# Career support framework for early career researchers

[A project by]

UiO **Faculty of Mathematics and Natural Sciences** University of Oslo

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University of Oslo



Addressing the University of Oslo's standards for career support for early career researchers.

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This project was carried out in tight collaboration between the Career Services at the University of Oslo, the Faculty of Social Sciences and the Faculty of Mathematics and Natural Sciences. This interdisciplinary collaboration between the humanities and sciences, as well as between colleagues with backgrounds in career counselling, counselling psychology, social anthropology, innovation and alumni relations in the private sector, research and development in academia, and management and development of the University libraries have been very fruitful and added interesting and relevant dimensions in the work and results of this project.

We want to thank the management at the two faculties and at the Career Services for agreeing to initiate this project, and the University management to allow us to pull on the great resources and expertise of the Career Services in developing and piloting a career development initiative towards early career researchers.

The working group started up in February 2021 and conducted weekly meetings throughout the spring semester to ensure progress in the project. Much time was spent on going through relevant background material such as existing framework, surveys etc. to ensure that our work was based on the newest and most relevant information. Elements of the framework was piloted and evaluated, but as several of the members of the working group are now moving on, we focused on writing up this report as a resource for the faculties and UiO instead of doing more pilots.

The working groups consisted of:

- Vivienne Lumayag, career counsellor, the Career Services
- Camilla Krogstie, career counsellor, the Career Services
- Barbro Kolbjørnsrud, career and employability coordinator, Faculty of Social Sciences
- Jessica Lönn-Stensrud, head of section, the Library of medicine and science
- Natasa Nikolic, adviser, Faculty of Mathematics and Natural Sciences
- Stian Engen, senior adviser, Faculty of Mathematics and Natural Sciences (project leader)

The steering groups consisted of:

- Bjørn Jamtveit, vice dean of research, Faculty of Mathematics and Natural Sciences (project owner)
- Kine Lundhagen Hesselroth, section manager at HR section, Faculty of Mathematics and Natural Sciences
- Anne Julie Semb, dean, Faculty of Social Sciences
- Gisle Hellsten, leader at the Career Services
- A standing invitation to a representative from the UiO central administration

#### Abbreviations

KS: the Career Services at UiOSV: the Faculty of Social Sciences at UiOMN: the Faculty of Mathematics and Natural Sciences at UiOECR: early career researcher

# Background

The objective of a research fellowship is completion of research training to the level of a doctoral degree while the main objective of appointment as a postdoctoral research fellow is to qualify for work in senior academic posts<sup>1</sup>, like associate and full professor. The number of PhD candidates and postdoctoral fellows being trained today is far higher than the academic system can support, and most early career researchers (ECRs) therefore need to look beyond academic research for their first permanent employment. Our ECRs can, and will, find similar challenges outside of academia and it is important that we help them realize that the society needs highly educated and well-trained scientists to spread to other sectors and take on our social responsibility with a good amount of innovative and critical thinking. The doctoral education is a training programme that qualify our ECRs to pursue careers with high demands for knowledge and competence within as well as beyond academia.

Unclear career prospects can be a contributing factor to unhealthy stress. Therefore, it is important to provide our ECRs with a reality orientation on the criteria for positioning oneself for a top academic position, in addition to a broad understanding of alternative career paths. Supplemented with training in career management skills and other generic skills, our ECRs should be provided with tools and knowhow on how to make strategic choices towards their dream career and how to recognize and act on opportunities and challenges that arises.

Professional development requires time and effort. Therefore, it is important that we help our ECRs take on a realistic view on their career alternatives as early as possible, giving them time to investigate and adjust their career ambitions and plans accordingly. An early reality orientation can also help our ECRs shed some light on the blind spot by helping them realise the importance of continuous and strategic professional development and understand the need to make use of the professional development activities available.

Career support for our ECRs is also beneficial for supervisors, the research teams and the institution. The link between a person's happiness and productivity<sup>2,3</sup> show that by helping our ECRs reduce the career uncertainty, we can also help them become more productive in their work. ECRs that feel cared for and supported will consequently praise their supervisors, research team and institution, which in the long term can have positive effects on the recruitment of new ECRs.

Policies requesting career support for ECRs, at all stages, in higher educational institutions exits both at the international (The European Charter & Code for researchers<sup>4</sup>), national (the Ministry of Education and Research's Strategy for researcher recruitment and career development<sup>5</sup>) and local (the University of Oslo's standards for career support of early career researchers<sup>6</sup>) levels.

<sup>&</sup>lt;sup>1</sup> <u>Forskrift om ansettelsesvilkår for stillinger som postdoktor, stipendiat, vitenskapelig assistent og spesialistkandidat (lovdata.no)</u>

<sup>&</sup>lt;sup>2</sup> Oswald, A. J., et al. (2015). "Happiness and Productivity." Journal of Labor Economics 33(4): 789-822.

<sup>&</sup>lt;sup>3</sup> Walsh LC, Boehm JK, Lyubomirsky S. Does Happiness Promote Career Success? Revisiting the Evidence. Journal of Career Assessment. 2018;26(2):199-219.

<sup>&</sup>lt;sup>4</sup> <u>European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers. European</u> <u>Commission. 2005.</u>

<sup>&</sup>lt;sup>5</sup> <u>Strategi for forskerrekruttering og karriereutvikling. Kunnskapsdepartementet. 2021.</u>

<sup>&</sup>lt;sup>6</sup> <u>UiO's standards for career support for early career researchers</u>

In response to UiO's standards for career support, a collaboration project between the Career Services at UiO (KS), the Faculty of Social Sciences (SV) and the Faculty of Mathematics and Natural Sciences (MN) was launched in February 2021. This project aimed at drafting and piloting a career support framework that accommodates the standards by providing our ECRs with tools, know-how and support on how to map their competences and how to plan and carry out strategic professional development. The project focused on three aspects; 1) individual and 2) group career counseling within non-academic career opportunities, in addition to 3) tailored online information with self-help resources that can be supplemented with training in relevant topics. The framework has been presented to relevant focus groups like UiODoc, Forum for researcher education at UiO and the PhD representatives in the PhD council at SV, and received only minor general comments.

In this project we pulled on resources like existing career support initiatives at UiO<sup>7,8,9,10</sup>, surveys<sup>11,12,13</sup>, existing frameworks<sup>14,15,16</sup> and the guidelines for promotion to professor by the Universities Norway<sup>17</sup>. The latter can also serve as a reality orientation for our ECRs, helping them to better understand what is required for a top academic position. Based on this background, we present in this report topics and activities that we think constitutes a comprehensive career support framework for ECRs. We have focused on making the main report as short as possible with several Appendixes for easy access to the relevant information. Depending on the needs and opportunities of the reader, this report can be consulted on how to establish a complete framework or supplement the existing offer.

The elements of the suggested framework is relevant for both PhD candidates and postdoctoral fellows, albeit some at differentiated levels for these two groups. Therefore, throughout this report, we refer to these two groups as early career researchers (ECRs) and the individual reader must consider the suggested topic and activity in their own context of existing career support offer, possibilities, resources, critical mass and more.

<sup>&</sup>lt;sup>7</sup> <u>Career support for MN's early career researchers</u>

<sup>&</sup>lt;sup>8</sup> The Postdoctoral Programme at the Faculty of Medicine

<sup>&</sup>lt;sup>9</sup> Courses and career support at the Faculty of Social Sciences

<sup>&</sup>lt;sup>10</sup> <u>University of Oslo Library – Freestanding courses</u>

<sup>&</sup>lt;sup>11</sup> Kandidatundersøkelsen 2018 (in Norwegian only)

<sup>&</sup>lt;sup>12</sup> <u>Doktorgradsundersøkelsen 2019: En spørreundersøkelse blant doktorer (ph.d.) som disputerte i 2013, 2014 eller</u> <u>2015. NIFU.</u>

<sup>&</sup>lt;sup>13</sup> <u>Utdanning for arbeidslivet : Arbeidsgivers forventninger til og erfaringer med nyutdannede fra universiteter,</u> <u>høgskoler og fagskoler</u>

<sup>&</sup>lt;sup>14</sup> <u>The Vitae Researcher Development Framework</u>

<sup>&</sup>lt;sup>15</sup> Identifying transferable skills and competences to enhance early-career researchers employability and competitiveness. Eurodoc. 2018.

<sup>&</sup>lt;sup>16</sup> Adapted version of the Career Service's competence wheel

<sup>&</sup>lt;sup>17</sup> <u>Guidelines for promotion to professor. Universities Norway (webpage only in Norwegian; guidelines in English)</u>

# The career support framework

A career support framework needs to be flexible to provide support across different needs and levels of the candidates as well as the needs, possibilities and existing offer at the faculties. As our ECRs progress through their projects, we expect them to take greater ownership of their professional development. This requires timely, incremental and differentiated information and tools available to them in their continuous development. Therefore, we have focused this framework on the three broad phases of a PhD or postdoctoral project period: the onboarding phase, the ongoing phase and the outgoing phase (Figure 1). Individual and group career counseling are important measures that span all three phases.

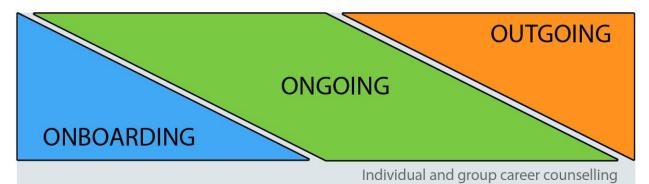


Figure 1. The Career Support framework for Early Career Researchers. An illustration of the overlapping onboarding, ongoing and outgoing phases. The duration of each phase is subjective and depend on each individual's background and context.

We have taken a **generic approach** to describe the career support framework that is relevant for all candidates across disciplines (Table 1). Appendix A-C provide more detailed description of each phase and topic and Appendix F gives an overview of relevant resources available that can be consulted to organize training in the desired topics.

Onboarding			Ind
Read, evaluate and write	Data management	Introduction to career learning	Individual
Ongoing			
Manage your project	Networking	Competence mapping	and gr
Develop your teaching	Grant writing	Personal branding	group
(Research) communication / dissemination	Authorship, publishing and metrics Innovation and entrepreneurship	Work-life balance and well- being	career counselling
Outgoing			۱sell
Career opportunities and job searching skills			ing

Table 1. Overview of the suggested topics for a comprehensive career support framework divided in onboarding, ongoing and outgoing phase.

## Individual and group career counselling

Individual and group career counselling is relevant and valuable for all ECRs from start to end of their project period. As ECRs work in an academic environment, academic career advice is more readily available than non-academic. Therefore, it is important that we provide our ECRs with non-academic counselling opportunities in order for them to explore their competences and career paths both individually and in discussions with their peers. Individual and two models of group career counselling was piloted during this project. Details on the models and evaluations are given in Appendixes D and E.

# Onboarding

The goal of the onboarding phase is to assist our ECRs in becoming established and productive in their new position as soon as possible. The process of onboarding starts from when the contract of employment is signed and lasts until the ECRs are fully operational in the new position.

To ensure that our ECRs get the best starting point for their project, it is important that they receive a proper, and equal, onboarding to the institution and research group. A proper onboarding also increase the affection to the host institution<sup>18</sup>, which give more happy and productive ECRs. The onboarding should provide relevant information and tools for the ECRs to use immediately in the start-up of their project and to get integrated socially. The duration of onboarding phase is dependent on the background and context of the new ECRs and the onboarding practices at the institutions and groups.

The Faculty of Social Sciences offer the course **SV9103** – **Introduction to the PhD programme**<sup>19</sup>. This is an onboarding initiative by the faculty that provides timely and highly relevant information for new candidates on the structure of the PhD programme, duties and regulations, guidelines on supervision as well as an introduction to the PhD programme council. The course also provides an introduction to the breadth of the career pathways of ECRs and the important skill of how to attract external funding.

On 11 June 2021, the SV Faculty board approved a comprehensive career support framework for their postdoctoral fellows. The framework establishes four year contracts as the new faculty standard and that they all shall be assigned a mentor. In addition, all postdoctoral fellows shall have a mandatory induction conversations with their closest leader, for calibrating their expectations related to the project and career development activities like pedagogical training, as well as yearly follow-up conversations and yearly employee interviews.

At the MN Faculty, all new PhD candidates and their principal supervisors are required to have an induction conversation<sup>20</sup> to clarify the mutual expectations between the two parties on the aim of the doctoral education, supervision, working hours etc. The faculty also arrange a yearly, **two-day PhD programme seminar**<sup>21</sup> for all new PhD candidates. The aim of this seminar is to provide a networking platform with their peers and information and tools they can use throughout their doctoral education.

<sup>&</sup>lt;sup>18</sup> <u>Rolleklarhet som mediator på forholdet mellom onboarding og affektiv tilknytning til organisasjonen: En</u> mediatoranalyse. 2018. Masteroppgave: Marthe Knudsen Bjerke, Det samfunnsvitenskapelige fakultet, Psykologisk institutt

<sup>&</sup>lt;sup>19</sup> <u>SV9103 – Introduction to the PhD programme</u>

<sup>&</sup>lt;sup>20</sup> Induction conversation templates for new PhD candidates at the MN Faculty

<sup>&</sup>lt;sup>21</sup> PhD programme seminar at the MN Faculty

All new postdoctoral fellows are required to submit an individual professional development plan no later than 1 month after commencement of their postdoctoral period<sup>22</sup>.

More details on the suggested topics for a proper onboarding of ECRs is given in Appendix A.

### Ongoing

The ongoing phase is the longest phase and focuses on topics that enable the candidates to take the lead in their own project, establish a position in their own field of research and develop relevant networks. In addition, it should provide further training in career management skills that can help them develop the understanding of their own competences, a better understanding of their future academic and non-academic career possibilities, as well as how to position oneself strategically to pursue the career of their dreams.

More details on the suggested topics for the continuous professional development of ECRs is given in Appendix B.

## Outgoing

The outgoing phase is short and busy for ECRs with finishing up projects, papers, and for PhD candidates, writing the thesis. The topics covered in the ongoing phase should prepare our ECRs well for the outgoing phase. Therefore, the framework here focuses on the job searching process and the tools needed for our ECRs to locate and get to their next career step.

More details on the suggested topics for the outgoing phase of ECRs is given in Appendix C.

### Success criteria

We want to ensure that the time spent by our ECRs attending career development activities, and the time our administrative staff use organizing a career support offer, is time well spent. Therefore, for a successful implementation of parts, or the whole, framework, it is important to anchor the responsibility at the right level in the organisation and dedicate designated time to develop, and for the ECRs to take part in, the professional development activities.

Academic career counselling is in most cases best left to the supervisors and the research group. Nonacademic individual and group career counselling, however, can and should be **organized by trained career counsellors** from the top level and across faculties to ensure that all PhD candidates at UiO receive the same offer and counselling expertise. KS have a long and broad experience in counselling bachelor's and master's students, and now through this project, also in counselling PhD candidates.

It is important to reduce the administrative burden and time spent on organizing a career support programme. It can therefore be beneficial to **collaborate** on a joint career support offers across research groups, departments and/or faculties. All topics mentioned in this framework have generic elements

<sup>&</sup>lt;sup>22</sup> Professional development plan for postdoctoral research fellows at the MN Faculty

that can be taught and learnt across research disciplines. Cross-disciplinary career support activities can also provide cross-disciplinary networking arenas for our ECRs. If needed, and there are resources available, specific training activities can be arranged locally.

The most important measure is to establish a position as **career support coordinator** at the central level at UiO, allocated to KS, that can coordinate cross-institutional activities and collaborate with key personnel at the different levels at the faculties. This would ensure mutual synergies, exchange of knowledge, collaboration in organizing activities and support for KS' when counselling ECRs. Such a position could be financed by the University or jointly by the faculties.

Today there are several local career support activities being organized by research groups, researcher schools, centres etc. When establishing their offers, they could benefit greatly from having a contact point that could provide tips, best practices and resources in the start-up phase, or just inform of the existing offers that they perhaps could take advantage of. To facilitate this, the working group suggest to establish a **forum for career support**. Such a forum would be relevant to exchange information about local career initiatives and plans, new reports, surveys etc., in addition to potentially establish connections to relevant personnel at other Universities, like the Career Centre for ECRs at the University of Bergen<sup>23</sup>, and external institutions. Such a forum could be established and lead by a central career support coordinator.

## Online information and tools for self-help platform

To provide easily accessible information on the topics presented in table 1 that are available for all our ECRs on demand, the working group have developed an online self-help platform that consist of a collection of available resources and recommend literature. However, particular topics need to be supplemented with workshops for higher learning outcome and extended training for our ECRs.

The online self-help platform is under development<sup>24</sup> and will be move to a new location on UiO's webpages when ready.

<sup>&</sup>lt;sup>23</sup> <u>Announcement of position as career counselor for early career researchers at UiB (22.03.2021)</u>

<sup>&</sup>lt;sup>24</sup> <u>Career support resources for early career researchers</u>

# Appendix A: Onboarding

The goal of the onboarding phase is to assist our ECRs in becoming established and productive as soon as possible in their new position. The process of onboarding starts from when the contract of employment is signed and lasts until the candidate are fully operational in their new position.

#### Read, evaluate and write

This topic should involve strategies for searching, reading and critically reviewing relevant literature, in addition to an introduction to common do's and don'ts when writing academic English. Lastly, it should also cover tools and tips that will help to start, and understand the value of, a well-organized and manageable library of literature.

#### Data management

Good research data management is increasingly important to researchers in all disciplines and plays an essential role in Open Science to make the data Findable, Accessible, Interoperable and Reusable (FAIR). Therefore, it is important that our ECRs get a good understanding of why it is important with a data management plan and the tools and know-how on how to start one. In addition, good data management practices can help our ECRs save time by reflecting on if they need to collect new data, and if so, what type(s) of data will be collected and how, where and when it will be collected. Another time saving aspect is good data organization and documentation strategies that can help make the collected data more easily retrievable for yourself and others.

#### Introduction to career learning

A PhD education is a jumping board to a broad array of career paths. Therefore, it is important that our ECRs get an early introduction to career planning techniques and mindset, in addition to a better understanding of their career opportunities, the value of developing networks and an introduction to intercultural communication. The goal would be to help our ECRs develop a mindset for strategic career development.

# Appendix B: Ongoing

The ongoing phase is the longest phase and focuses on topics that enable the candidates to take the lead in their own project, establish a position in their own field of research and grow relevant networks. In addition, it provides further training in career managing skills that can help them develop the understanding of their own competences, a better understanding of their future academic and non-academic career possibilities, as well as how to position oneself strategically to pursue the career of their dreams.

#### Manage your project

A PhD programme is formally a training programme to becoming an independent researcher while a position as a postdoctoral fellow aims at further qualifying ECRs for senior academic positions. Therefore, it is important that the candidates receive proper training in how to plan and manage projects, in addition to getting introduced to important aspects of being a good project manager like role understanding, differences in collaboration- and communication styles, know when and how to plan and conduct good meetings, how to receive and give constructive feedback and more.

#### Competence mapping

Through higher education and researcher training ECRs develop both factual knowledge and a broad array of transferable skills. For our ECRs to get a better understanding of their career opportunities and for them to make good and successful career decisions, it is important that they are aware of their values, motivations, skills, personal traits and results. Surveys show that individuals that are able to communicate their competence and skills tend to get more relevant jobs. Awareness of their competences can help our ECRs make a career development plan that is in line with their values and the skills they prefer to use, which can be the difference between success and burnout.

#### Develop your teaching

To get a permanent position that involves part or full time teaching in academia, you need to provide a teaching portfolio documenting your merits as a lecturer. Developing as a teacher requires time and effort. Therefore, it is important to provide our ECRs with information on the importance of teaching in order for them to position themselves for an academic career, and get the required insight and training in aspects like pedagogic tools and student active learning methods, how to plan and structure lecturers and how to provide a good learning environment.

#### Networking and personal branding

Networking is an important skill both within as well as outside of academia and can be done both electronically and physically. In order to connect with peers or potential future employers, it is important that our candidates get trained in the do's and don'ts of networking at conferences or career fairs, and how to brand and pitch themselves. They also need to get an introduction to why it is important to be present on digital platforms and training in how to establish good profiles and use resources like ResearchGate, ORCID, Google scholar, Cristin, LinkedIn, Twitter and the UiO personal profile (which ranks among top 3 in Google search results).

#### (Research) communication / dissemination

Communication skills are one of the most highly sought-after skill both in academia and other sectors. As a researcher, you need to be able to communicate your message properly and adapt the format and level of the content to your audience whether you are giving presentations and posters at seminars, pitching your project to potential collaborators, building up an argument when defending your research results or talking to the media. Therefore, it is important that our ECRs receive training in different presentation techniques, media training and pitching, rhetoric and argumentations techniques.

#### Grant writing

Being able to attract external funding is becoming more and more important in a researcher career. Therefore, it is important that we provide our ECRs with training in how to write a competitive grant proposal and a good understanding of what a solid CV looks like, and how to build one.

#### Authorship, publishing and metrics

To qualify for top academic positions, ECRs will be evaluated on their scientific qualifications, including scientific publications. The norms of order of authors on a publication differ between disciplines, but it is important that all PhD candidates get a general introduction to their rights and obligations as authors and co-authors, in addition to learning how to make a publication strategy and understanding the UiO publication system.

#### Work-life balance and well-being

More and more people are experiencing a fast-moving working environment and prolonged periods of stress which can be detrimental to both mental and physical health. Therefore, it is important to find the right balance between work and free time to be able to recharge the batteries. To help our ECRs find a sustainable balance in their everyday researcher life, they need tools to recognize, and deal with, unhealthy stress, in addition to time- and conflict management. Time management focuses on working smarter, not harder, and getting more out of the time you spend at work and hopefully making it easier to take time off. Knowledge on how to handle a conflict and understand where and when to get help, can contribute significantly to reducing stress levels for those experience conflicts, making our ECRs more happy and productive researchers.

#### Innovation and entrepreneurship

It is important that our PhD candidates get an early introduction to the concept of innovation and understand their role as innovators in their own research projects. It can also be beneficial to get an introduction to entrepreneurship and the resources available to them in the event of a possible patent, or if they are considering joining or initiating their own start-up.

# Appendix C: Outgoing

The outgoing phase is short and often quite busy for ECRs by finishing up projects, publications and writing the thesis. The topics covered in the ongoing phase should have prepared our ECRs well for the outgoing phase. Therefore, this phase only focuses on the job application process and the tools needed to find, apply for and secure their next job.

#### Career opportunities and job searching skills

When planning their next career step, it is important that our ECRs receive training in job searching skills, skills that help find relevant information, make plans, act on those plans to reach their goals, write a (non-)academic CV and an application that stands out in the pile. They also need training in how to prepare for a job interview and how to manage the transition from their old position and into their new, that being a new position in academia or a different sector.

A limitation for many ECRs is that they have a too narrow view on their career opportunities outside of academia. Therefore, they need to get training in mapping their own competences to better understand their value in different sectors, helping them explore a broader range of possible career paths.

# Appendix D: Individual career counselling pilot

PhD candidates is a highly diverse group with different backgrounds, nationalities and career prospects. Therefore, it is important to provide individual career counselling to address the individual needs of this group as well as for the bachelor and master students at UiO.

Individual career counselling was piloted for PhD candidates at the SV and MN Faculty in the period of 1 May to 16 July 2021. Registration was done through Nettskjema and manually handled by the Career Services. In total 56 candidates registered for a counselling session, whereof 30 were from the SV Faculty, 25 from the MN Faculty and 1 from the Faculty of Theology. 17,9 % were in the start of their PhD while 33,9 % and 48,2 % were in the middle or end of their period, respectively.

For the registration, the participants were asked to give questions or topics they wanted to raise in their counselling session. This has provided us with important insights in aspects that should, and easily can be addressed to provide better career support for our PhD candidates. The main topics were:

- Where can I work outside of academia?
- Academia should I stay or should I go?
- What to do after my PhD?

- Competence mapping what am I good at?
- How to start my career development plan?
- Strategies to reach my goals?

20 participants responded to the evaluation survey whereof 10 were from SV and 10 from MN. 18 people had already participated in a counselling session while 2 had not due to other commitments that arose. 1 gave a comment that they would like this to be a permanent offer

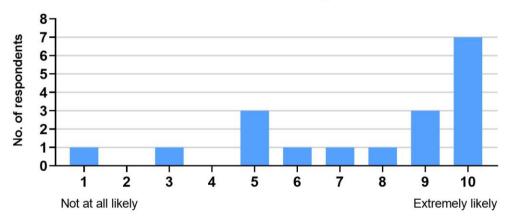
because the pilot period was a too short window (see box).

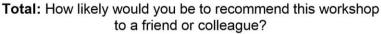
When asked how likely they were to recommend individual career counselling to a friend or colleague, the average score was 7,6 on a 10 point scale. SV averaged 6,8 and MN 8,4. The distribution of the scores are shown in figure 1. Most participants found the consultation motivating and inspiring, and that the session itself and the required preparation time was very helpful. Our own

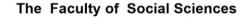
learning outcome from the lower score comments is to provide a better clarification of expectations to the counselling session in our e-mail announcements and on the webpages, in addition to providing a welcome e-mail with points on what to expect and how the session will play out.

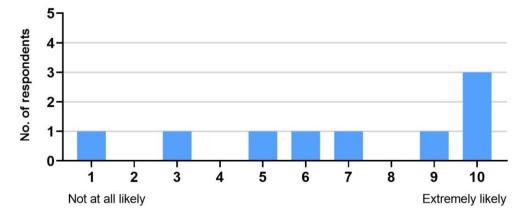
In the case of a continuation of this offer, PhD candidates need to be included in the booking system already established at KS in order to avoid the administrative burden associated with manually booking. The time frame for a consultation is 15 minutes on preparation, 45 minutes counselling session and 5 minutes after-work. With the current resources at KS, an additional service like this need to be put to "low season", like May/June and November/December. For a full year-around offer of individual career counselling for PhD candidates, additional resources need to be allocated to KS.

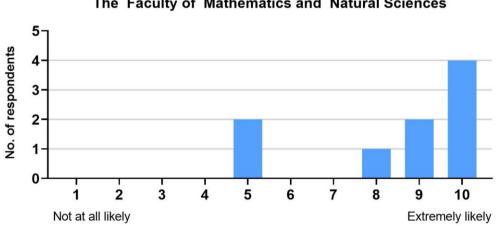
"I think a more general offer would be good, because I realise my not attending was only due to the relatively short time window of this offer."











The Faculty of Mathematics and Natural Sciences

Figure 1. Overview of the scores from the evaluation of the individual career counselling offer. The top graph shows the distribution of scores among all (18) responses. The middle graph shows the distribution of responses from the SV Faculty (9) and bottom one from the MN Faculty (9).

# Appendix E: Group career counselling pilots

Hosting group career counselling sessions in the form of seminars and workshops have many benefits and serve multiple purposes for our ECRs. In addition to providing them with training in career management skills, these sessions can also serve as informal meeting and networking arenas for socializing and peer-to-peer discussions on career, and everyday researcher life, issues. Also, some ECRs benefit more from counselling in groups where they learn from each other in a peer group rather than getting advice from an expert, like a career counsellor.

In this project, we have piloted two different models. Both models provide the same information and training but differ in structure and duration.

### Pilot 1: Career management sprint

The career management sprint<sup>25</sup> was piloted digitally for ECRs at the MN Faculty and prepared and

delivered by KS. The sprint was based on the KS' competence circle (Figure 1) and consisted of 5 different 3-hour sessions offered throughout 1 week. The topics covered were skills, values, results, personal traits and how to start a career development plan. Each session consisted of a 45 minute introduction to the subject followed by 2 x 45 minute workshop for further training. This format was chosen to allow busy ECRs acquire at minimum the knowledge and tools in the introduction part, and if their calendars allowed it, take part in the workshop for further joint training. If not, they had the tools to work individually at a later time.

To ensure predictability and continuous work and reflection on one's competences, the sprint could be offered at the beginning of each semester. This way,



Figure 1. Adapted version of the Career Services' competence circle used as a foundation for the career management sprint.

candidates who missed one or several workshops, or just want to brush up their skills on self-reflection, can attend the sprint next semester.

The topics covered in the sprint requires reflection over time, which means re-visiting it regularly. In order to create more meeting arenas, better training in career management skills and make time for further progression on self-reflection and the professional development plans, the sprint could be supplemented with monthly, half-day, drop-in workshops. Here the participants could work individually or in groups with peers, facilitated by a professional career counsellor.

<sup>&</sup>lt;sup>25</sup> Career management sprint webpage

#### Evaluation of the Career management sprint pilot

Max capacity for the workshops were set to 25 with 13-16 registered participants for each event. The no-show rate was quite high giving even fewer replies on the evaluations (between 2-5). To increase the

number of participants, the advertisement and the texts on the webpages need to be improved to help our ECRs realize the benefits of participating in career management activities. We also need to reduce the possibility of them forgetting about the event by issuing calendar invites, reminders by SMS and e-mail both three and one day before the event. It can also be helpful to change the format to a 2-hour event with mixed theoretical and practical input, as it could be hard to understand the 1-hour-intro/2-hour-workshop model of separated theoretical and practical part. A survey among PhD candidates at the MN

"I had the impression that there were few people there, fewer than I expected for such a good workshop. Therefore, I am inclined to assume that the workshops should be better advertised. One improvement could be to make people more aware that they need these workshops as they may not know themselves good enough."

Faculty showed that starting an event at 10.15 am is their preferred time to start.

On the frequency of the sprint, we received feedback to spread out the activities more, over a month or a semester, as it is heavy topics and a lot of new information. Spreading out the 5 topics as monthly 2-hours workshops could help reduce the intensity of the sprint and give more time for reflection before being introduce to a new topic.

I had a lot of fun during the workshop, learned a lot and liked the atmosphere.

In general, the evaluations were positive and the participants were happy to receive useful tips and

techniques and to get help to start new reflection processes. An added value to the workshops themselves was that the participants now had dedicated time to reflect on these issues, which is otherwise hard to make in a busy day. Some also pointed out the value of just preparing for the workshops.

Through the sprint, the Career Services gained further valuable insight and experience in working with ECRs at UiO. They prepared and delivered all the

"Hi Camilla, I want to express that I find this career sprint an amazing initiative!"

material for the workshops while the webpages, advertisement and registration was done by the MN Faculty. Several hours were put into make the material for the workshops and the administrative obligations for the first run. This material is now available, requiring minor changes to be utilized in any future events.

The working group suggest that a group career counselling offer like this should be organized and offered by the University in tight collaboration with the Career Services, who should be responsible for the content of the workshops.

# Pilot 2: Career planning workshop for Early Career Researchers

The career planning workshop was piloted for PhD candidates and postdoctoral fellows at the SV Faculty. It consisted of 2 half-day workshops given by KS physically on campus. The topics covered were:

- Learn how to describe your competence and skills that can help you discover career opportunities outside academia
- Learn what motivates you and what can be a suitable career plan for you
- Learn how to expand your network wisely that can help you in your further career development
- Get tools to set your short term and long term goals
- Kick start your career development plan

These 2 half-day workshops can also be given as 1 full-day workshop, either providing the same output as the sprint in fewer days.

This format requires the participants to dedicate more accumulated time through two half-day, or one full-day workshop. However, it allows the participants to cover more topics by investing one or two days, as opposed to the sprint that requires 1-3 hours each day over 1 week. This could be better for the participants looking to learn more about all topics covered in the workshop and will help them see, and take advantage of, the sequential and interdependent topics. However, those looking to learn more about a given topic may lose interest and would benefit more from the pick-and-choose model of the sprint.

The topics covered in the workshop requires reflection and commitment over time, which means revisiting it regularly. The two group career counselling options presented in this report could supplement each other well by offering the workshop as part of the onboarding of new ECRs, while the sprint would be available for those who want to repeat specific topics or get a deeper understanding and commitment to training of career management skills.

#### Evaluation of the Career planning workshop for Early Career Researchers

Max capacity for this workshop was set to 25. Out of 12 registered participants, 9 took part on day 1 and 5 on day 2. High no-show rates is a known problem, at all levels and across employee groups, in particular for new events that are free of charge. High quality events that are repeated at a regular basis will build a good reputation which will help the number of registered participants and turn-out. To increase the number of participants further, an event such as this should be offered as part of the onboarding of new ECRs and advertised in welcome letters, e-mails and by deans and head of departments. This would also show that the University and Faculty consider these kind of events and activities important and could encourage our ECRs to spend time on them.

No written evaluation was performed as to the low number of participants, but we received much feedback during the workshop. The participants really appreciated that they got better insight and training in career management skills and a better understanding of which questions they could ask to further their career development, in addition to tips on where they can turn to get more information and help. The workshop also helped them develop their growth mindset in a way that they now saw other career paths as equally good options for their next step on their career path, which could also possibly lead back to academia, and not as a "failure" if choosing to look beyond academic research after their PhD or postdoc period.

The more concrete feedback on the topics of the workshop was that they had become more aware of their own transferable skills and the different arenas and activities where they acquire them, like coauthoring a paper which requires time management and collaboration in addition to good written communication skills. They also got a better understanding of the effect that these skills, other competences and network have on their career choices and the opportunities that may arise. Many participants realised that they have a broader and more relevant networking than they initially thought. Several participants left the workshop feeling more motivated and more optimistic for what the future may hold.

Through the workshop, KS gained further valuable insight and experience in working with ECRs at UiO. They prepared and delivered all the material while the webpages, advertisement and registration was done by the SV Faculty. Several hours were put into make the material for the workshops and the administrative obligations for the first run. This material is now available, requiring minor changes to be utilized in any future events.

The working group suggest that a group career counselling offer like this should be organized and offered by the University, in tight collaboration with KS, yearly or bi-annually for all new PhD candidates and postdoctoral fellows at UiO.

# Appendix F: Resources

Below is a non-exhaustive list of relevant resources that can be consulted for establishing or further developing a career support by the University, Faculty, Department, research group or by the researchers themselves.

### The Career Services at UiO

<u>The Career Services</u> is primarily for bachelor and master students at UiO but allow PhD candidates to use most of their services. They are a great resource in training of career management skills like mapping your competences, transition management, CV, application, job interview, networking and more.

- Mapping your competences
- <u>CV and application</u>
- <u>The job interview</u>

## The libraries

The University of Oslo has 13 libraries. They already provide a broad portfolio of courses that are highly relevant for researchers at all stages. For information see the individual library pages.

- Freestanding courses for staff and students at UiO
- <u>Resources by subject</u>
- Writing and publishing

### The Academic writing centre

<u>The Academic writing centre</u> offers both drop-in for students and researchers who wish to improve their writing and a variety of courses. Contact them to hear what they can offer.

• Weekly Shut up & write sessions for dedicated writing time

### **Digital Scholarship Center at UiO**

<u>The Digital Scholarship Center</u> offer support with data management, visualization, digital research methods, and digital skill development.

• <u>Research Data management at UiO</u>

#### PhD on track

<u>PhD on Track</u> is a web resource aimed primarily at PhD candidates and early career researchers. The project is a collaboration between six Norwegian higher education institution libraries. Reach out to

them for consultation on activities on searching and reviewing scholarly literature, on academic writing, and on sharing and publishing reports and data.

# **Educational initiatives**

<u>Centre for Learning, Innovation & Academic Development (LINK)</u> contributes to strengthening the quality of education at UiO. They promote learning and innovation in UiO's education approach and practices, networking across disciplines, and enhancing the competence of teaching and student's learning. There are also several faculty-based educational initiatives.

- <u>Centre for Teaching and Learning in Science (KURT; Faculty of Mathematics and Natural</u> <u>Sciences)</u>
- <u>Research, Innovation and Competence Development (FIKS; Faculty of Educational Sciences)</u>
- Centre for Health Sciences Education (HUS; Faculty of Medicine)
- <u>Eilerts læringsnettverk (EILIN; Faculty of Social Sciences; under development)</u>