

## **Report on best practices for re-entry into science after a critical career break**

Long career breaks (parental leave, long illness, taking care of sick family members, compulsory military service) can seriously hamper or even put an end to scientific careers. For example, long career breaks reduce the number of scientific publications/citations of researchers compared to those with no career breaks. This can be a disadvantage in promotion or in applying for research grants where bibliometrics plays an important role. Moreover, science is progressing very rapidly in many fields and career breaks of longer than one year (e.g. three-year parental leave in Estonia) can make it very difficult to return as it requires extra effort to catch up with the advancements of the last years.

Work package 2 (Work and family) of the Baltic Gender project aims to develop family-friendly strategies to raise the awareness of career interruptions and to establish policies to express the institutions commitment to supporting family care-giving responsibilities as well as other situations (like long illness, compulsory military service) that can cause long career breaks. The aim of this report is to analyse funding opportunities for employees at critical career moments (e.g. re-entry positions) considering national regulations and best practices in the 8 partner institutions of Baltic Gender.

Compilation of national and institutional funding regulations from the Baltic Gender partners revealed that there are no re-entry support practices neither at the EU nor at national (funding agencies) level. General policy in the EU seems to be that it is possible to pause personal grants. For example, Marie Curie Grants at EU level and many similar national post-doc grants (or grants for small research teams) can be stopped temporarily in the case the PI needs a career break due to parental leave, long illness or compulsory military service. This policy is usually called “no-cost extension”. In such circumstances funding will continue after the return of the PI and the end date of the project is prolonged accordingly. However, sometimes there may be exceptions. For example, some national funding schemes use EU funding as a source of co-funding of certain activities. Deadlines of these EU programs are usually fixed. This means that the national grant schemes using EU co-funding cannot be extended even if these are personal grants (at least if they were awarded towards the end of EU programs).

One of the good practices allowed by funding agencies and/or institutes is part time work after long career break. This is basically a longer “no-cost extension” (i.e. the funding comes from the grant obtained before the career break) where the employee has the right to re-start his/her work gradually not returning immediately on a full-time position. Such option may be needed due to family commitments or health reasons.

Typically, the situation is different in the case of projects that involve larger teams and are either focused on solving one particular problem in a pre-defined time frame or studying a wider scientific theme. These projects cannot be prolonged when either the PI or some key staff requires extended leave. The same applies to contracts with industry or organisations, like the European Space Agency, and to H2020 projects. Potential changes in the key staff have



to be evaluated as risks in the application phase and any changes in personnel cannot affect the on-time delivery of the end product. Project-funded researchers taking career breaks from such projects are very vulnerable as there may be no funding available when their career break ends.

In the EU, laws protect employees in returning to their position after parental leave, military service or long illness. However, this puts also research institutions in a difficult situation in countries where scientific research is fully (or mostly) project based (e.g. all universities in Estonia, private research organisations (SMEs) in all countries) as there may be no funding available at the time of return. In such situations the research institutions will have to lay off staff members not protected by the law or find other ways out (e.g. loan). Re-entry grants would be especially valuable in such institutions but generating funds for the internal re-entry grants may be almost impossible in a strictly project based research environment.

Within the Baltic Gender consortium, examples of supporting re-entry after career breaks were identified only in three German institutions (see Table 1). There are two main funding schemes:

- 1) GEOMAR Helmholtz Centre for Ocean Research Kiel awards the "Inge Lehmann Fund" for 1-24 month full position grants, where all GEOMAR employees who had parental leave/family care within the last 12 months can apply. There are two such positions per year and the duration of the position may be up to 24 months depending on the length of the career break and scientific quality of the proposal.
- 2) The Leibniz Institute for Baltic Sea Research Warnemünde (IOW) and Christian-Albrechts-University Kiel (CAU) have 3-6 month grants for finishing PhD thesis, for finishing a publication, or for preparing a funding proposal. "Come back to research" is a funding scheme to support female marine scientists who want to return to science after a family-related recess. Former IOW employees, doctoral students supervised by IOW researchers or researchers who would like to establish their position at IOW are eligible to apply. CAU has funding from the central equal opportunity budget. Formally the program is for females who have had parental leave or responsibilities to care for family members during last two years. However, it is agreed that applications from male PhD students and Post Docs will be considered if received. Both institutions support manuscript preparation and writing third party funding proposals while IOW is funding also finishing PhD thesis. Compared to the come-back grants from GEOMAR and IOW, the CAU funding is not directed at marine scientists and is comparatively small-scale.

Additional information about each funding program and the links to their websites are provided in the Table 1.

The experience of the German partners shows that there is demand for the re-entry grants as a means to get back into science after long career breaks. For example, there have been in total twelve female scientists in the IOW Come Back to Research Program since 2005 who were supported by the program. The funding scheme is running for 15 years now (since 2005). The program is designed to give support on demand to female PhD and postdocs who



aim to come back into science after family break. However, as was mentioned above, it has been agreed that applications from male colleagues will be considered when received. The Inge Lehmann Fund in GEOMAR has been running since May 2015. 2 men and 20 women have been funded since then for an average duration of 6 to 8 months. The 2 men received full time positions for that period, whereas women received on average 75% positions. The uneven distribution of the funding between the two sexes reflects the higher number of applications from women compared to men. This suggests that men are either not taking parental leave and have therefore no need for funding or men are supported better in returning to their jobs. On the other hand, it appears that women preferentially apply for part-time positions possibly due to family reasons.

The need in re-entry grants obviously depends on the contract type and research funding system in each country/institution. For example, there is no need for re-entry grants in the case of scientists who have a permanent position funded by their employer. Such a researcher can just return to his/her position after a long career break. The situation may be a bit more difficult for researchers with extensive teaching obligations as the lecture materials may need updating after a long break and this may require extensive work on recent publications. In that case the employer should either allow their scientists to focus initially on research (to refamiliarize with science, prepare new courses, etc.) or provide a re-entry grant that allows to do the same on more firm ground.

Researchers getting their primary income from personal research grants are also relatively secure as most funding agencies allow “no-cost extensions”. Researchers who get most or all of their salary from applied projects paid by companies, ministries, agencies like the European Space Agency (or Horizon 2020) are in the most vulnerable position. Such funding cannot be prolonged, and the products/results have to be delivered on agreed time. In such a case it is practically impossible to return after a career break if the research group/department/institute does not have any ongoing projects. Researchers in such positions need the re-entry grants the most, but such research institutes usually do not have possibilities to accumulate funds internally that would allow providing re-entry grants or even bridging grants that allow to survive in between applied contracts/projects.



**Table 1. The best practices of re-entry positions in the Baltic Gender partner Institutions.**

Institution	Funding scheme	Who can apply?	Duration	Eligible expenses	Additional information
GEOMAR	Inge Lehmann Fund. Re-entry positions	All GEOMAR employees and scholar ship holders who are employed by GEOMAR or who went on parental leave within the last 12 months / family care time within the last 24 months after their contract ended	1-24 months according to the duration of the break	Depending on the scientific proposal and the duration of the parental leave	<a href="https://www.geomar.de/zentrum/struktur/gremien/gleichstellung/">https://www.geomar.de/zentrum/struktur/gremien/gleichstellung/</a>
IOW	Come back to research programme	Former female IOW staff members, doctoral students or female scientists supervised by IOW scientists who would like to locate their position at the IOW	3-6 months	Three scenarios: (1) 3 months (in exceptional cases 6 months) for final work on a doctoral thesis, (2) 3 months to prepare a manuscript that is based on the results of the doctoral thesis for publication in a journal with peer review process, (3) 6 months to prepare a funding proposal In all 3 cases, the costs of participation in a conference relevant to the respective subject area are covered.	<a href="https://www.io-warnemuende.de/com-back-to-research.html">https://www.io-warnemuende.de/com-back-to-research.html</a>
CAU	Central equal opportunity budget (Zentrales Gleichstellungsbudget)	PhD students and Post Docs, who are writing a scientific publication or an application for third-party funds. Female as well as male scientists can apply after a family break, for up to 2 years, because of maternity leave, parental leave or care for family members. To be awarded this fellowship, the scientist's dissertation has to be above average and a work place has to be secured beforehand.	PhD students: 6 months. PostDocs: writing scientific publication or application for third-party funds: 3 months. Both groups have the possibility to extend the fellowship once.	Fixed monthly stipend	<a href="http://www.gleichstellung.uni-kiel.de/de/Gleichstellungsbudget_Ausschreibung_18_dt.pdf">http://www.gleichstellung.uni-kiel.de/de/Gleichstellungsbudget_Ausschreibung_18_dt.pdf</a>
CAU	Central equal opportunity budget (Zentrales Gleichstellungsbudget)	Female scientists during their pregnancy or with childcare responsibilities, who have work responsibilities they cannot attend due to their family responsibilities or maternity protection.	Variable	Resources for additional student assistance	<a href="http://www.gleichstellung.uni-kiel.de/de/Gleichstellungsbudget_Ausschreibung_18_dt.pdf">http://www.gleichstellung.uni-kiel.de/de/Gleichstellungsbudget_Ausschreibung_18_dt.pdf</a>