchers with a strong voice in the policy debate and that promotes science and research, often focusing on children and young adults. Within the academy younger researchers meet across university and disciplinary boundaries. The Academy was founded in 2011 at the initiative of the Royal Swedish Academy of Sciences and has about 40 members elected for five years.

Sveriges unga akademi,
Lilla Frescativägen 4a, SE114 18 Stockholm, Sweden
info@sverigesungaakademi.se

www.sverigesungaakademi.se

Twitter: @ungaakademin

Facebook: Sveriges unga akademi

LinkedIn: Sveriges unga akademi

Instagram: sverigesungaakademi.se

Youtube: Sveriges unga akademi

ISBN: 978-91-527-6748-1

Content

Executive summary	4
Motivation for the study	8
Enablers and recommendations for ERC grants	11
Key enabler 1: dedicated support for developing ERC proposals	11
ERC grantees say time and access to competent and experienced advice are important for developing winning proposal	11
Policies supporting researchers with time and advice for ERC proposals	12
Recommended measures to support researchers with time and advice	13
Key enabler 2: good conditions for hosting ERC projects	14
ERC grantees say they need strong research environments and good conditions to host their projects	14
Policies in support of good conditions and incentives for ERC grantees	14
Recommended measures to ensure good conditions for hosting ERC grants	15
Key enabler 3: access to undirected funding to develop research	16
ERC grant winners say access to long-term undirected domestic funding is key to develop competitive ERC proposals	16
Policies stressing the importance of undirected funding	16
Recommended increased attention to undirected and curiosity-driven funding	17
Key enabler 4: strong research culture and rich international networks	18
ERC grantees say strong research culture and rich international networks are important	18
Policies supporting strong research cultures and international networks	18
Recommended support to create strong research cultures and increased mobility	19
Appendices:	21
Appendix 1: Project methodology	21
Appendix 2: Overview of ERC grant success enablers and hurdles as voiced by the interviewees from Denmark, the Netherlands, Norway, Sweden and Switzerland	23
Appendix 3: Overview of national policies targeting ERC grant application support systems in the investigated countries	30
Appendix 4: References	37



Executive summary

The European Research Council (ERC) is the main European funding organisation for excellent frontier research. Participation in the competitions and acquisition of ERC funding is a vital part of Swedish national research strategy. However, participation and success rates in securing ERC funding could be higher given the country's strong research tradition. In this report, the Young Academy of Sweden proposes policy recommendations aimed at strengthening Sweden's participation and success in the ERC funding programme. Our recommendations are aimed at three different types of actors: (1) the government, (2) Swedish funding agencies, and (3) universities. The recommendations are based on a series of interviews with early career research leaders in Sweden and in countries comparable to Sweden with successful track records in ERC grant competitions, as well as on a review of national policies supporting ERC applications from these countries. In order to meet the objectives of the Swedish national research strategy, high-quality research is absolutely decisive and our recommendations focus on ERC-related research policies and practices, as well as other conditions that are necessary for the national research system to stay internationally competitive. In addition to the recommendations, all findings from the interviews and the policy analyses are summarised as enablers of ERC grant competition success in other countries.

Key enablers

The four key enablers for developing winning proposals and hosting ERC projects are:

1. **dedicated support** for developing ERC proposals
2. **good conditions for hosting** ERC projects
3. **access to undirected funding** to develop research
4. **strong research culture** with rich **international networks**

These enablers operate with different time horizons; ranging from enablers with narrower scopes relating specifically to the ERC, to those with broader scopes relating to the overall national research landscape (FIGURE 1).

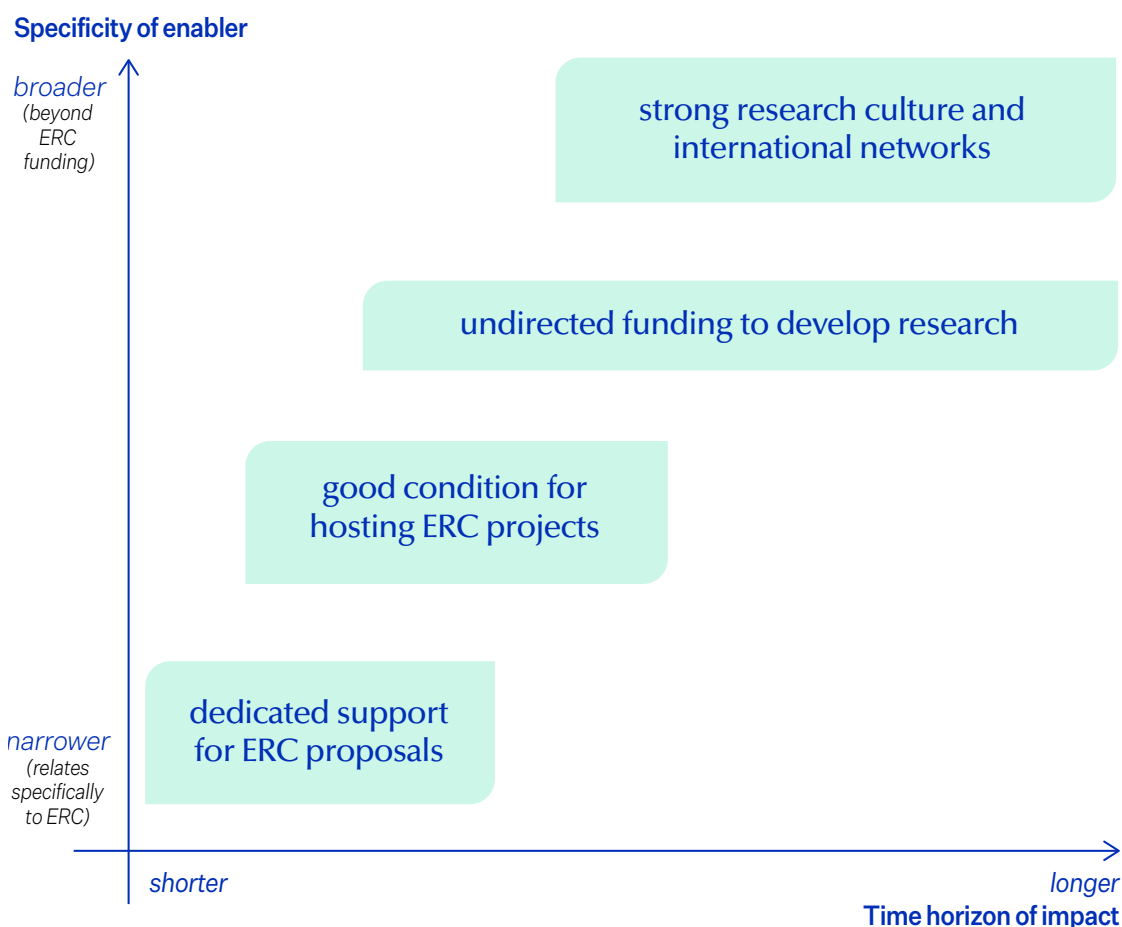


FIGURE 1. Key enablers and their relationship.



! Recommendations

1. to ensure that Swedish researchers have **dedicated support** for developing competitive ERC proposals, we recommend that:
 - a. the Swedish government **strengthens the capacity and resources of the ERC National Contact Point (NCP)** to bolster ERC guidance and competence at universities, and offer advice and ERC-training for host institutions and applicants through hands-on workshops and reading days;
 - b. the Swedish Research Council in collaboration with other funders offer **seed funding for improving proposals** to all ERC reapplicants who have advanced to Stage 2 (grade A and B) and were invited to the interview, yet did not receive funding. Seed funding may cover, for instance, pilot studies, data and feedback collection, as well as research time;
 - c. universities:
 - i. offer competitive **proposal-writing seed funding** for first-time ERC applicants to ensure that they have allocated time for proposal writing and resources to prepare strong ERC proposals;
 - ii. strengthen ERC training at universities **as regards proposal and interview preparation** to complement the NCP training.
2. to ensure that researchers enjoy **good conditions for hosting ERC projects at Swedish institutions**, comparable to those in other European countries, we recommend that:
 - a. the Swedish government take action to ensure that funding is available for **overhead costs beyond the 25%** currently covered by the ERC to prevent overhead costs from deterring either applying for or hosting ERC grants;
 - b. Swedish research funders work together with universities over the long term to revise **the current overhead cost model** ('SUHF model') in order to increase transparency and efficiency, incentivise participation in seeking ERC grants, and reduce disparities between institutions;
 - c. universities ensure that Swedish institutions are suitable locations to host ERC projects by:
 - i. **providing funding** for the salaries of PIs through direct government funding (basanslag) so that grantees have sufficient time for their ERC projects;
 - ii. preventing **overhead costs from deterring participation** or detracting from individual researcher budgets;
 - iii. developing clear **career incentive mechanisms** to attract and retain ERC grant winners at Swedish host institutions, e.g., by means of administrative support for projects, tenure track positions, and offering funding top-ups or prolongation grants.



3. to ensure **access to undirected funding** and increase the compatibility of research in Sweden with the ERC vision of frontier research, we recommend that:
 - a. the Swedish government **increases the proportion of funding for scholar-initiated research** allocated to the national funding agencies to ensure development of strong curiosity-driven frontier research environments in Sweden;
 - b. Swedish research funders support risk-taking and **curiosity-driven research** across all research domains and safeguard **scientific excellence** as the key assessment criterion for proposals;
 - c. universities ensure that researchers have **good conditions to pursue research**, including sufficient time for research and salary coverage to promote discoveries of unexpected results.
4. to support **strong research cultures** rooted in the **international research landscape** we recommend that:
 - a. the Swedish government:
 - i. **ensures that ERC funding programmes are strengthened** and protected within Horizon Europe and future framework programmes;
 - ii. **improves procedures and conditions for the immigration of foreign researchers** to reinforce Sweden's competitiveness as a knowledge nation;
 - iii. amends the Higher Education Ordinance to **extend the cut-off dates** for applying for assistant professorships, from five to seven years after obtaining a PhD, to ensure universities attract the best candidates for these positions;
 - b. Swedish research funders **strengthen their investment in mobility mechanisms** for researchers, such as competitive sabbatical funding and international exchange support;
 - c. universities:
 - i. provide sufficient **long-term funding to develop strong research environments** and individual research careers;
 - ii. conduct open and transparent **merit-based recruitments** striving to attract internationally competitive talent;
 - iii. **promote mobility and international collaboration**, by means of career development, policy, administrative support, and performance evaluations;
 - iv. encourage **strong academic leadership** by promoting academic merits in leadership positions, ensuring adequate administrative relief and support to maintain research, and incentivising collegiality.

Motivation for the study

The ERC funding scheme is Europe's flagship programme for cutting-edge curiosity-driven frontier research. As a result, obtaining ERC funding is often seen as the hallmark of a strong national research climate and many European countries have specific policies and practices in place to support researchers applying for these competitive grants and for attracting ERC grant winners. Participation in Horizon Europe and acquisition of ERC funding is also a vital part of the Swedish national research strategy.¹

However, as noted by Vinnova in their report from 2021,² the application rate of Sweden-based researchers in the European funding framework, as well as their competitiveness in terms of success rate, are lower than other comparable countries (FIGURE 2 AND 3), particularly when considering the substantial Swedish investment in research and development (R&D). Within the ERC programme, Sweden performs at the level of the EU27 average, but notably lower than comparable countries³ (FIGURE 3). For example, ERC statistics from 2020 show that researchers in Sweden received funding for 40 ERC projects while Dutch scholars secured grants for 81 projects. At the same time Sweden invested 3.5% of its GDP in R&D (the highest percentage in the EU), compared to 2.3% of GDP for the Netherlands.⁴ The Swedish Research Council notes in a 2020 report that there is potential for improvement regarding Sweden's participation in ERC competitions, especially within the humanities and social sciences.⁵ In 2022, senior researchers in Sweden in the humanities and social sciences received a record number of ERC Advanced Grants so far (6 grants).⁶ It is a commendable achievement that shows that such accomplishments are feasible in the humanities and social sciences, and should continue to be supported, particularly for early career researchers (ECRs).⁷

Various efforts and initiatives are already underway to support successful Swedish participation in ERC competitions. Examples include interview training, training camps and proposal development, as well as funding to strengthen incentives and support excellence. However, actions are scattered, and different actors in the system could benefit from increased knowledge of the measures taken at different levels, in order to promote best practices and improve coordination.

¹ Utbildningsdepartementet (2021).

² Hansson et al. (2021).

³ Including, but not limited to the countries subject to the current study.

⁴ OECD (2023).

⁵ Johansson et al. (2020).

⁶ Vetenskapsrådet (2023-3).

⁷ Definitions of early career researchers may differ depending on research domain and national context. Here we mean researchers with up to approximately ten years of experience after PhD, which is largely based on ERC formulations. European Research Council (2023-1 and 2023-2)



Application rate, relative success rate and success rate for Sweden, comparable countries and EU 27 in Horizon 2020.

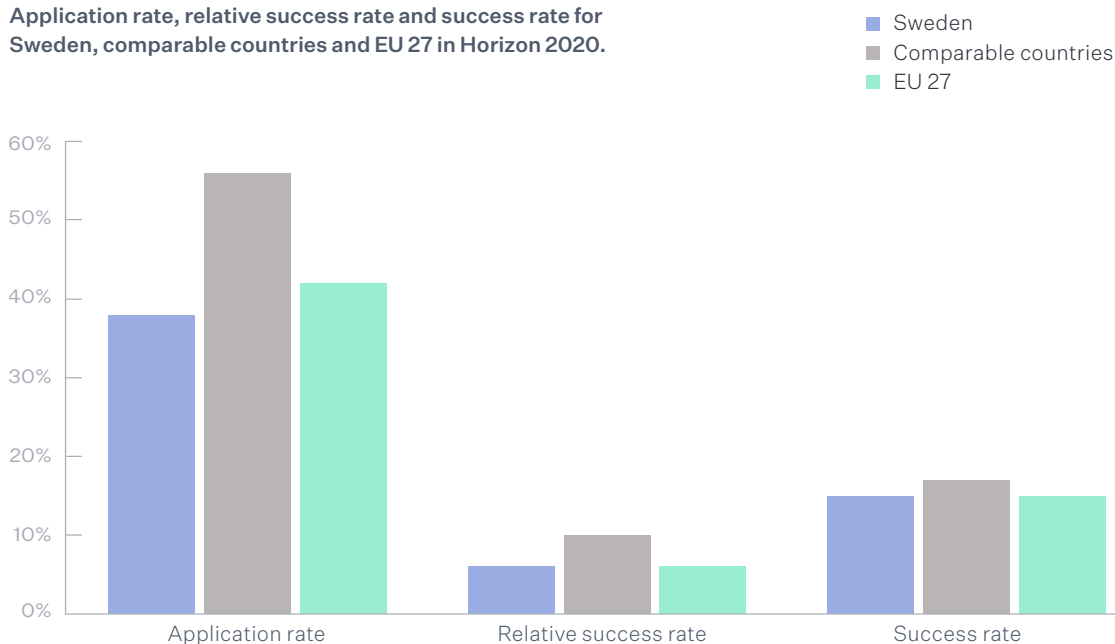


FIGURE 2. Application rate, relative success rate and success rate^a in Horizon 2020 for Sweden, comparable countries (Austria, Belgium, Denmark, Finland, Norway, The Netherlands, Switzerland) and the EU 27. Source: Adapted from Hansson (2021). *Horisont 2020 – årsbok 2021. Svenskt deltagande i EU:s ramprogram för forskning och innovation.*

ERC success rate within Horizon 2020 of Sweden, comparable countries and EU 27

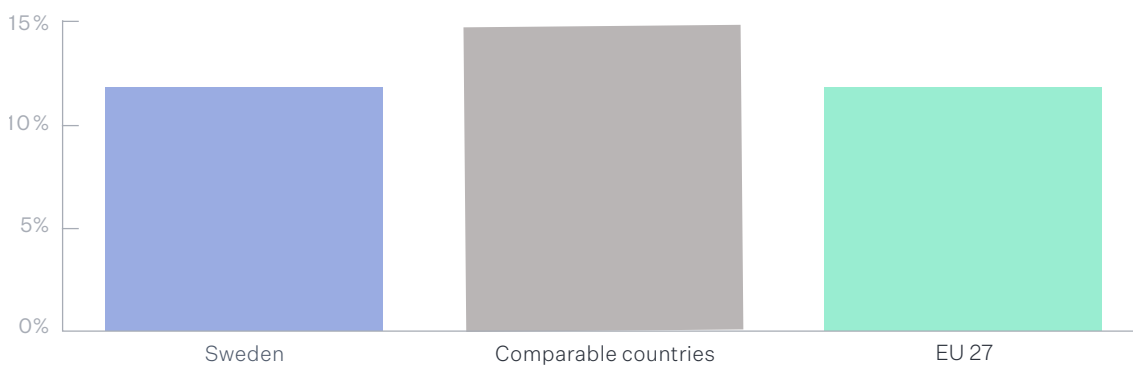


FIGURE 3. ERC success rate within Horizon 2020 of Sweden, comparable countries (Austria, Belgium, Denmark, Finland, Norway, The Netherlands, Switzerland) and the EU 27. Source: Adapted from Hansson (2021). *Horisont 2020 – årsbok 2021. Svenskt deltagande i EU:s ramprogram för forskning och innovation.*

^a *Application rate* refers to the number of applications in relation to the number of researchers in the R&D system, *relative success rate* indicates the number of granted applications in relation to the number of researchers, and *success rate* is the number of granted applications in relation to the number of applications.

Lower Swedish participation and success in the ERC funding scheme impacts the overall national research climate. Limited opportunities to conduct free researcher-initiated research envisioned by ERC may also reduce the quality of research in Swedish academia. This may in turn weaken our research environments, diminish the capacity to attract and retain top researchers, and compromise Sweden's position as a knowledge nation for the future. It may also particularly impact early career researchers, for whom ERC grants are often an ideal way to develop research contributions and build a scientific career.

In response to this situation the Young Academy of Sweden has conducted an investigation to identify mechanisms for increasing the number of successful applications for ERC grants in Sweden in a sustainable way, with a special focus on early career researchers. Our investigation complements previous studies by the Swedish Research Council on the ERC-related situation in Sweden in two ways.⁹ First, we focus on **understanding enablers** of successful ERC grant competitions by interviewing young ERC grantees in Sweden and other countries – Denmark, the Netherlands, Norway, and Switzerland.¹⁰ These countries were selected because of their similar preconditions for R&D, and their similar size, as compared to Sweden.¹¹ The Netherlands and Switzerland are top performers within the ERC programme. Norway has seen a positive development in terms of ERC success, especially within the humanities and social sciences. Second, we **identify potential interventions** by surveying ERC grant support policies and best practices in successful ERC countries as well as Sweden.

Our methodology is explained in Appendix 1. An overview of ERC grant success enablers and hurdles as voiced by the interviewees is presented in Appendix 2. And an overview of national policies regarding support systems for ERC grant applications in the investigated countries is included in Appendix 3.

⁹ Vetenskapsrådet (2017), Johansson et al. (2020), Wikgren et al. (2019) and Wikgren et al. (2019-2).

¹⁰ Currently, Switzerland is considered a non-associated country and does not participate in the ERC competition but it successfully did in the past.

¹¹ Comparable countries have preconditions for R&D that are similar to those that apply for Sweden, and are also similar in terms of number of publications in relation to population size and citation impact. Vetenskapsrådet (2021).



Enablers and recommendations for ERC grants

Here we summarise the main findings of our interviews with young academy members and ERC grant winners from Denmark, the Netherlands, Norway, Sweden, and Switzerland, as well as our analysis of ERC-related national policies in these countries. For each enabler, we summarise the findings from our interviews, followed by our summary of policies related to that enabler, and conclude with our recommendations.

Key enabler 1: dedicated support for developing ERC proposals

ERC grantees say time and access to competent and experienced advice are important for developing winning proposal

The key specific factor that interviewees identified as being important for developing a successful proposal was having **dedicated support** in the form of allocated time, training and competent advice on developing ERC proposals. A number of interviewees reflected on the importance of seed funding to develop ERC proposals (to conduct pilot studies, collect data and feedback), the need for dedicated time for developing a proposal, and a variety of support schemes offered at local (department, faculty) as well as national levels. High teaching loads and inadequate coverage of researchers' salaries by direct government funding were seen as a main barrier to developing ERC applications. Unequal distribution of seed funding across research domains was also mentioned as an obstacle.

In addition, grantees often identified access to training for applicants, opportunities to work with competent and experienced grant application advisers who offered personalised feedback (either through their universities or external consultants), and opportunities to review successful ERC proposals as key to their success. Customised training and individualised feedback on applications including line editing (which, for instance, is offered in the Netherlands) was also stressed as being important. The ERC funds a particular type of researcher-initiated frontier



research and several grantees mentioned that attending training workshops helped them understand the specific nature of the ERC proposal. The interviewees also noted that ERC grant schemes frequently are perceived as challenging and associated with a high administrative burden, and that domestic grant schemes consequently often are considered to be more attractive (less time-consuming, more manageable). This might deter researchers from applying for ERC grants. It was suggested that development of the support know-how (training, advice, capacity building and competent administrative support) could change these perceptions.

Policies supporting researchers with time and advice for ERC proposals

The countries we surveyed have a number of policies in place to support researchers in developing applications. One common national policy is to offer **seed grants** to support pilot studies and allocation of time dedicated to application preparation. For example, the Swiss National Science Foundation (SNSF) offers seed funding in its SPARK programme defined as ‘rapid funding of novel and unconventional ideas’.¹² Seed funding on a national level is also offered in Norway. In Sweden, the Swedish Foundation for Strategic Research (SSF) and Vinnova (Sweden’s innovation agency) offer competitive grants in the range SEK 200,000–500,000 to develop applications, but this funding is only available for specific fields (e.g., medical research). In the investigated countries, seed funding is also often made available by universities. In Sweden, some but not all faculties and institutions offer competitive seed grants for developing applications, which entails the risk that talented researchers in other environments miss out on such opportunities.

Another common policy is targeted **funding for all reapplications** since reapplying increases the chances of success. For example, the Norwegian Research Council offers NOK 500,000 to improve an ERC proposal within two years of submitting the original one, if a researcher advanced to Stage 2 (grade A and B), yet was not awarded funding.¹³ Until recently, Denmark also had a similar policy. The Swedish Research Council funds ERC Starting Grant and ERC Consolidator Grant proposals on the ERC reserve list, which have received the highest grade (A) but were not funded due to budget constraints. Applicants in Sweden can also apply for the Swedish Foundations’ Starting Grant, which is offered for one year at a time, for up to five years, given that the researcher continues to apply to ERC funding programmes. These funding practices are commendable and would benefit from wider recognition and awareness in the system. However, no support for improving a proposal in order to reapply is currently available in Sweden for ERC Starting Grant and ERC Consolidator Grant applicants who previously made it to Stage 2 and received grade B, or for ERC Advanced Grant applicants who made it to Stage 2 and received either an A or B. Such support would strengthen the incentives to try again and further increase the possibilities of succeeding to secure ERC funding since reapplicants have better chances of winning a grant if they improve their proposals and reapply.

Another common targeted ERC support measure is to offer **training workshops** on the ERC application process and so-called ‘**reading days**’ where applicants can study successful

¹² Swiss National Science Foundation (2023-2)

¹³ The Research Council of Norway (2022)



ERC proposals. For example, in Norway training is part of the NCP's comprehensive nation-wide support system for Horizon Europe applicants, and several Norwegian universities run training workshops with the NCPs and experienced grant advisers and/or private consultancies. Additionally, several European countries organise national 'information hubs'. In Switzerland, the nation-wide Euresearch platform is run in collaboration with universities providing comprehensive information and training activities on funding for all researchers. Norway and Austria implement 'reading days' where NCPs provide ERC applicants with access to successful proposals. In Sweden, the NCP organises ERC information webinars and interview workshops. ERC training is offered by some universities, though quality and comprehensiveness vary. In the past, Swedish private funders have organised a writing workshop for applicants from smaller universities, and sometimes they continue to support this at the local level, but these important initiatives have not been permanent.¹⁴ Increasing the capacity to offer effective training, competent advice and proposal writing seed funding would make it possible to attain the objectives of Swedish national research strategy and boost chances of ERC success.

! Recommended measures to support researchers with time and advice

We recommend that a number of measures be introduced or expanded upon to ensure that researchers in Sweden enjoy **dedicated support** in developing ERC proposals:

- a. the Swedish government **strengthens the capacity and resources of the ERC National Contact Point** (NCP) to support the development of ERC guidance and competence at universities, and offer advice and training on ERC for host institutions and applicants through hands-on workshops (tailored to different research domains¹⁵) and reading days (during which applicants have a chance to review successful proposals).
- b. the Swedish Research Council in collaboration with other funders offer **seed funding to improve proposals** for all ERC reapplicants (at all three ERC levels) who previously have advanced to Stage 2 (grade A and B) and been invited to the interview, but who did not receive funding. Seed funding may cover, for instance, pilot studies, data and feedback collection, as well as research time, and should be automatically available to all applicants who were interviewed on condition that they reapply for ERC funding within 2 years.
- c. universities:
 - i. **offer proposal-writing seed funding** on a competitive basis for first-time applicants (for pilot studies and/or allocation of time to proposal writing);
 - ii. **provide support** on proposal writing and interview preparation by strengthening training at the university level to complement efforts by the NCP.

¹⁴ E.g. Riksbankens Jubileumsfond previously offered these training workshops, and the Kempe Foundation is currently organising a pilot training programme offered to scholars in northern Sweden.

¹⁵ PE: Physical Sciences and Engineering; LS: Life Sciences; SH: Social Sciences and Humanities.

Key enabler 2: good conditions for hosting ERC projects

ERC grantees say they need strong research environments and good conditions to host their projects

Many interviewees emphasised the importance of being in a strong research environment with access to supportive leaders and experienced grant administrators to host a winning proposal at a given institution. Several grantees also noted the importance of transparent incentive systems (e.g., hiring and promotion policy) and a potential for long-term funding of their research. The availability of long-term funding of a given research theme via centres of excellence (especially in smaller research domains) was also mentioned as an important incentivising factor to apply for and host ERC projects at a given institution. Additionally, several interviewees noted a negative impact when institutional support was lacking.

Additionally, several grantees noted the importance of the financial and administrative conditions associated with hosting a grant-receiving project at a particular institution, including the amount of overhead¹⁶ cover, direct government funding, and additional support. Some of our interviewees also reflected on the importance of incentivising the retention of grants at the individual and institutional level—by means of measures such as tenured positions for winning an ERC grant, full overhead cover for ERC grants, and ‘top-up’ grants in the form of an additional PhD student or prolongation support. The variety of conditions at host institutions sometimes influenced decisions by grantees on whether to stay at the host institution or transfer to another one.

Policies in support of good conditions and incentives for ERC grantees

The financial and administrative conditions offered are important factors when researchers select host institutions. In the countries we investigated, except Sweden, overhead costs were not seen as a problem since they were usually lower than the 25% covered by the ERC, and in countries where they were higher, financial support for host institutions were available at the national level. In contrast, the financial conditions were identified as a major barrier in Sweden where institutions generally have high overhead costs ranging between 20–65%, often far above the 25% covered by the ERC.¹⁷ We find that Swedish overhead rates can decrease the value of the ERC grant by 6–19% for a project in the natural sciences and by 5–30% in the humanities.¹⁸ This means that an ERC grant is less desirable for some institutions and less valuable in Sweden than in other national contexts. Additionally, researchers in Sweden have testified that their institutions do not allow them to apply for ERC funding because they cannot or will not pay the excess overhead costs. In addition to the higher overhead rates vis-à-vis other countries, PIs in Sweden are often responsible for raising a significant portion of their

¹⁶ Sometimes also referred to as indirect costs.

¹⁷ Young Academy of Sweden (2021); Vetenskapsrådet (2019).

¹⁸ In an attempt to visualise the effects of the variation of indirect costs, depending on the university and the department hosting the grant, we analysed two typical ERC grant applications (one in the natural sciences and one in the humanities) and compared how much funding remains available for the actual project research, after deduction of overhead costs.



own salary, which can decrease the capacity of PIs to focus on their projects due to the need to assume additional responsibilities or apply for more funding to cover their salaries.

There are a number of examples of researchers from Sweden winning ERC grants and then changing host institutions to another EU country. We identified several incentive mechanisms to retain ERC projects at host institutions. The loci of these types of policies vary—from national funders to the university level. For instance, in Norway there is performance-based basic funding for increased participation in EU projects (RETUR-EU) to compensate institutes and cover overhead costs above 25%. Additionally, the Swiss National Science Foundation supports universities by funding indirect costs of projects.¹⁹ Such policies incentivise universities to seek ERC grants and encourages universities to establish incentives and support mechanisms for researchers. Policies at the university level can take the form of prolongation funding for ERC projects after their completion or ‘top-ups’ in the form of funding for a PhD or post-doc to make the grant go further. In Sweden, some universities co-fund ERC projects, for example by offering university-funded PhD or post-doc positions for ERC projects in addition to covering any overhead gaps, as competitive prolongation funding helps secure long-term research and maintain high-quality research expertise.

! Recommended measures to ensure good conditions for hosting ERC grants

We recommend the following interventions to ensure that researchers **have good conditions for hosting** ERC projects in Sweden, comparable to those in other European countries:

- a. the Swedish government acts to ensure that funding is available for **overhead costs beyond the 25%** currently covered by the ERC, in order to ensure that overhead costs do not deter the hosting of ERC grants at Swedish institutions. This funding could be administered by the Swedish Research Council;
- b. Swedish research funders work together with universities over the long term to revise **the current overhead cost model** (‘SUHF model’) in order to increase transparency and efficiency, incentivise participation in seeking ERC funding, and reduce disparities between institutions;
- c. universities ensure that Swedish institutions are suitable locations to host ERC projects by:
 - i. **providing funding** for the salaries of PIs through direct government funding (basanslag) so that grantees have sufficient time for their ERC projects;
 - ii. preventing **overhead costs from deterring participation** or detracting from individual researcher budgets;
 - iii. developing clear **career incentive mechanisms** to attract and retain ERC grant-winners at Swedish host institutions, such as administrative support for projects, tenure track positions, and funding top-ups or prolongation grants.

¹⁹ Swiss National Science Foundation (2021-1)

Key enabler 3: access to undirected funding to develop research

ERC grant winners say access to long-term undirected domestic funding is key to develop competitive ERC proposals

Many of our interviewees noted that undirected research funding at the domestic level contributed to the development of the type of ‘frontier’ research ideas that the ERC requires. For example, the importance of Dutch national funding for excellent, curiosity-driven research rather than earmarked grants was noted. Several interviewees also noted the importance of long-term funding opportunities to develop innovative ideas, particularly in positions and institutions where researchers have little dedicated time for research due to high teaching loads and limited domestic opportunities for funding.

Policies stressing the importance of undirected funding

The issue of the proportion of undirected calls to strategic calls is broader than the discussion about ERC funding, and has a broader impact on the overall research landscape than the first set of interventions. It is clear, though, that some countries have addressed the issue in the past and we believe Sweden can learn from their initiatives. For example, Switzerland supports researcher-initiated frontier research rooted in the principle of researcher freedom and scientific autonomy. The positive impact of domestic curiosity-driven calls is evidenced by the fact that over 80% of ERC grant winners between 2007–2019 in Switzerland first received funding from the Swiss National Science Foundation (SNSF).²⁰ In the Netherlands, funding distributed by the Dutch Research Council (NWO) for researcher-initiated research (‘Open Competition’, ‘Talent Programme’) in 2022 was nearly three times larger than the budget for strategic and thematic calls (‘Knowledge and Innovation Covenant’).²¹ The connection between domestic funding for researcher-initiated research and ERC success rates is also visible in the Netherlands, for example in the social sciences and humanities. NWO’s researcher-initiated ‘Talent Programme’ funded as many proposals in the ‘Social Sciences and Humanities’ domain (91 projects in 2022) as in the ‘Science’ domain (89 projects in 2022). ‘Applied and Engineering Sciences’ (32 projects) and ‘Health Research and Development’ (46 projects) received as much combined.²² As the Netherlands are the big winners in the ERC funding programmes, also in the social sciences and humanities, this indicates that a strong focus on funding research projects of the highest scientific quality, where researchers themselves have the opportunity to pursue researcher-initiated frontier research, yields positive results also in ERC competitions. The ERC itself aims for a similar success rate between panels, across different domains, and thus allocate more funding to panels with more proposals.

²⁰ Swiss National Science Foundation (2021-2).

²¹ Funding related to the exploration of societal issues is also distributed via NWO’s ‘Dutch Research Agenda’ (NWA) programme. Broad research themes defined by means of 25 research ‘routes’ and 140 questions, originating in a public consultation process, create the basis for open research and building interdisciplinary research consortia. The Dutch Research Council (2022).

²² The Dutch Research Council (2023)



These policies and practices are highly relevant to securing ERC funding in Sweden since there is a potential for improvement in the social sciences and humanities, as indicated by the Swedish Research Council's report from 2020. The Swedish Research Council funds both researcher-initiated projects as well as proposals responding to specific thematic calls. Half of the *number* of calls offered today in Social Sciences and Humanities (SH) are earmarked for specific topics, rather than open and researcher-initiated. At the same time, the *budget* (i.e., the amount of overall funding) for earmarked calls is expected to increase from 20% in 2020 to 33% by 2025.²³ Additionally, the total grant approval rate in the SH domain is generally lower than in other domains. In 2022 it was 13% (11% in 'Project' funding) which makes it the least funded domain compared to Educational Sciences (15%), Artistic Research (16%), Natural and Engineering Sciences (20%), Clinical Therapy Research (21%), Medicine and Health (23%), and Development Research (25%).²⁴ This, in combination with the limited dedicated time for research in the social sciences and humanities, decreases the chances for researchers in these fields to develop researcher-initiated frontier research ideas and build competitive track records, which, as indicated by the Swedish Research Council report, could explain the lower participation and success rates of this domain in the ERC competitions.²⁵

! Recommended increased attention to undirected and curiosity-driven funding

We recommend the following measures to ensure **access to undirected funding** and increase the compatibility of research in Sweden with the ERC vision of frontier research:

- a. the Swedish government **increases the proportion of funding for researcher-initiated research** allocated to the national funding agencies to ensure frontier research advances in Sweden;
- b. Swedish research funders support risk-taking and curiosity-driven research across all research domains and safeguard **scientific excellence** as the key assessment criterion for proposals;
- c. universities ensure that researchers have **good conditions to pursue research**, including sufficient time for research and salary coverage in support of long-term research promoting discoveries of unexpected results.

²³ Vetenskapsrådet (2023-1)

²⁴ Vetenskapsrådet (2023-2)

²⁵ Johansson et al. (2020)

Key enabler 4: strong research culture and rich international networks

ERC grantees say strong research culture and rich international networks are important

Nearly all interviewees stressed the importance of strong research cultures and rich international networks to their success. Strong research cultures were described as active, supportive, and collegial. The positive role of mentors, role models, and colleagues in preparing the application (peer-review, mock interviews) as well as a supportive local culture and community was noted by interviewees from Switzerland, Denmark and Norway. In this sense, access to research leaders was thought to bring increasing returns as those who have been successful in ERC competitions or in other competitive funding schemes encouraged others to apply and mentored younger scientists to also develop their talent.

The importance of strong research environments that attract international talent to Switzerland (where many ERC grantees come from abroad) was also noted. Many interviewees also identified active engagement in international research networks and research associations as key to their success. This was for example the case of Switzerland, and it demonstrates the value of internationalisation.

Policies supporting strong research cultures and international networks

Strong research cultures depend on high-quality research performance of individual researchers identified, supported, and incentivised by merit-based hiring, rewarding, and promotion practices (including promotions to leadership positions). This is because research cultures are generally believed to depend on research leaders who can create high trust and a shared sense of identity at the group level.²⁶ Although leadership styles within strong research environments vary, they are all marked by active and engaged research leaders. Identifying, training, and supporting research leaders can lead to more impactful science.

In addition to the importance of being rooted in strong national contexts, a connection to international networks and scientists is recognised as key to developing and advancing cutting-edge science and successful ERC projects. Policies supporting such networks include those supporting research exchanges as well as sabbaticals. In Norway, all researchers can apply for grants from the Research Council of Norway to enable a mobility period abroad, and the same research council allows and rewards mobility support when evaluating research grants.²⁷ In Switzerland, SNSF has a comprehensive grant programme supporting international mobility, including more than 20 different publicly funded grant schemes.²⁸ Some Swedish funders offer mobility grants for post-doctoral scholars to carry out research projects outside of

²⁶ Roxå et al. (2013)

²⁷ The Research Council of Norway (2023)

²⁸ Swiss National Science Foundation (2023-1)



Sweden. Such support mechanisms are very valuable also beyond the post-doc level, enabling continuous professional development for academic staff.

Policies related to mobility and internationalisation also have a broader positive impact than ERC funding alone and several countries pursue internationalisation strategies in their research and recruitment. The Netherlands offers tax reductions for new foreign experts including researchers, meaning they are exempt from paying tax on up to 30% of their salary for 5 years. Switzerland is one of the countries with the strongest research environments in the world and it also has one of the most internationalised workforces in academia worldwide, with a high level of inbound mobility and international recruitment (more than half of its academic workforce comes from abroad).²⁹ A significant proportion of these inbound scholars have gone on to win ERC grants. International mobility is incentivised, legislatively facilitated, and is seen as a mandatory step in an academic career. Swedish universities also consider internationalisation to be a strategic measure,³⁰ and call for improving support systems for incoming researchers and their families as regards immigration procedures, working life and living conditions. This includes effective support for Swedish language acquisition especially for tenured researchers (through access to high-quality courses and allocation of time to language acquisition).

Internationalisation also concerns the harmonisation of career systems across Europe. For example, the ERC ‘cut-off’ for Starting Grants is seven years after PhD completion, but the cut-off for assistant professorship positions in Sweden is five years after PhD completion,³¹ which can decrease the probability of attracting the best candidates to open positions.³² Many strong research nations do not have a set limit for when positions corresponding to assistant professorships can be applied for. In order to promote the internationalisation of Swedish academia and build strong research environments, the Swedish system needs to harmonise with international practice, and extending the time period during which it is possible to apply for assistant professorships would enable universities to recruit the strongest candidates, nationally and internationally. The strict five-year rule also hampers internationalisation and excellence in the sense that it benefits candidates who choose to stay close to the research network created during their doctoral studies and penalises those who take risks by broadening their networks, moving to a new country, or expanding into a new research field.

! Recommended support to create strong research cultures and increased mobility

We recommend the following measures to support **strong research cultures** rooted in the **international research landscape**:

- a. the Swedish government:
 - i. **ensures that ERC’s funding is strengthened** and protected within Horizon Europe and future framework programmes;

²⁹ Sautier et al. (2021)

³⁰ Shih et al. (2020); Westenhoff et al. (2021)

³¹ The tenure track position assistant professor (biträdande lektorat) can currently only be applied for within five years after completing a PhD degree. SFS 2023:83

³² The same was suggested by the Swedish Research Council in their 2020 report. Johansson et al. (2020)





- ii. **improves procedures and immigration conditions for foreign researchers** to reinforce Sweden's competitiveness as a knowledge nation;
 - iii. amends the Higher Education Ordinance to **extend the cut-off dates** for applying for assistant professorships from five to seven years after obtaining a PhD to ensure universities attract the best candidates for these positions.
- b. Swedish research funders **strengthen their investment in mobility mechanisms** for researchers, such as competitive sabbatical funding and international exchange support (e.g., travel and workshop funding).
- c. universities:
- i. provide sufficient **long-term funding to develop strong research environments** and individual research careers;
 - ii. implement open and transparent **merit-based recruitment** strategies striving to attract internationally competitive talent;
 - iii. **promote mobility and international collaboration**, by means of career development, policy, administrative support, and performance evaluations;
 - iv. encourage **strong academic leadership** by emphasising academic merits in assigning leadership positions, ensuring adequate administrative relief and support to maintain research activities, and incentivising collegiality.

Appendices:

1. Project methodology
2. Overview of ERC grant success enablers and hurdles as voiced by the interviewees from Denmark, the Netherlands, Norway, Sweden and Switzerland
3. Overview of national policies targeting ERC grant application support systems in the investigated countries
4. References

Appendix 1: Project methodology

In order to identify enablers and potential interventions to increase the rate of ERC grant success in Sweden we conducted a bottom-up, explorative study, including policy analysis and interviews with top early career researchers in five selected EU countries. Interviewees were mainly ERC grantees, recruited from national young academies in Denmark, the Netherlands, Norway, Sweden and Switzerland.³³ These countries were selected because of their higher education institution systems and sector sizes being comparable to Sweden's, and because of their broad engagement with ERC grant competitions and/or success in ERC competitions. The interviews were conducted in order to identify the most successful practices and systems that could be applicable in Sweden. The policy analysis provided details about policies and respective contexts and allowed the project team to analytically compare and contrast the qualitative data gathered in the interviews.

The study was carried out in four steps:

Step 1: Mapping systems supporting and incentivising applicants and grantees in Sweden.

The study began in December 2020/January 2021 by mapping existing systems to support and incentivise applicants and grantees in Sweden. This data was collected in a survey distributed to the members of the Young Academy of Sweden. The results indicated that early career researchers would like to see an improvement of the existing support and incentive mechanisms. These responses prompted a more in-depth exploration of the experience of support and incentive systems in other countries, among successful ERC applicants.

³³ Currently, Switzerland is considered a non-associated country and does not participate in the ERC competition but it successfully did in the past.



Step 2: Analysis of systems supporting and incentivising ERC applicants and grantees, using data collected in interviews with top early career researchers.

The second step of the study was undertaken in January 2022. The project group contacted colleagues in the national young academies of Denmark, the Netherlands, Norway, Sweden and Switzerland. A series of semi-structured expert interviews were held with research leaders in these countries (members of young academies, ERC grant holders), focusing on questions around existing support and incentive mechanisms in the respective higher education landscapes. The interviews lasted between 1–1,5 hours each and were recorded. Notes were taken to capture successful grant application support and incentivising policies in the respective countries, for comparative analysis.

Step 3: Analysis of policies supporting and incentivizing ERC applicants and grantees in their respective countries.

In October 2022, the project group proceeded to the third step of the study, in which an analysis of policies for supporting and incentivising for ERC applicants and grantees was conducted and best practices were identified. The analysed policies were developed by the research councils of Denmark, the Netherlands, Norway, Sweden and Switzerland respectively (or by institutions with corresponding responsibilities).

Step 4: Analysis of data and development of policy recommendations.

In October through December 2022, the project group carried out a comparative analysis of the interview data collected. The analysis was undertaken in three phases. First, two project members listened to each interview and took notes. Second, the project group jointly discussed all reflections made while listening to the interviews. Third, project members collected their findings, based on impressions from the interviews, conducted comparative analysis at the project meetings, and identified best practices. Finally, policy recommendations based on the interviews and the analyses of the investigated countries' policies were formulated and presented in this report.

Appendix 2:

Overview of ERC grant success enablers and hurdles as voiced by the interviewees from Denmark, the Netherlands, Norway, Sweden and Switzerland

This section presents an overview of ERC grant success enablers and hurdles hindering participation and success in ERC competitions, as voiced by the interviewees from Denmark, the Netherlands, Norway, Sweden and Switzerland.

Key enabler 1: dedicated support for developing ERC proposals

Competitive seed funding for allocating time and development of pilot studies for ERC proposals

Flexible seed funding from the university supports applicants to develop competitive proposals

National one-year long competitive seed grants (SPARK) allow for the testing of novel ideas and collection of pilot data

Comprehensive seed funding offered at the national level to potential new applicants and especially reapplicants. The Research Council of Norway offers NOK 500,000 for resubmitting proposals to applicants who progressed to the interview; seed money for the application's graphic design. In case of smaller countries nation-wide support really matters, especially for smaller universities, as it is available for everyone, not only for powerful institutions

National seed funding for reapplicants who progressed to ERC Stage 2 is important

Seed funding offered by the faculty to applicants is the key to develop competitive proposals

Seed funding for conducting pilot studies and securing feedback on the application draft played an important role

Seed funding for teaching relief, especially in small research environments, is vital





Funding for the interview training is important

Inclusiveness and transparency in the distribution of seed funding is important

The economic help is highly appreciated

Support at the faculty level is very useful; consultancy services paid, seed money (NOK 100,000) for instance for a project proposal workshop is available

Sufficient research time to prepare applications and build a competitive research track record, especially in the underfunded fields of the humanities and social sciences with excessive teaching loads, is key to increasing the number of ERC applications

Transparent and effective support mechanisms to enable periods of teaching relief are important factors for facilitating applications

Funding to prepare the application and teaching buy-out may facilitate the application process and subsequent success

Funding for acquiring feedback from external consulting company is important

Training workshops and competent advice on developing ERC proposals

Nation-wide Euresearch online platform and offices located at different universities provide information and training for all applicants regardless of affiliation and field of research. The organisation is funded at least partly by the government, but most of the events are jointly run with the institutions' grants offices, and the latter are funded internally by the institutions

Customised training and feedback on applications tailored to different fields and research topics offered by consulting companies are important

High-quality professional developmental and line editing services to improve applications are appreciated

ERC 'reading days' (giving feedback to each other, no external readers), workshops, online seminars with consulting companies organised by NCP is available

Advanced feedback on applications by 'supercompetent' grant advisers is important





High-quality professional application writing support for applicants is available

Successful applications ‘reading-days’ organised by NCP are helpful

Interview training with external consulting company funded by the research council is very useful

A professional support system offered at the faculty level that features feedback on applications, mock interviews, information sessions, help with grant agreement negotiations is appreciated

ERC grant holders network organised by NCP is very helpful

Peer-review system is appreciated

Research office at the faculty level offers feedback (by specialists on the ERC), pays for external consultancy, organises mock interviews

Clear information on what kind of support is offered at the faculty level is crucial especially for international researchers/newcomers to the system, post-docs or researchers in temporary positions

The ERC grants’ reputation of being extremely competitive often prevents researchers from applying. More information would help to resolve this issue

Knowledge and understanding of ERC funding and institutional support for researchers interested in applying for ERC grants in smaller research environments is needed

Domestic grant schemes are often considered more attractive (less time-consuming, more manageable, less bureaucracy, better working conditions), which prevents researchers from applying for ERC funding. Development of the support know-how (training, advice, competent administrative support) could change these perceptions



Key enabler 2: good conditions for hosting ERC projects

Coverage of overhead costs beyond the 25% offered by ERC funding

Bonus for departments hosting ERC grants is available

Bonus from the ministry to an institute (of which part goes to the PI) is available. Institutes get additional funding based on research achievements and ERC grants count in this evaluation

University funding for covering the overhead gap when department costs are higher than the 25% offered by ERC is provided

Reducing overhead costs for ERC projects levied by the universities is key to increase participation in ERC

Greater responsibility for funding the salaries of PIs through direct government funding facilitates applications

Incentive mechanisms to attract and retain ERC grant winners

Transparent and fixed hiring policy, tenure track positions, and promotion fast tracks offer incentives for individuals to apply for ERC grants are available

Career development incentives: permanent job or promotions are offered

Transparent policy on offering permanent employment and additional funding for doctoral students at some institutions is important

A major incentive is the possibility to negotiate tenure track positions

Strong local/faculty/university administrative support allows applicants to focus on science

ERC funding for indirect costs returned to the project offers additional incentive

'Top-up' funding for ERC grantees enables project prolongation



Best practices for supporting success in ERC grant competitions: Learning from national leaders

– Policy recommendations developed by the Young Academy of Sweden



SVERIGES UNGA AKADEMI

Additional doctoral student paid for by university is offered

Salary increase is offered

Bonus for ERC winners (around NOK 60,000–80,000 per year) is offered

Prestige and recognition ('seal of excellence')

Recognition of ERC grantees (invitations to talks, PR, meetings with university leadership) is appreciated

ERC application is valued very highly in the yearly individual performance evaluation

Preselection and prioritisation of researchers without tenure track positions (depending on research field or departmental needs) does not incentivise these researchers to apply for ERC funding

Nation-wide policy on hiring and promoting grantees would help

Nation-wide support for departments hosting ERC grants is important as it would allow them to take the risk and offer permanent positions to ERC grantees

Central administrative support to implement the project especially when it comes to budgeting is crucial

ERC grants are perceived positively but tenure track is a problem for some departments (problem of hiring, outsourcing decisions about what will be taught at the department etc.). A review of the impact on institutions of hosting ERC projects (implementation and consequences) in different countries would be helpful



Key enabler 3: access to undirected funding to develop research

Understanding of the beneficial value of ‘blue skies research’ for the individual and the national research landscape is vital

Application preparedness among researchers in Norway was improved by the excellence centres (especially within the humanities). This resulted in improved ERC success rates in Norway

Domestic funding for excellent, curiosity-driven disciplinary, interdisciplinary and multidisciplinary research has a larger impact on ERC competition success than earmarked grants

Funding for researchers engaging with independently envisioned research ideas is key to ERC success

Opportunity to carry out research in a subject of one’s own choosing without any thematic constraints is very important



Key enabler 4: strong research culture with rich international networks

Foster strong research cultures

Supportive local culture and community of grantees help applicants at every stage

Very supportive collegial research culture especially at smaller universities is important

Mentors and role models are important in general (including colleagues who have received ERC grants). Access to researchers in a similar career age group is important. As work conditions of applicants and mentors are similar, the young academy is a great resource

Mentors, role models and colleagues are important, especially the young academy

A strong and supportive research culture is vital for success in ERC competitions





A culture supportive of research and collegial support is key for developing innovative research and grant applications

Support is offered mainly at the department and faculty levels: the department evaluates candidates who prepare applications, support to those who are called to interviews (mock interviews) is important

At the department level a peer-review group (2–3 senior researchers including previous grantees) was vital

Support at the department level: competent assistance in grant budget drafting and keep-ing track of time sheets. At the faculty level: checking periodical ERC reports is helpful

Support mobility mechanisms and internationalisation

Large and strong international research networks are important

International associations offer mentorship and valuable feedback

Individually organised support in domestic and international networks, e.g., access to successful applications, feedback, mentorship, multiple mock interviews are important for success

Internationalisation and the development of a track record for a career in Europe and the worldwide is important

International networks are vital

Promotion and dissemination of ‘national’ research results across the EU and national financial support for building international consortia are appreciated

Very good universities and research institutions in Switzerland attract international talent



Appendix 3:

Overview of national policies for ERC grant application support systems in the investigated countries

This section summarises national policies devised to support and incentivise researchers and research institutions to participate in Horizon Europe. The compilation is based on information provided on websites of national research councils and institutions performing similar functions in the investigated countries. Countries are presented in alphabetical order.

Denmark

Danmarks Frie Forskningsfond

- Danish ERC program

Until recently, Danmarks Frie Forskningsfond offered the DFF–Danish ERC programme that aimed to strengthen the opportunities for talented early career researchers to win ERC grants. The funding covered a variety of costs related to the improvement of ERC Starting Grant or ERC Consolidator Grant applications that previously had reached Stage 2 (grade A or B) of the evaluation process, but did not receive funding. Researchers could apply for grants of up to DKK 35,000 per month (excluding overhead costs). Grants could be awarded for up to 24 months.

<https://dff.dk/en/dff-danish-erc-programme-english-call-for-proposals-published>

Danish Agency for Higher Education and Science

- EuroCenter

EuroCenter hosted by the Danish Agency for Higher Education and Science functions as Danish National Contact Point (NCP) for Horizon Europe. EuroCenter provides counselling for Danish research and innovation communities on the funding opportunities, and the regulations for participation in Horizon Europe. EuroCenter also organises information meetings and webinars, as well as courses for grant advisers, researchers, companies, municipalities interested in Horizon Europe etc. EuroCenter is also the coordinator of the EU-DK Support Network.

<https://ufm.dk/en/research-and-innovation/funding-programmes-for-research-and-innovation/eu-and-international-funding-programmes/horizon-europe/counselling/about-us/about-eurocenter/about-eurocenter>

- The EU-DK Support Network

The EU-DK Support Network is a network for EU grant advisers in the public sector. The members of the network offer counsel on a wide range of EU programmes including Horizon Europe. They



advise and guide applicants and provide information about EU funding opportunities within research, innovation, education, business development, and entrepreneurship.

<https://ufm.dk/en/research-and-innovation/funding-programmes-for-research-and-innovation/eu-and-international-funding-programmes/horizon-europe/counselling/network-groups/the-eu-dk-support-network>

- The EU-ERFA Networking Group

The network focuses on Horizon Europe and brings together administrators and advisers from the public sector. The members of the network exchange knowledge and practical experiences relating to participation in Horizon Europe. EU-ERFA aims to enhance knowledge about Horizon Europe among administrative staff at public research institutions. The goal is to help researchers with applications and participation in the EU research and innovation programmes.

<https://ufm.dk/en/research-and-innovation/funding-programmes-for-research-and-innovation/eu-and-international-funding-programmes/horizon-europe/counselling/network-groups/the-eu-erfa-networking-group>

The Netherlands

The Netherlands Enterprise Agency

The Netherlands Enterprise Agency hosts the National Contact Point for ERC in Horizon Europe. The NCP advises applicants on Horizon Europe. Its services are free of charge. They offer training and workshops, individual advice, proofreading of proposals etc., thus complementing strong and competent grant support offices at individual universities in the Netherlands.

<https://business.gov.nl/partners/netherlands-enterprise-agency/>

Norway

The Research Council of Norway

- EU Networks in Horizon Europe

The EU networks aim to prepare Norwegian applicants for Horizon Europe. The Research Council of Norway contributes with funding to operate the networks' hubs located at different research institutions throughout the country. The networks' goal is to mobilise Norwegian participants to the framework programme by building competence in Horizon Europe, improving intersectoral cooperation between key actors, learning and sharing best practices and building alliances.

<https://www.forskingsradet.no/en/horizon-europe/eu-networks/>

- Consultancy services

The Research Council of Norway offers free consultancy services, through the external consulting company PNO, to applicants with a high potential to win Horizon Europe grants (typically recommended by the local grant advisers). Researchers can get consultancy support for collaborative projects (RIA, IA and CSA programmes) and individual applications for ERC, MSCA or COST networks.

<https://www.forskingsradet.no/en/horizon-europe/consultancy-services/>

- Horizon Europe courses

The Research Council of Norway offers courses on Horizon Europe funding. They are free of charge and open to all researchers. Courses include: introduction to Horizon Europe, proposal writing, project management, finance and budgeting, consultancy and interactive face to face workshops, special course on the ERC, MSCA etc.

<https://www.forskingsradet.no/en/horizon-europe/horizon-europe-courses/>

- Guidance on international research networks

On their website the Research Council of Norway provides guidance on how to build and participate in international research networks, e.g., how to find partners for projects or to participate in an application for Horizon Europe funding. Researchers can also apply for support to establish a regional EU network.

<https://www.forskingsradet.no/en/apply-for-funding/international-funding/international-research-networks/>

- PES Horizon Europe – support for project establishment and positioning

The PES funding scheme aims to ensure that applications to Horizon Europe that include Norwegian participants are of a high quality and is intended to increase the success rate of Norwegian applications. Target groups are the public sector, industry and research organisations. Individual researchers interested in PES grants apply through their institutions. The funding can cover costs related to travel, participation in virtual and physical events, establishing consortia, networks, and preparation of project proposals.

<https://www.forskingsradet.no/en/call-for-proposals/2021/project-establishment-positioning-horizon-europe/>

- Financial support to submit a new ERC grant proposal

Researchers who have applied to the ERC and advanced to Stage 2 of evaluation process, without having been awarded funding, can apply for support to prepare a new proposal. The

Research Council of Norway awards up to NOK 500,000 to applicants submitting a new grant proposal within two years of submitting the original one. The funds may cover different expenses, e.g., payroll costs for the PI to make room for time to prepare the proposal, salaries to people who assist the PI (in connection with the preparation of an improved ERC grant proposal), direct costs related to experiments, travel and conference-related expenses, data collection and use of infrastructure intended to generate results that will strengthen ERC grant proposals.

<https://www.forskingsradet.no/en/call-for-proposals/2019/financial-support-to-submit-a-new-erc-grant-proposal/>

- Supplementary Funding for Norwegian Participants in Horizon 2020 Projects

This funding scheme targets Norwegian participants with a key role in Horizon 2020 projects. The purpose of this supplementary funding is to encourage a greater number of Norwegian actors to take on a key role in Horizon 2020 projects and to give a wider range of Norwegian actors access to knowledge developed in Horizon 2020 projects. Activities approved for funding may include establishment and operation of national networks, initiatives to involve additional Norwegian partners in a Horizon 2020 project, participation in conferences, etc.

<https://www.forskingsradet.no/en/call-for-proposals/2021/supplementary-funding-horizon-2020-horizon-europe-projects/>

- Reading days of successful proposals

The Research Council of Norway has established a library of successful proposals and NCPs arrange so-called ‘reading days’ for new applicants. During the reading days, researchers who have started working on their applications are invited to select a few proposals from the library that can be reviewed during the reading day. The purpose is to enable applicants to get acquainted with applications, see how they are structured, narrated, etc.

<https://www.forskingsradet.no/en/events/2022/erc-proposal-reading-day-in-oslo4/#AboutTitle>

- Webinars

The NCPs organise webinars with information about EU grants.

The Norwegian government

- Funding for increased participation in EU projects (RETUR-EU)

To incentivise and ensure that Norwegian institutes can afford to participate in EU projects, the Norwegian government has launched a programme for EU performance-based basic funding for research institutions. As research institutions participating in EU projects do not receive full coverage for their overhead costs from the EU, RETUR-EU funding aims to cover the remaining costs.



<https://www.forskningsradet.no/en/research-policy-strategy/institute-sector/participant-funds-eu-return/>

Sweden

The Government Offices (Regeringskansliet)

The Government Offices have assigned the responsibility for Sweden's participation in Horizon Europe to several public agencies. The Swedish Research Council (Vetenskapsrådet) hosts the National Contact Point (NCP) for programmes related to 'Excellent Science'. Sweden's innovation agency (Vinnova), has been designated as Sweden's contact agency for other Horizon Europe programmes ('Global Challenges and European Industrial Competitiveness', 'Innovative Europe'). NCPs are responsible for dissemination of information about EU grant calls and for supporting Swedish participation in EU grant competitions.

The Swedish Research Council

The Swedish Research Council works to promote Sweden's participation in ERC competitions. It hosts the National Contact Point (NCP) that acts as a link between researchers in Sweden, administrative staff at Swedish universities and the ERC Executive Agency (ERCEA). Their responsibility includes informing about calls, the application process, and other activities e.g. webinars for prospective applicants.

- ERC interview training

The Swedish Research Council regularly arranges workshops to prepare applicants having progressed to Stage 2 of the application process for the upcoming ERC interview. This applies to the ERC Starting Grant, ERC Consolidator Grant and the ERC Advanced Grant. The participation is open to all researchers based in Sweden and free of charge.

- Funding for ERC proposals on the reserve list

The Swedish Research Council offers funding equivalent to a five-year ERC grant to researchers who have received the highest grade on their application (A) and have made it to on the ERC's reserve list, yet without having received funding. This applies to researchers who have applied for the ERC Starting Grant and the ERC Consolidator Grant.

<https://www.vr.se/uppdrag/internationellt-arbete/eus-ramprogram-horisont-europa/sok-medel-fran-erc.html>

- Webinars

The NCPs organise webinars in order to inform about EU grants.

Vinnova (Sweden's innovation agency)

- Funding for preparation projects for international application within health

This funding scheme is aimed at researchers who plan to develop a proposal for an international grant targeting health research in a wide sense. Researchers can apply for SEK 200,000–500,000. Funding can be used to develop the scientific or technical base of the project and to strengthen the project's business acumen. Activities to strengthen the consortium component such as meetings and discussions with potential international partners, may also receive funding. Target groups are researchers, research institutes, the public sector and care providers, as well as small and medium-sized enterprises (SMEs), which plan to participate in international grant proposals.

<https://www.vinnova.se/en/calls-for-proposals/utlysning-2021-01671/preparation-projects-for-international-2021-01807/>

- Funding to promote Swedish participation in Horizon Europe: planning projects in sustainable industry

This funding scheme supports the development of proposals for the Horizon Europe programme within the area of Sustainable Industry. Funding is made available for planning projects and should result in the submission of a proposal. The funding can be used to develop the project idea, establish a consortium, etc. The consortium must consist of at least three Swedish project partners, of which at least one is a company. Each project can apply for up to SEK 500,000 (for a coordinating role) or SEK 300,000 (for a participating role).

<https://www.vinnova.se/en/calls-for-proposals/call-for-proposals-to-promote-2021-01569/promote-swedish-participation-in-2021-01980/>

- Webinars

The NCPs organise webinars with information about EU grants.

Swedish Foundations' Starting Grant (SFSG)

Swedish Foundations' Starting Grant is offered to ERC applicants who progressed to Stage 2 of the evaluation and received the highest grade (A) yet did not receive funding. It is granted for one year at a time (the amount originally applied for from the ERC) and up to five years, given that the researcher continues to apply for ERC Starting Grants (when eligible). It is funded by Erling-Persson Foundation, Kempe Foundations, Foundation Olle Engkvist Byggmästare, Ragnar Söderberg Foundation, Riksbankens Jubileumsfond or Svenska Sällskapet för Medicinsk Forskning.

<https://startinggrant.se/start/the-grant/>



Switzerland

State Secretariat for Education, Research and Innovation (SERI)

- Euresearch

Euresearch is a non-profit organisation funded by the State Secretariat for Education, Research and Innovation (SERI). Euresearch is organised as a network with a head office hosting Horizon Europe NCPs and regional offices at various research institutions. All Euresearch offices are partly funded by the government. Most of them are run jointly by Euresearch and the institutions' grant support offices. The Euresearch offices promote and facilitate the participation of researchers, organisations and companies in European projects and programmes related to research and innovation. Their services are free of charge and include providing information and guidance on funding opportunities.

<https://www.euresearch.ch/>

Appendix 4: References

Reports

Hansson, Gustav; Jensen, Eric; Legrand, Garance; Lindberg, Johan; Magnusson, Mimmi; Spuhler, Jeannette; Zika-Viktorsson, Annika. 2021. *Horisont 2020 – årsbok 2021, Svenskt deltagande i EU:s ramprogram för forskning och innovation.* Report VR 2022:04. Stockholm: Vinnova. Available at: https://www.vinnova.se/contentassets/76659ea101a148ba9a70dee7e4838c66/arsbok-2021_horisont-20202.pdf?cb=20220616143702 [15 March 2023]

Johansson, Hanna Sofia; Plant, Laura; Renner, Lena; Wickström Östervall, Linnea. 2020. *Söktryck och framgång vid Europeiska forskningsrådet – En analys med fokus på humaniora och samhällsvetenskap i Sverige.* Report VR05. Stockholm: Vetenskapsrådet. Available at: https://www.vr.se/download/18.6bd0597171d2a04c52dd4/1590423023239/So%CC%88ktryck%20och%20framga%CC%8Ang%20vid%20Europeiska%20forskningsra%CC%8Adet_VR_2020.pdf [15 March 2023]

Roxå, Torgny; Mårtensson, Katarina. 2013. *Understanding strong academic microcultures: an exploratory study.* Lund: CED, Centre for Educational Development, Lunds universitet. Available at: https://lucris.lub.lu.se/ws/portalfiles/portal/55148513/Microcultures_eversion.pdf [16 March 2023]

Shih, Tommy; Gaunt, Albin; Östlund, Stefan. 2020. *Responsible internationalisation: guidelines for reflection on international academic collaboration.* Stockholm: STINT. Available at: https://www.stint.se/wp-content/uploads/2020/02/STINT_Responsable_Internationalisation [25 March 2023]

Swiss National Science Foundation. 2023-1. *SNSF international cooperation strategy.* Bern: SNSF. Available at: <https://www.snf.ch/media/en/zib1PuDj2vvd98sv/snf-international-strategy-with-table-of-international-instruments.pdf> [16 March 2023]

Universitetskanslersämbetet. 2019. *Finansieringen av svenska universitet och högskolor: De ekonomiska effekterna av statens styrning och resurstilldelning 2007–2017.* Report 2019:2. Stockholm: Universitetskanslersämbetet.

Utbildningsdepartementet. 2021. *Nationell strategi för Sveriges deltagande i Horisont Europa 2021–2027.* Report. Stockholm: Regeringskansliet. Available at: <https://www.regeringen.se/contentassets/78b3b1ba662d49518b29a0156d220111/en-nationell-strategi-for-svenskt-deltagande-i-horisont-europa-20212027/> [15 March 2023].

Vetenskapsrådet. 2017. *Svenskt deltagande i Europeiska forskningsrådet.* Report VR1706. Stockholm: Vetenskapsrådet. Available at: https://www.vr.se/download/18.5f55e5e81618e003b7066f9f/1555332295977/Svenskt-deltagande-i-%20Europeiska-forskningsradet_VR_2017.pdf [15 March 2023]

Vetenskapsrådet. 2021. *Forskningsbarometern 2021*. Report VR2110. Stockholm: Vetenskapsrådet. Available at: <https://www.vr.se/analys/rapporter/vara-rapporter/2021-10-21-forskningsbarometern-2021.html> [06 April 2023]

Vetenskapsrådet. 2023-1. *Forskningsöversikt 2023: Humaniora och samhällsvetenskap*. Report VR2305. Stockholm: Vetenskapsrådet. Available at: <https://www.vr.se/analys/rapporter/vara-rapporter/2023-01-27-forskningsoversikt-2023-humaniora-och-samhallsvetenskap.html> [29 March 2023]

Wikgren, Marianne; Gerdes Barriere, Stina; Fröberg, Johan. 2019. *Externfinansieringens roll i svensk högskoleforskning*. Report VR1910. Stockholm: Vetenskapsrådet. Available at: https://www.vr.se/download/18.50a36236168b14238b1e52/1552382968194/Externfinansieringens-roll-i-svensk-h%C3%B6gskoleforskning_VR_2019.pdf [15 March 2023]

Wikgren, Marianne; Plant, Laura. 2019-2. *Kan ERC:s bedömning av forskning användas nationellt?* Report VR1913. Stockholm: Vetenskapsrådet. Available at: https://www.vr.se/download/18.4dd26b09169cbe0ddda973/1556181114543/Kan-ERCs-bedomning-av-forskning-anvaendas-nationellt_VR_2019.pdf [06 April 2023]

Newspaper and Journal Articles

Sautier, Marie. *Move or perish? Sticky mobilities in the Swiss academic context*. Higher Education. Vol. 82, No. 4, 2021: 799–822. doi.org/10.1007/s10734-021-00722-7.

Westenhoff, Sebastian; Söderfeldt, Ylva; Larhammar, Dan; Berggren, Magnus. 2021. *Migrationsreglerna slår mot forskning*. Svenska Dagbladet. November 29. Available at: <https://www.svd.se/a/9KxVMI/migrationsreglerna-slar-mot-forskningen> [11 April 2023]

Young Academy of Sweden. 2021. *OHållbart system för overhead*. Tidningen Curie. November 9. Available at: <https://www.tidningencurie.se/debatt/ohallbart-system-for-overhead/> [16 March 2023]

Databases

OECD. 2023. *Gross domestic spending on R&D (indicator)*. doi: 10.1787/d8b068b4-en Available at: <https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm> [07 March 2023]

Vetenskapsrådet. 2023-2. *Statistics 2022*. Available at: <https://www.vr.se/english/analysis/swedish-research-in-figures/overall-decision-statistics/statistics-2022.html> [07 March 2023]

Government bills and legislation

SFS 2023:83. *Högskoleförordning* (1993:100).

Websites

Dutch Research Council. 2022. *Funding lines*. Available at: <https://www.nwo.nl/en/funding-lines> [16 March 2023]



Dutch Research Council. 2023. *34 leading scientists receive Vici Grants*. Available at: <https://www.nwo.nl/en/news/34-leading-scientists-receive-vici-grants> [16 March 2023]

European Research Council. 2023-1. *Starting Grant*. Available at: <https://erc.europa.eu/apply-grant/starting-grant> [26 April 2023]

European Research Council. 2023-2. *Consolidator Grant*. Available at: <https://erc.europa.eu/apply-grant/consolidator-grant> [26 April 2023]

Swiss National Science Foundation. 2021-1. *The SNSF also funds indirect research costs of universities*. Available at: <https://data.snf.ch/stories/overhead-2021-en.html> [16 Mars 2023]

Swiss National Science Foundation. 2021-2. *The SNSF funds over 80% of researchers from Switzerland before their first ERC grant*. Available at: <https://data.snf.ch/stories/erc-grantees-snsf-grants-en.html> [16 March 2023]

Swiss National Science Foundation. 2021-3. *339 outstanding projects approved*. Available at: <https://www.snf.ch/en/7CuXDrIH1svby5vs/news/339-outstanding-projects-approved> [16 March 2023]

Swiss National Science Foundation. 2023-2. *Spark*. Available at: <https://www.snf.ch/en/8EWqXT6CZ7wuAJUq/funding/programmes/spark> [27 March 2023]

The Research Council of Norway. 2022. *Financial support to submit a new ERC grant proposal*. Available at: <https://www.forskningsradet.no/en/call-for-proposals/2019/financial-support-to-submit-a-new-erc-grant-proposal/> [07 March 2023]

The Research Council of Norway. 2023. *Research stays abroad*. Available at: <https://www.forskningsradet.no/en/apply-for-funding/funding-from-the-research-council/Personal-Overseas-Research-Grants/> [16 March 2023]

Vetenskapsrådet. 2023-3. *Rekordmånga forskare i Sverige får ERC Advanced Grant 2022*. Available at: <https://www.vr.se/aktuellt/nyheter/nyhetsarkiv/2023-03-30-rekordmanga-forskare-i-sverige-far-erc-advanced-grant-2022.html> [06 April 2023]