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A Nordic perspective on EMBL and the research career

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Table of Contents

Summary	1
1. Introduction	2
1.1 Objectives; method and data; outline	2
2. Researchers' motives for choosing EMBL	3
2.1 Knowledge about EMBL	3
2.2 Motives; a European choice	3
3. Researchers' experiences while at EMBL	5
3.1 Skills development	5
3.2 Building a network	6
3.3 Social experiences	7
4. EMBL and researchers' careers	8
4.1 Immediate merit value	8
4.2 Long term merit value	9
5. Reflections	11
Appendix A Interviewees	13

Summary

The European Molecular Biology Laboratory, EMBL, hosts researchers on temporary stays from all around the world. This report presents the findings of a study of Nordic researchers' stays at EMBL; the motives for choosing to go to EMBL; the experiences of their stay; and the estimated merit value of the stay during the subsequent career.

Many of the researchers in this study chose EMBL because of its perceived high standards, and for most of them, it was their first hand choice. Some have also underlined that they preferred a European location for their stay.

A variety of experiences during the stay have been described to us. Almost everyone bear witness of a most positive experience, where enhanced scientific skills and competence development is the most prominent and frequently mentioned outcome. It is clear that the scientific environment is very competitive, but it is also supportive and encouraging. Many researchers think that the stay at EMBL made them advance their research in a way which they otherwise would not have done. They explain how they were 'pushed' further by the collegial atmosphere and encouraged to always try to reach beyond what they had achieved before.

Another outcome of a stay at EMBL is the international network of prominent researchers that often is established. For some, this is emphasised as the most valuable effect from their stay, and something that lasts for many years afterwards. The network has been important for many in order to get the next position; for some, it was crucial.

The merit value of a stay at EMBL is almost always very high when applying for the next position. It differs somewhat whether it is the value of having been to EMBL in general that is valued, or if it is the very publications that is the result of a stay that matter the most. Typically, the merit value fades somewhat with time and more recent merits may carry heavier weight instead. What remains is the way of doing research that was learnt while being at EMBL; an attitude that everything is possible and that there are essentially no limits to what one can do and achieve, scientifically. Such an attitude, combined with access to an extensive international network of very prominent researchers, is likely to have a positive impact throughout the research career.

1. Introduction

1.1 Objectives; method and data; outline

The European Molecular Biology Laboratory, EMBL, is an international research facility located on a hillside just outside Heidelberg, Germany, and with four smaller so called outstations located in other parts of Europe. The laboratory is since many years regarded as one of the world's top institutions when it comes to basic research in the molecular life sciences. 20 countries are member states at EMBL; all Nordic countries are members.

Over the years, many Nordic researchers and also many Nordic doctoral students have passed through EMBL for shorter or longer stays. There are different positions available to apply for and take on at EMBL, at different levels: from doctoral student level to group leader level. All positions are temporary, resulting in a constant inflow and outflow of junior and senior staff at EMBL from not only the member states, but from all around the world.

In this study, we are interested in the stays of Nordic researchers and doctoral students at EMBL. The overall aim is to uncover general trends, increase the understanding of researcher careers in relation to EMBL stays and if possible estimate the merit value of such stays. A number of more elaborated questions are posed in relation to this ambition.

A site visit has been made at the EMBL main facility in Heidelberg, where we got insight into the research conditions, the recruitment policy, and the international PhD programme. A number of face-to-face interviews were conducted. These were complemented with both telephone interviews with Nordic researchers who had been to EMBL, and with more face-to-face interviews with a selection of researchers located in Helsinki and in Copenhagen (who had also been to EMBL). Altogether, 30 individuals have been interviewed. The majority of the interviewees come from the Nordic countries, but a few researchers from other countries have also been interviewed as a small reference group. Typically, the interviews have lasted about one hour. All interviews have been transcribed.

Commissioned by NordForsk, the study has been undertaken by Technopolis Sweden (Faugert & Co Utvärdering) between January and April 2014. The working team has consisted of Göran Melin (project manager), Malin Jondell Assbring, and Michelle Andersson. The team wishes to extend its gratitude towards the International Relations unit at EMBL, where Dr. Silke Schumacher, Plamena Markova, Jana Pavlic and Maria Pia Becker received us with warm hospitality and an extensive programme. We are furthermore grateful to all the researchers and doctoral students at EMBL and in various other Nordic research institutions who have generously taken their time during interviews and shared their experiences and thoughts.

In the following chapters, we will present different aspects of researchers' careers in relation to their stays at EMBL. First, the researchers' *motives* for going to EMBL is described, followed by a chapter where the *experiences* from the stays are described in terms of skills development, networking and social experiences. After this, the *merit value* of a stay at EMBL is discussed both in a short term and long term perspective. Finally, we draw some *conclusions* and share some of our *reflections*.

2. Researchers' motives for choosing EMBL

2.1 Knowledge about EMBL

The majority of interviewed researchers were familiar with EMBL and the research conducted there prior to their stay at the laboratory. Some researchers had a rather vague, albeit positive, understanding of EMBL and had heard of the laboratory at a conference or through a colleague who had been there. Many had an impression of EMBL as being one of the top research institutions within the field of molecular biology, and applied for EMBL as a strategic career move. The view of EMBL as being a prime institution in its field is expressed by those who were there fifteen years ago as well as those with a more recent experience, which indicates that EMBL's good reputation has not changed much over the years. Some interviewees note that nowadays EMBL is not the only top-level research institution within molecular biology – Harvard University, University of California and Massachusetts Institute of Technology are mentioned as very prominent, as well as Swiss Federal Institute of Technology. However, EMBL is still considered one of the most prominent ones.

One interviewee who did a part of his post-doc at EMBL says he had followed some of the work undertaken at EMBL during his doctoral studies. He had seen how many of the high quality scientific papers from Europe came from EMBL, and consequently decided to apply. Another EMBL post-doc says he applied to EMBL because of its high status, but only realised just how renowned EMBL is after going there. Yet another interviewee who has remained in Heidelberg since his stay at EMBL explains:

I came here for my PhD by accident – I knew it was a good place but not that it was this good.

A few interviewed researchers did not know much of EMBL before applying for a position there. Some knew of the European Bioinformatics Institute or the European Molecular Biology Organisation, whereas others only learnt of EMBL after a supervisor, professor or an EMBL alumni representative recommended them to apply.

2.2 Motives; a European choice

Some interviewees say they were determined to go abroad in order to get new perspectives and experiences, or because their partner had found a job in Germany, and found out about EMBL after they started exploring their opportunities. Some point out that they considered going to renowned research facilities in the US, but chose to stay in Europe because of family reasons or because they wanted to build a European network.

EMBL was generally the interviewees' first hand choice, particularly for those who wanted to stay in Europe. A couple of researchers who stayed at EMBL ten or fifteen years ago mention that doctoral (termed pre-doctoral at EMBL) and post-doctoral salaries at EMBL were much more generous back then compared to salaries in the US. Although the level of salary was not a crucial factor for any of the interviewees in their decision to apply to EMBL, it was certainly an advantage. For those who applied to go to EMBL in more recent years, EMBL salaries have not been considered as favourable, especially not compared to salaries for doctoral students in the Nordic countries. A final reason mentioned for choosing EMBL was that the application process was much faster than that of other research institutions. Researchers were given an offer from EMBL long before other research institutions did so, and, hence, decided to accept.

Some researchers have experience from temporary stays at other research institutions, prior to or after the stay at EMBL. When asked how the other institutions compare to EMBL, the researchers agree that the research environment at EMBL is much more advanced, especially compared to what is the typical situation at any given university. One person says EMBL has a much higher "concentration of quality". Another interviewee argues along the same line and points out that, in terms of research, EMBL is a very intense environment with great resources, top of the line equipment

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and large turnover of people, which create a very inspiring atmosphere and a good reputation.

3. Researchers' experiences while at EMBL

3.1 Skills development

The skills developed by the researchers during their stay at EMBL naturally vary. Circumstances that matter include which position they had, for how long they stayed at the laboratory and what their previous experiences were. However, there are some skills mentioned by a large number of interviewees and which characterise a stay at EMBL.

Development of scientific skills is the most frequently mentioned benefit from a stay at EMBL, hardly surprising. Scientific skills comprise a broad spectrum of competences, including enhanced laboratory skills, mastering new research techniques and writing articles. Conditions for doing research at EMBL are described by the researchers as very favourable; one of the interviewees explains that researchers had access to all the technology they needed and that the equipment was state-of-the-art.

Another facilitating condition to their learning process is the inspiring atmosphere at the laboratory. One interviewee enthusiastically says that “influences fall upon you in the corridors”, as researchers persistently get exposed to great ideas and outstanding people. Another individual describes his impression when coming to EMBL:

I think it was a wake-up call. I became aware of what you can achieve when you dedicate all resources into achieving something. It was very inspiring. I realised I was more ambitious than I thought I was, being in an environment where you can see things really happen.

One researcher calls the encouraging atmosphere “the can-do attitude”, meaning an attitude among the researchers that everything is possible. Through this atmosphere, it was easy for researchers to improve their understanding of research. For instance, one former doctoral student says she developed her problem solving skills more in two months at EMBL than during her entire undergraduate studies.

One aspect of developing skills that is mentioned by the researchers is the questioning environment they experienced at EMBL. According to the interviews, the researchers were always challenging the meaning and use of the research conducted, which was thus reviewed on a regular basis through daily interaction. The goal with this questioning environment was to further improve the quality of the work and achieve better results. The stimulating questioning environment is a consequence of the presence of some of the best researchers in Europe in the field, and also a high turnover of the staff. All staff is at EMBL on temporary contracts, longer or shorter, and this circumstance results in a desire to make a significant scientific contribution while there. Insofar, the environment constantly challenges the researchers in their daily work and encourages them to aim higher and go further. One person says that, due to enormous expectations from other researchers, she was “pushed beyond her ability”. One former EMBL post-doc explains that people at EMBL are much more critical than he was used to, and he had to be constantly prepared to defend his work and conclusions. He succinctly concludes that, at EMBL, “you’d better know what you’re working on”.

This impression is further strengthened by a statement of another researcher who says that a decent publication did not really count at EMBL, only top publications had a merit value. In turn, this critical and challenging atmosphere strengthened the researchers’ skills in scientific communication through daily discussions and feedback on their work. They developed their abilities of communicating research results by writing papers, interacting in research projects and doing presentations. Such skills were primarily used during internal seminars or conferences, but interviewees also mention that these skills came in good use when results were presented to journalists.

Although mostly appreciated, the critical and challenging atmosphere has downsides too. Many of the interviewees speak of a stressful environment and of negative aspects of the high pressure to perform. Some experienced fierce competition between

individuals in terms of getting the best results and becoming first author of the scientific publications. The interviewed researchers all say that they were able to cope with the pressure, but many of them know of individuals who had problems coping with the stress, some of which in fact turned ill due to the workload and the immense expectations. It is difficult to know whether or not this problem has to do with EMBL or if it is a general problem at research institutes. Some interviewees agree with the latter, but a couple of researchers point out that the level of stress was much higher at EMBL than at Nordic universities, at least.

Furthermore, the interdisciplinary approach at EMBL made several researchers see the value of crossing disciplinary (or sub-disciplinary) borders. One of the interviewees sees his own cross-bordering of this type as decisive for the career path he later chose. Another person mentions that he got a broader perspective on research during his stay, which he says distinguishes his perception of research compared to other colleagues who have not been at EMBL. The ability to value different research projects and estimate their findings, developed through the variety of projects the researchers encountered, is stressed by another person who participated in the doctoral programme as a core outcome of having done the doctoral studies at EMBL.

Interviewed researchers describe their stay at EMBL as a period when they were able to focus solely on doing research, essentially undisturbed by other duties. There were few or none administrative tasks and no need to teach. Not having the possibility to teach is, however, experienced as negative by some individuals since they believe they would have needed such experience later on. According to the interviews, this has now changed, and it is currently possible to teach on doctoral courses, other courses, and even high school students.

Other skills developed, according to researchers, are for instance the ability to cope with several projects simultaneously, as well as learning project management. Many take courses at EMBL; the courses held have been most appreciated by participants. The opportunity to develop language skills is also mentioned as a bonus. English, being the working language, was obviously improved for most people, and some interviewees claim they learned other languages as well, not least German. Several researchers mention that they are trying to reconstruct the international and interdisciplinary environment at EMBL at their current research departments or research groups.

3.2 Building a network

Since a great majority of the positions at EMBL are temporary, the researchers are aware that they will have to move on to another place after their stay at EMBL. This fact stresses the importance of networking during the stay, since an extensive network might be crucial for getting the next position. As further discussed in chapter 4, people with a big network usually get easier access to information about vacancies and because of this reason tend to get a new position more easily. However, while being at EMBL, networking and cooperating is also an important aspect of achieving results. This makes networking connected to EMBL a twofold matter; it is both about shaping and using a network during the stay but also about creating a network that can be used later on.

Generally speaking, interviewees present a very positive view of the opportunities for networking at EMBL. They testify of an open environment where it is easy to set up cooperation between different research groups. Many interviewees mention that the major part of networking took place in informal settings; in coffee rooms shared between different research groups, during seminar coffee breaks or over an after work beer.

Those who stayed at an EMBL location other than Heidelberg generally describe the possibility to network within the institution as somewhat smaller. However, the introductory course for doctoral students, a joint two-month course in Heidelberg, is appreciated as it brings all doctoral students together before they move on to their

respective location. The course is also highly valued by those who stayed in Heidelberg, as it brings closer those from different disciplines, which facilitates networking and collaborations.

Cooperation is mentioned as a central part of the work at EMBL, for example when writing papers. Collaboration leads to synergies and further development of the research. For many, their research group was extremely central and created a feeling of being part of a team rather than working as an individual researcher. Several interviewees also say that the international environment at EMBL has taught them to collaborate with people from different cultures. In addition, many interviewees stress the value of building a network outside EMBL. One researcher collaborated with the industry while at EMBL and through this he learned to recognise the importance of such cooperation. Others state that they had the possibility to extend their network by going to conferences and seminars outside EMBL. One former doctoral student, however, notes that her group leader did not have any contacts with people outside EMBL, which made her network less comprehensive than it could have been. Other former doctoral students say that, although they have built a network within and outside EMBL, they have not yet had the opportunity to use it. One interviewee comments on this by noting that group leaders have a greater need of a network in their daily work, whereas doctoral students are still in an early phase of their careers, but networks will most likely be useful in their future careers.

In conclusion, there seems to have been many opportunities to build a comprehensive network at EMBL and many of the interviewees seem to have done so. However, doctoral students have not yet had the opportunity to use their network as much as post-docs and group leaders.

3.3 Social experiences

The foremost non-academic experience presented by interviewees, was being a part of a highly international environment. The interviewees testify of a culture where it is easy to get to know people. Both at EMBL as a whole and in individual research groups, there are people from many countries working together on a daily basis. Thus, the interviewees point out that they learnt about cultural differences and how to communicate and cooperate with people from different cultures. This can, according to one of the researchers, be an advantage in their future career since it means that the researchers are used to interacting in an international setting.

Due to the fact that most researchers did not have an existing network or only had a limited network at EMBL when they moved there, they typically value developing new social relations, partly facilitated through organised social activities as well as through the professional cooperation and interaction, and for the doctoral students, the introductory course. One of the researchers describes EMBL as a world of its own, where you work and socialise with the same people. Some of the researchers who stayed in downtown Heidelberg also consider the secluded location of the laboratory as a determinant factor in getting close to one another, describing the location as “a monastery on a hill”.

One interviewee points out that the heavy workload does not give researchers much free time. Others, on the contrary, describe various social activities initiated by the researchers themselves, such as football teams, skiing trips, and parties. Because of the many social activities and events, one of the interviewees explains that there was little need to integrate with the society outside EMBL; the network and activities at EMBL were sufficient.

4. EMBL and researchers' careers

The majority of interviewed researchers think that their stay at EMBL has served as a great merit. In our questions, we distinguished between the 'immediate merit value' and 'long term merit value'; the former meaning the value that the stay had soon after completion, for instance when the researcher applied for the next position, and the latter referring to the value of the stay several years later.

4.1 Immediate merit value

When asked about the immediate merit value, i.e. the value when the researchers applied for their next position, some mention that having EMBL in their CV is highly valued by employers. In particular, this seems to be the case for those who have pursued an academic career immediately after leaving EMBL, and remained in a field of research where EMBL is well known.

One EMBL post-doc says that having EMBL in their CV gives a seal of approval; if a researcher has been able to 'survive' at EMBL, it indicates that s/he will also be able to perform under pressure in the future. One former EMBL doctoral student who moved on to work in the industry, describes how she is not met by the same admiring reaction from industry partners when she mentions her stay at EMBL, compared to colleagues in academia.

The most frequently cited concrete example of an EMBL-stay as an immediate merit value relates to developing scientific skills and understanding. As mentioned in chapter 3.1, researchers often learn new techniques and develop a wider understanding at EMBL, which prove to be a merit when applying for a new position. Some interviewees explicitly say that they were able to get their new position only because of the skills they developed at EMBL, but that having good scientific papers and being able to write EMBL in their CV was perhaps a bit less important. Of course, through the skills of the individual and the actual publications, the EMBL brand is anyway a mark of highest scientific standards:

It was considered a big merit to have been at EMBL when I returned to [my home country]. The very level of the science was a merit and also that I had been exposed to the very culture there and the system.

Some interviewees anyway point towards the scientific publications as the main merit. Many researchers have been able to publish a number of excellent papers while at EMBL, publications that have enabled the researchers to apply for higher academic positions. One former EMBL doctoral student who has pursued an academic career explains that it is not difficult to get a good post-doctoral position with a few reasonably good scientific papers in your hand, but with his papers from EMBL in hand, he had several even more attractive positions to choose from. This point is shared by a couple of interviewed doctoral students currently at EMBL. They consider the primary value of their stay at EMBL as short term, i.e. to be able to get a good post-doctoral position after the dissertation.

Some emphasise the interdisciplinary environment at EMBL as a merit, which leads to increased understanding of other disciplines or topics outside one's own sub-field. One former doctoral student explains that EMBL teaches you to "speak each other's languages, figuratively speaking" and is positive that the unique way of thinking at EMBL contributed to him getting his next position. A number of interviewed researchers consider the international experience most valuable, something which, according to the interviews, is much preferred amongst employers when continuing an academic career in the Nordic countries. However, some researchers say that there are a couple of other research institutions in the US and Europe that would have been just as good a merit.

The fact that a stay at EMBL is considered a great merit by so many, certainly adds to the pressure to use that opportunity wisely and efficiently. Some researchers say that EMBL is an awful place for failures because conditions for successful scientific results

are so favourable. It can be noted that those who stayed at EMBL more recently do not value their stay as highly as those who spent time there some years ago. This can most likely be explained by the fact that there are more research institutions of similar standards today, making EMBL less unique. In contrast, a few researchers argue that EMBL is not recognised enough by Nordic researchers and employers.

4.2 Long term merit value

When it comes to the merit value of the stay a few years on (the time span was not exactly specified), some interviewed researchers believe that EMBL continues to be a merit in their CVs, although the value tends to fade a little in contrast to more recent experiences. Some still consider scientific achievements and papers from EMBL to be continuously valuable for their career, despite the many years that have passed. One researcher moved on to the industry after his time at EMBL, only to return to academia a few years later. That, he explains, was made possible because of his scientific papers from EMBL.

The most commonly cited long term merit value of a stay at EMBL is the formation of a large network. Interviewees say that they were able to build an extensive network of international researchers, a network that they would not have access to, had they stayed at another institution instead of EMBL, and certainly not if they had remained at their home institution. As mentioned in chapter 3, EMBL facilitates networking by supporting an environment where researchers interact with each other both scientifically and socially. Some researchers feel that those who have been at EMBL have a special bond to each other – when they meet at a conference years after their time at EMBL, they immediately connect because of their shared experiences. Several interviewees express gratitude towards the EMBL Alumni Association through which they get the opportunity to stay in touch and reconnect with other EMBL alumni.

Interviewees give several different perspectives on how their network from EMBL has evolved after they left the laboratory. Many speak of collaborations with former EMBL colleagues years after their stay; they visit each other's labs, write articles together and ask for advice on scientific conundrums. Some have returned to EMBL to take courses or teach. One of the interviewees explains that EMBL researchers normally end up getting good positions afterwards and by knowing them, the researcher now has contact with influential people in different countries and areas of research. One former EMBL doctoral student recounts that he was able to get a job only because of his EMBL network; merits and publications are only important if you know nothing about an applicant, he says, but with shared experiences and a personal bond it is easier to connect with an employer.

There are, however, some researchers that have not used their network as extensively. There are several reasons for this. Some individuals did not see any value of keeping their network from EMBL up to date, and others have changed their field of research, making their old network less useful. On the other hand, other researchers that have also shifted fields still stress the importance of their old network, which is partly due to the interdisciplinary nature of their research.

Many researchers are convinced that the scientific skills they developed while at EMBL are continuously valued as a merit later on in their careers. Interviewees explain this as a different mind-set that has characterised them as researchers. One person says that at EMBL, you are exposed to knowledge, experience and high intelligence, which “makes your brain faster”. According to our interviews, these analytical and scientific skills developed at EMBL have been very useful in researchers' subsequent careers.

When asked what the researchers' careers would look like today without the experience of a stay at EMBL, some researchers believe they would still have the same position today. One person argues that her current position was dependent on good scientific papers and a post-doctoral position, but this could have been achieved elsewhere. Another researcher says he could have been where he is today without

having been at EMBL, but he would lack significant skills and experiences gained at EMBL:

I think I could have been in the same place. It would have been different in terms of scientific skills, the belief in myself and my drive. I am trying to get funds now to start my own group, and I would not have been confident enough to do that without EMBL.

On the other hand, the majority of researchers think that their careers would be different, had they not had the opportunity to go to EMBL. A couple of researchers believe they would not be active in their respective fields and that they would have steered away from a research career completely. Some believe they would have stayed in their home country, probably at their home university. One researcher looks back on former classmates from his undergraduate education and says most of them have stayed at the same university, and he probably would as well. Another researcher says that he is more content with his research after the stay at EMBL, as the EMBL experience opened up to new ways of thinking and doing research.

5. Reflections

The aim of this analysis is to uncover general trends, increase the understanding of researcher careers in relation to EMBL stays and if possible estimate the merit value of such stays. It is clear that EMBL provides a unique environment in terms of the nearly unlimited resources that are available to the researchers who work there, the remarkably high scientific standard of the staff and the cooperative but also competitive and demanding collegial climate. Although a few interviewed researchers have testified of some negative sides of the stay, we have not heard a single individual saying anything but that the stay altogether was a great experience. The positive assessment from their side relates to the critically supportive environment, where junior as well as senior staff is constantly encouraged to go further, even beyond one's perceived limits. Such an environment may appear partly stressful, but for most people, it was simply very inspiring and stimulating.

We can conclude that a stay at EMBL typically leads to a couple or a number of very good publications, significantly enhanced scientific skills, widened understanding of scientific practice, such as insights into research fields and disciplines other than one's own, and the establishment of an international and often long-lasting collegial network. All these outcomes are important determinants when applying for the next position and when pursuing a career that involves scientific activity.

Surprisingly, more than once has it been described to us that EMBL is not very well-known among Nordic researchers. We find this circumstance difficult to understand (even if the information is of an anecdotal character), and we actually question whether this is fully true. Do Nordic researchers in the molecular biology field not know about EMBL? Of course, our sample is biased since it consists only of people who have been to EMBL and, thus, know about the laboratory. Therefore, it has not been possible for us to investigate to what extent EMBL is known to the Nordic molecular biology community as a whole. Given the laboratory's prominent position internationally, it would be strange if it is not well known among Nordic researchers. Possibly, if a recently examined doctoral student is asked about EMBL, s/he may perhaps not know in detail what EMBL is and stands for, but we would advise a more careful investigation before claiming that the Nordic molecular biology community as such does not know EMBL very well.

Whether Nordic researchers chose to apply for a stay there is another story; we know that although the merit value is significant, there are also downsides, not least for the doctoral students. For instance, given the level of salary in the Nordic countries for doctoral students (possibly with the exception of Iceland), EMBL is not as competitive as it may be for post-docs and for senior researchers. And, one must note, it may be a disadvantage to not being anchored in a national scientific environment as doctoral student, if one wants to proceed with a scientific career in the home country. International merits are valued, but it is no secret that they are not valued as much as easily recognisable names of domestic departments, supervisors and colleagues.

Nordic researchers on post-doc and group leader level would probably find the working conditions at EMBL quite attractive and its salaries competitive, but for these categories of people, other barriers may be at play instead. Nordic researchers are often a few years older when they receive their PhD exam compared to what is the norm in many other European countries. Thus they may more often have entered into a phase in life when family is established. With reference to a recent study undertaken by NordForsk about researcher mobility, for some, it may feel more complicated to move to a foreign country when children are involved, in addition to the constraint of finding an attractive job also for the spouse. In essence, the generous national systems regarding parental leave and the developed gender equality on the labour market in the Nordic countries actually make a stay in a foreign country more of a concern than it might be for researchers from other countries. In the specific case of Norway, the unusually high levels of salary may form yet another hindrance towards taking on a

position elsewhere. None of these barriers have anything to do with EMBL as such, or lack of knowledge about EMBL.

Although a few interviewees have said that they would probably be in the same position where they are today, even without the experience of having been to EMBL, we interpret the value of a stay at EMBL as indeed most favourable for the subsequent research career. However difficult to estimate exactly, a stay at EMBL is in most cases a very formative, developing and inspiring period, and leverages the career opportunities in a way which is likely to be almost unparalleled as long as we speak of careers in basic research, and it is likely to be most beneficial even if pursuing a career with more of an applied research character.

Appendix A Interviewees

Rein Aasland
Petri Auvinen
Giovanna Bergamini
Niklas Blomberg
Sarah Butcher
Kim Ekroos
Holger Erfle
Friedrich Frischknecht
David Gloriam
Elina Ikonen
Anders Isaksson
Janus Jakobsen
Ole Jensen
Lars Juhl Jensen
Aino Inkeri Järvelin
Marko Kaksonen
Sara Kangaspeska
Matthew Kirkham
Michael Knop
Ari Löytynoja
Iben Møller Hansen
Lisbeth Olsen
Ann Parvinen
Jens Preben Morth
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